2018 Hudson Valley Research Lab Scouting Report

NYSAES Entomology Dept., Highland, NY

Date	Baskerville-Emin (BE) DD Accumulations (previous day NEWA)			Field Observations / Trap Catches / Models
	43 F	**50 F**		**# / trap / day (pheromone trap)**
3/21	86.8	34.1		Beginning degree day accumulations beginning 1 January, 2018
			0.0	Spotted Green Fruitworm (SGFW) (0/0)
			0.0	Redbanded Leafroller (RBLR) (0/0)
			0.0	Spotted Tentiform Leafminer (STLM) (0/0)
				Codling Moth (CM) (0/0)
			0.0	Psylla eggs / bud (0 egg / 25 buds / 5 UT Bart. stems) Psylla nymph / bud (0 nym. / 25 buds/ 5 UT Bart. stems)
				Apple – McIntosh – Dormant
				Apple – Empire, Ginger Gold, Spur Red Delicious – Dormant
				Pear – Bartlett / Bosc – Dormant
			0.52	Weekly Rainfall
			2.06	Total Rainfall (From 1 March, 2018)

Date	DD Accumulations (previous day NEWA)			Field Observations / Trap Catches / Models
	43 F	**50 F**		**# / trap / day (pheromone trap)**
3/26	89.4	34.1	0.0	Spotted Green Fruitworm (SGFW) (0/0)
			0.0	Redbanded Leafroller (RBLR) (0/0)
			0.0	Spotted Tentiform Leafminer (STLM) (0/0)
			0.0	Codling Moth (CM) (0/0)
			0.0	Psylla eggs / bud (0 egg / 25 buds / 5 UT Bart. stems) Psylla nymph / bud (0 nym. / 25 buds/ 5 UT Bart. stems)
				Apple – McIntosh – Dormant
				Apple – Empire, Ginger Gold, Spur Red Delicious – Dormant
				Pear – Bartlett / Bosc – Dormant
			0.0	Weekly Rainfall
			2.06	Total Rainfall (From 1 March, 2018)

Date	Baskerville-Emin (BE) DD Accumulations (previous day NEWA)			Field Observations / Trap Catches / Models
	43 F	**50 F**		**# / trap / day (pheromone trap)**
3/28	91.1	34.1		Beginning degree day accumulations beginning 1 January, 2018
			0.25	Spotted Green Fruitworm (SGFW) (0/1) **First Catch**
			0.0	Redbanded Leafroller (RBLR) (0/0)
			0.0	Spotted Tentiform Leafminer (STLM) (0/0)
			0.0	Codling Moth (CM) (0/0)
			0.0	Psylla eggs / bud (0 egg / 25 buds / 5 UT Bart. stems) Psylla nymph / bud (0 nym. / 25 buds/ 5 UT Bart. stems)
				Apple – McIntosh – Dormant
				Apple – Empire, Ginger Gold, Spur Red Delicious – Dormant
				Pear – Bartlett / Bosc – Dormant
			0.07	Weekly Rainfall
			2.59	Total Rainfall (From 1 March, 2018)

Date	DD Accumulations (previous day NEWA)			Field Observations / Trap Catches / Models
4/2	**43 F**	**50 F**		**# / trap / day (pheromone trap)**
	110.8	37.4	0.2	Spotted Green Fruitworm (SGFW) (0/2)
			0.4	Redbanded Leafroller (RBLR) (3/1) **First Catch**
			0	Spotted Tentiform Leafminer (STLM) (0/0)
			0	Codling Moth (CM) (0/0)
			0.08	Psylla eggs / bud (2 egg / 25 buds / 5 UT Bart. stems) **First Catch** Psylla nymph / bud (0 nym. / 25 buds/ 5 UT Bart. stems)
				Apple – McIntosh – Dormant
				Apple – Empire, Ginger Gold, Spur Red Delicious – Dormant
				Pear – Bartlett / Bosc – Dormant
			0.21	Weekly Rainfall
			2.73	Total Rainfall (From 1 March, 2018)

Date	Baskerville-Emin (BE) DD Accumulations (previous day NEWA)		Field Observations / Trap Catches / Models
	43 F	**50 F**	**# / trap / day (pheromone trap)**
4/9	116.0	39.0	Beginning degree day accumulations beginning 1 January, 2018
			0.0 Spotted Green Fruitworm (SGFW) (0/0)
			0.0 Redbanded Leafroller (RBLR) (0/0)
			0.0 Spotted Tentiform Leafminer (STLM) (0/0)
			0.0 Codling Moth (CM) (0/0)
			0.0 Brown Marmorated Stink Bug (BMSB)
			0.92 Psylla eggs / bud (23 egg / 25 buds / 5 UT Bart. stems) Psylla nymph / bud (0 nym. / 25 buds/ 5 UT Bart. stems)
			Apple – McIntosh – 48.5% dormant, 49.5% silver tip, 2% green tip
			Pear – Bartlett / Bosc – Dormant
			1.08 Weekly Rainfall
			3.81 Total Rainfall (From 1 March, 2018)

Date	DD Accumulations (previous day NEWA)		Field Observations / Trap Catches / Models
	43 F	**50 F**	**# / trap / day (pheromone trap)**
4/16	145.8	52.4	0.0 Spotted Green Fruitworm (SGFW) (0/0)
			4.0 Redbanded Leafroller (RBLR) (42/14)
			0.0 Spotted Tentiform Leafminer (STLM) (0/0)
			0.0 Codling Moth (CM) (0/0)
			0.0 Brown Marmorated Sitnk Bug (BMSB)
			1.24 Psylla eggs / bud (31 eggs / 25 buds / 5 UT Bart. stems) Psylla nymph / bud (0 nym. / 25 buds/ 5 UT Bart. stems)
			Apple – McIntosh – 33% green tip
			Apple – Ginger Gold – 55.4 green tip
			Apple – Red Delicious – 46.9% green tip
			Apple – Golden Delicious – 15.4% green tip
			Pear – Bartlett – 58% swollen bud
			Pear – Bosc – 10% bud burst
			0.11 Weekly Rainfall
			3.92 Total Rainfall (From 1 March, 2018)

Date	Baskerville-Emin (BE) DD Accumulations (previous day NEWA)		Field Observations / Trap Catches / Models
	43 F	**50 F**	**# / trap / day (pheromone trap)**
4/23	165.2	59.1	Beginning degree day accumulations beginning 1 January, 2018
		0.08	Spotted Green Fruitworm (SGFW) (1/0)
		1.4	Redbanded Leafroller (RBLR) (15/2) **First Sustained Catch**
		0.5	Spotted Tentiform Leafminer (STLM) (6/0) **First Catch**
		0.0	Codling Moth (CM) (0/0)
		0.0	Oriental Fruit Moth (OFM) (0/0)
		0.25	Lesser Apple Worm (LAW) (0/3) **First Catch**
		0.0	Brown Marmorated Stink Bug (BMSB)
		0.96	Psylla eggs / bud (24 egg / 25 buds / 5 UT Bart. stems) Psylla nymph / bud (0 nym. / 25 buds/ 5 UT Bart. stems)
			Apple – McIntosh – 30% ½" green
			Apple – Ginger Gold – 44.8% ½" green
			Apple – Red Delicious – 31.3% ½" green
			Apple – Golden Delicious – 9.0% ½" green
			Pear – Bartlett – 39.1% bud burst
			Pear – Bosc – 40.7% bud burst
			Peach – Early – 32.4% bud burst
			Peach – Late – 25.4% bud burst
			Cherry – Black Pearl – 100% swollen bud
			Cherry – Regina – 62.4% swollen bud
			Plum-- Stanley – 53.2% swollen bud
		2.22	Weekly Rainfall
		6.14	Total Rainfall (From 1 March, 2018)
	43 F	**50 F**	**# / trap / day (pheromone trap)**
4/26	212.4	83.6	Beginning degree day accumulations beginning 1 January, 2018
		1.16	Psylla eggs / bud (29 egg / 25 buds / 5 UT Bart. stems)
		0.04	Psylla nymph / bud (1 nym. / 25 buds/ 5 UT Bart. stems) **First Catch**
		0.62	Weekly Rainfall
		6.76	Total Rainfall (From 1 March, 2018)

Date	Baskerville-Emin (BE) DD Accumulations (previous day NEWA)			Field Observations / Trap Catches / Models
	43 F	**50 F**	**# / trap / day (pheromone trap)**	
4/30	236.6	92.8		Beginning degree day accumulations beginning 1 January, 2018
			0.0	Spotted Green Fruitworm (SGFW) (0/0)
			13.9	Redbanded Leafroller (RBLR) (142/53)
			4.1	Spotted Tentiform Leafminer (STLM) (36/22) **First Sustained Catc**
			0.0	Codling Moth (CM) (0/0)
			0.0	Oriental Fruit Moth (OFM) (0/0)
			0.6	Lesser Apple Worm (LAW) (8/1) **First Sustained Catch**
			0.0	Brown Marmorated Stink Bug (BMSB)
			1.76 0.04	Psylla eggs / bud (44 egg / 25 buds / 5 UT Bart. stems) Psylla nymph / bud (1 nym. / 25 buds/ 5 UT Bart. stems) **First sustained nymph count**
				Apple – McIntosh – 52% ½" green
				Apple – Ginger Gold – 3% tight cluster
				Apple – Red Delicious – 92% ½" green
				Apple – Golden Delicious – 32% ½" green
				Pear – Bartlett – 4% green cluster
				Pear – Bosc – 30% bud burst
				Peach – Early – 81% ½" green
				Peach – Late – 38% ½" green
				Plum-- Stanley – 87% bud burst
			1.53	Weekly Rainfall
			7.67	Total Rainfall (From 1 March, 2018)
5/2	236.6	92.8		Beginning degree day accumulations beginning 1 January, 2018
			2.0	Brown Marmorated Stink Bug (BMSB) **First Trap Catch**
			1.66	Weekly Rainfall
			7.67	Total Rainfall (From 1 March, 2018)

Date	Baskerville-Emin (BE) DD Accumulations (previous day NEWA)		Field Observations / Trap Catches / Models
	43 F	**50 F**	**# / trap / day (pheromone trap)**
5/7	389.5	204.1	Beginning degree day accumulations beginning 1 January, 2018
		0.0	Spotted Green Fruitworm (SGFW) (0/0)
		21.9	Redbanded Leafroller (RBLR) (169/138)
		6.0	Spotted Tentiform Leafminer (STLM) (45/40)
		0.0	Codling Moth (CM) (0/0)
		7.4	Oriental Fruit Moth (OFM) (54/50) **First Catch**
		0.0	Lesser Apple Worm (LAW) (0/0)
		5.25	Brown Marmorated Stink Bug (BMSB) **First sustained catch**
		1.8	Psylla eggs / bud (45 egg / 25 leaves / 5 UT Bart.)
		0.4	Psylla nymph / bud (9 nym. / 25 leaves/ 5 UT Bart.)
			Apple – McIntosh – 48% bloom
			Apple – Ginger Gold – 42% bloom
			Apple – Red Delicious – 52% bloom
			Apple – Golden Delicious – 22% bloom
			Pear – Bartlett – 99% bloom
			Pear – Bosc – 88% bloom
			Peach – Early – 64% petal fall
			Peach – Late – 33% petal fall
			Sweet Cherry – 91% bloom
			Plum-- Stanley – 96% bloom
		0.43	Weekly Rainfall
		8.1	Total Rainfall (From 1 March, 2018)

Date	Baskerville-Emin (BE) DD Accumulations (previous day NEWA)		Field Observations / Trap Catches / Models
	43 F	**50 F**	**# / trap / day (pheromone trap)**
5/14	495.1	261.8	Beginning degree day accumulations beginning 1 January, 2018
		0.0	Spotted Green Fruitworm (SGFW) (0/0)
		18.9	Redbanded Leafroller (RBLR) (131/133)
		2.4	Spotted Tentiform Leafminer (STLM) (22/12)
		0.07	Codling Moth (CM) (1/0) **First Catch**
		19.9	Oriental Fruit Moth (OFM) (141/138/) **First Sustained Catch**
		0.0	Lesser Apple Worm (LAW) (0/0)
		1.6	Brown Marmorated Stink Bug (BMSB) (11)
		0.0	San Jose Scale (SJS)
		0.16	Psylla eggs / bud (4 egg / 25 leaves / 5 UT Bart.)
		0.5	Psylla nymph / bud (13 nym. / 25 leaves/ 5 UT Bart.)
		0.0	Spotted Wing Drosophila (SWD)
			OBLR 0.5% in UT Ginger Gold
			SGFW 0.5% in UT Ginger Gold
			Plum Curculio (PC) 0.5% in UT Ginger Gold Fruitlets
			Tarnished Plant bug (TPB) 0.5% in UT Ginger Gold Fruitlets
			Apple – McIntosh – 3% Fruit Set
			Apple – Ginger Gold – 66% Petal Fall
			Apple – Red Delicious – 43% Petal Fall
			Apple – Golden Delicious – 31% Petal Fall
			Pear – Bartlett – 65% Fruit Set
			Pear – Bosc – 59% Fruit Set
			Peach – Early – 49% Fruit Set, Shucks on
			Peach – Late – 37% Fruit Set, Shucks on
			Sweet Cherry – 8% Fruit Set
			Plum-- Stanley – 77% Petal Fall
		0.84	Weekly Rainfall
		8.94	Total Rainfall (From 1 March, 2018)
5/18	604.7	336.4	Beginning degree day accumulations beginning 1 January, 2018
		30.9	San Jose Scale (SJS) **First Trap Catch**

Date	Baskerville-Emin (BE) DD Accumulations (previous day NEWA)		Field Observations / Trap Catches / Models
	43 F	**50 F**	**# / trap / day (pheromone trap)**
5/21	635.0	354.1	Beginning degree day accumulations beginning 1 January, 2018
		0.0	Spotted Green Fruitworm (SGFW) (0/0)
		5.8	Redbanded Leafroller (RBLR) (33/48)
		1.5	Spotted Tentiform Leafminer (STLM) (10/11)
		1.6	Codling Moth (CM) (12/11/0) **First SustainedCatch**
		18.4	Oriental Fruit Moth (OFM) (130/128)
		0.0	Lesser Apple Worm (LAW) (0/0)
		0.85	Brown Marmorated Stink Bug (BMSB) (6)
		31.0	San Jose Scale (SJS) **First Sustained Catch**
		0.96	Psylla eggs / bud (24 egg / 25 leaves / 5 UT Bart.)
		0.88	Psylla nymph / bud (22 nym. / 25 leaves/ 5 UT Bart.)
		0.0	Spotted Wing Drosophila (SWD)

OBLR 0.0% in UT Ginger Gold
SGFW 0.0% in UT Ginger Gold
Plum Curculio (PC) 5.0% in UT Ginger Gold Fruitlets
Tarnished Plant bug (TPB) 8.0% in UT Ginger Gold Fruitlets

Apple – McIntosh – 100% Fruit Set

Apple – Ginger Gold – 92% Fruit Set

Apple – Red Delicious – 97% Fruit Set

Apple – Golden Delicious – 90% Fruit Set

Pear – Bartlett – 100% Fruit Set

Pear – Bosc – 100% Fruit Set

Peach – Early – 18% Fruit Set, Shucks off

Peach – Late – 8% Fruit Set, Shucks off

Sweet Cherry – 83% Fruit Set

Plum-- Stanley – 100% Fruit Set

		2.18	Weekly Rainfall
		11.11	Total Rainfall (From 1 March, 2018)

Date	Baskerville-Emin (BE) DD Accumulations (previous day NEWA)		Field Observations / Trap Catches / Models
	43 F	**50 F**	**# / trap / day (pheromone trap)**
5/29	829.8	493.3	Beginning degree day accumulations beginning 1 January, 2018
		0.0	Spotted Green Fruitworm (SGFW) (0/0)
		2.5	Redbanded Leafroller (RBLR) (26/14)
		0.9	Spotted Tentiform Leafminer (STLM) (7/8)
		8.1	Codling Moth (CM) (73/57)
			29 May CM model: 1st CM larval emergence
		9.25	Oriental Fruit Moth (OFM) (62/85)
		0.9	Lesser Apple Worm (LAW) (2/12) **First Catch**
		1.85	Brown Marmorated Stink Bug (BMSB) (12)
		711.6	San Jose Scale (SJS) (3,336/8,050)
		170 DD	**5th June SJS model for 1st gen. crawler emergence**
		4.88	Psylla eggs / bud (122 egg / 25 leaves / 5 UT Bart.)
		0.68	Psylla nymph / bud (17 nym. / 25 leaves/ 5 UT Bart.)
		0.0	Spotted Wing Drosophila (SWD) (0/0)
			OBLR 2.0% in UT Ginger Gold
			SGFW 2.0% in UT Ginger Gold
			OFM 6.0% in UT Ginger Gold
			Plum Curculio (PC) 34.0% in UT Ginger Gold Fruitlets
			Tarnished Plant bug (TPB) 17.0% in UT Ginger Gold Fruitlets
			Lepidopteran Feeding 4% in UT Ginger Gold Fruitlets
		0.17	Weekly Rainfall
		11.28	Total Rainfall (From 1 March, 2018)

Date	Baskerville-Emin (BE) DD Accumulations (previous day NEWA)		Field Observations / Trap Catches / Models
	43 F	**50 F**	**# / trap / day (pheromone trap)**
6/4	996.8	618.2	Beginning degree day accumulations beginning 1 January, 2018

Trap Captures (Attractant / Pheromone)

Apple

		0.42	Redbanded Leafroller (RBLR) (3/3)
		0.2	Spotted Tentiform Leafminer (STLM) (2/1)
		8.3	Codling Moth (CM) (70/47)
		1.92	Oriental Fruit Moth (OFM) (0/27)
		0.5	Dogwood Borer (DWB) (1/2) **First Catch**
		0.42	Lesser Apple Worm (LAW) (3/3) **First Sustained Catch**
		0.42	Brown Marmorated Stink Bug (BMSB) (3)
		2.42	San Jose Scale (SJS) (26/8)
		2.7	Obliquebanded Leafroller (OBLR) (13/3) **First Catch**

Apple

		10.4	Psylla eggs / bud (260 egg / 25 leaves / 5 UT Bart.)
		5.76	Psylla nymph / bud (144 nym. / 25 leaves/ 5 UT Bart.)

Cherry, Small Fruit, Alternate Hosts

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

Predictive Modeling

357DD CM model: Moth flight peaks & majority of eggs hatch

357DD PC model: Adult migration ends

295 DD   SJS Model: Today (6/4) SJS model for 1st gen. crawlers emergence (260-360 Base 50)
No crawler emergence at HVRL on 6/4

Tree Fruit Injury in UTC

OBLR 0.0% in UT Ginger Gold

SGFW 1.8% in UT Ginger Gold

OFM 41.0% in UT Ginger Gold

Plum Curculio (PC) 77.0% in UT Ginger Gold Fruitlets

Tarnished Plant bug (TPB) 39.0% in UT Ginger Gold Fruitlets

Lepidopteran Feeding 15% in UT Ginger Gold Fruitlets

Rainfall

		0.76	Weekly Rainfall
		12.05	Total Rainfall (From 1 March, 2018)

Date	Baskerville-Emin (BE) DD Accumulations (previous day NEWA)		Field Observations / Trap Catches / Models
	43 F	**50 F**	**# / trap / day (pheromone trap)**
6/11	1137.7	710.0	Beginning degree day accumulations beginning 1 January, 2018

Trap Captures (Attractant / Pheromone)

Apple

0.0	Redbanded Leafroller (RBLR) (0/0)
0.6	Spotted Tentiform Leafminer (STLM) (0/8/)
3.8	Codling Moth (CM) (30/23)
3.4	Oriental Fruit Moth (OFM) (41/6)
0.2	Dogwood Borer (DWB) (1/2) **First Sustained Catch**
0.4	Lesser Apple Worm (LAW) (1/5)
0.0	Brown Marmorated Stink Bug (BMSB) (0)
0.0	San Jose Scale (SJS) (0/0)
31.8	Obliquebanded Leafroller (OBLR) (31/12) **First Sustained Catch**

Pear

9.2	Psylla eggs / bud (230 egg / 25 leaves / 5 UT Bart.)
8.96	Psylla nymph / bud (224 nym. / 25 leaves/ 5 UT Bart.)

Cherry, Small Fruit, Alternate Hosts

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

Predictive Modeling

449 DD CM model: Moth flight peaks & majority of eggs hatch

449 DD PC model: Adults inactive, PC sprays are no longer necessary

387 DD SJS Model: 1st generation "white caps"
Pheromone traps should be in place to record the 2nd adult flight
No SJS crawler emergence at HVRL on 6/11 AM.

Tree Fruit Injury in UTC

OBLR 0.0% in UT Ginger Gold Terminals

SGFW 0.0% in UT Ginger Gold Terminals

OFM 22.0% in UT Ginger Gold Terminals

Aphids 2.0% in UT Ginger Gold Terminals

Plum Curculio (PC) 79 feeding sites in 100 UT Ginger Gold Fruitlets

Tarnished Plant bug (TPB) 54 feeding sites in 100 UT GG Fruitlets

OFM Feeding 10% in UT Ginger Gold Fruitlets

European Apple Sawfly 1% in UT Ginger Gold Fruitlets

Rainfall

0.5	Weekly Rainfall
12.5	Total Rainfall (From 1 March, 2018)

Date	Baskerville-Emin (BE) DD Accumulations (previous day NEWA)		Field Observations / Trap Catches / Models
	43 F	**50 F**	**# / trap / day (pheromone trap)**
6/18	1310.9	834.2	Beginning degree day accumulations beginning 1 January, 2018
			Trap Captures (Attractant / Pheromone)

Apple

	0.6	Redbanded Leafroller (RBLR) (6/2)
	5.8	Spotted Tentiform Leafminer (STLM) (61/20)
	5.7	Codling Moth (CM) (49/31)
	0.1	Oriental Fruit Moth (OFM) (0/1)
	0.2	Dogwood Borer (DWB) (2/1)
	0.3	Lesser Apple Worm (LAW) (3/1)
	0.0	Brown Marmorated Stink Bug (BMSB) (0)
	0.0	San Jose Scale (SJS) (na/1)
	6.6	Obliquebanded Leafroller (OBLR) (67/25)

Pear

	10.0	Psylla eggs / bud (251 egg / 25 leaves / 5 UT Bart.)
	15.3	Psylla nymph / bud (383 nym. / 25 leaves/ 5 UT Bart.)

Cherry, Small Fruit, Alternate Hosts

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

Predictive Modeling

573 DD CM model: Moth flight peaks & majority of eggs hatch

573 DD PC model: Adults inactive, PC sprays are no longer necessary

511 DD SJS Model: 1st generation "white caps"
Pheromone traps should be in place to record the 2nd adult flight
FIRST SJS crawler emergence at HVRL on 6/16 on Red Deliciou
and Ginger Gold.

Tree Fruit Injury in UTC

OBLR 18.0% in UT Ginger Gold Terminals

SGFW 0.0% in UT Ginger Gold Terminals

OFM 24.0% in UT Ginger Gold Terminals

Aphids 2.0% in UT Ginger Gold Terminals

Plum Curculio (PC) 129 feeding sites in 100 UT GG Fruitlets

Tarnished Plant bug (TPB) 56 feeding sites in 100 UT GG Fruitlets

OFM Feeding 13 feeding sites in 100 UT GG Fruitlets

European Apple Sawfly 3 feeding sites in 100 UT GG Fruitlets

Codling Moth 8 feeding sites in 100 UT GG Fruitlets

Rainfall

	0.02	Weekly Rainfall
	12.52	Total Rainfall (From 1 March, 2018)

Date	Baskerville-Emin (BE) DD Accumulations (previous day NEWA)			Field Observations / Trap Catches / Models
	43 F	50 F		# / trap / day (pheromone trap)
6/25	1310.9	834.2		Beginning degree day accumulations beginning 1 January, 2018

Trap Captures (Attractant / Pheromone)

Apple

2.6		Redbanded Leafroller (RBLR) (23/14)
8.0		Spotted Tentiform Leafminer (STLM) (58/54)
7.0		Codling Moth (CM) (44/54)
0.7		Oriental Fruit Moth (OFM) (3/7)
0.0		Dogwood Borer (DWB) (0/0)
0.1		Lesser Apple Worm (LAW) (0/1)
0.0		Brown Marmorated Stink Bug (BMSB) (0)
0.0		San Jose Scale (SJS) (0/0)
7.6		Obliquebanded Leafroller (OBLR) (53/53)
3.3		Tufted Apple Budmoth (TABM) (23/23) **First Catch**
1		Sparganothis (SPAR) (2/12) **First Catch**

Pear

7.1	Psylla eggs / bud (177 egg / 25 leaves / 5 UT Bart.)
17.2	Psylla nymph / bud (430 nym. / 25 leaves/ 5 UT Bart.)

Cherry, Small Fruit, Alternate Hosts

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

Predictive Modeling

725 DD CM model: 1st moth flight over & egg hatch complete

725 DD PC model: Adults inactive, PC sprays are no longer necessary

663 DD SJS Model: 1st generation "white caps"
  Pheromone traps should be in place to record the 2nd adult flight
515 DD OBLR model: Peak egg hatch, approximately 25% of total eggs have hatched by this time.
17 June OBLR larvae emergence predicted

Tree Fruit Injury in UTC

OBLR 8.0% in UT Ginger Gold Terminals
SGFW 0.0% in UT Ginger Gold Terminals
OFM 54.0% in UT Ginger Gold Terminals
Aphids 2.0% in UT Ginger Gold Terminals
Plum Curculio (PC) 52 feeding sites in 100 UT GG Fruitlets
Tarnished Plant bug (TPB) 34 feeding sites in 100 UT GG Fruitlets
OFM Feeding 13 feeding sites in 100 UT GG Fruitlets
European Apple Sawfly 10 feeding sites in 100 UT GG Fruitlets
Codling Moth 28 feeding sites in 100 UT GG Fruitlets
OBLR 1 feeding site in 100 UT GG Fruitlets

Rainfall

0.7	Weekly Rainfall
12.8	Total Rainfall (From 1 March, 2018)

Date	Baskerville-Emin (BE) DD Accumulations (previous day NEWA)		Field Observations / Trap Catches / Models
	43 F	**50 F**	**# / trap / day (pheromone trap)**
7/2	1718.4	1143.8	Beginning degree day accumulations beginning 1 January, 2018
			Trap Captures (Attractant / Pheromone)

Apple

	4.4	Redbanded Leafroller (RBLR) (13/49)
	12.7	Spotted Tentiform Leafminer (STLM) (97/81)
	1.9	Codling Moth (CM) (17/10)
	0.0	Oriental Fruit Moth (OFM) (0/0)
	0.1	Dogwood Borer (DWB) (1/0)
	0.1	Lesser Apple Worm (LAW) (0/1)
	0.0	Brown Marmorated Stink Bug (BMSB) (0)
	0.0	San Jose Scale (SJS) (0/0)
	2.4	Obliquebanded Leafroller (OBLR) (9/25)
	1.7	Tufted Apple Budmoth (TABM) (10/14) **First Sustained Catch**
	1.6	Sparganothis (SPAR) (11/11) **First Sustained Catch**
	1.4	Apple Maggot (AM) (2/3/0/2) **First Catch**

Pear

	2.0	Psylla eggs / bud (50 egg / 25 leaves / 5 UT Bart.)
	6.9	Psylla nymph / bud (172 nym. / 25 leaves/ 5 UT Bart.)

Cherry, Small Fruit, Alternate Hosts

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

Predictive Modeling

882 DD CM model: 2nd generation of moths emerge

882 DD PC model: Adults inactive, PC sprays are no longer necessary

821 DD SJS Model: 2nd generation adults emerge
Note date of first capture of 2nd generation adults, to obtain biofix for predicting 2nd generation crawler emergence
722 DD OBLR model: Larvae damaging fruit
Fruit damage is starting now, and will increase rapidly if larvae have not been effectively controlled

Tree Fruit Injury in UTC

OBLR 14.0% in UT Ginger Gold Terminals
SGFW 0.0% in UT Ginger Gold Terminals
OFM 20.0% in UT Ginger Gold Terminals
Aphids 0.0% in UT Ginger Gold Terminals
Plum Curculio (PC) 77 feeding sites in 100 UT GG Fruitlets
Tarnished Plant Bug (TPB) 14 feeding sites in 100 UT GG Fruitlets
OFM 16 feeding sites in 100 UT GG Fruitlets
European Apple Sawfly 4 feeding sites in 100 UT GG Fruitlets
Codling Moth 31 feeding sites in 100 UT GG Fruitlets
OBLR 19 feeding site in 100 UT GG Fruitlets

Rainfall

	1.66	Weekly Rainfall
	14.5	Total Rainfall (From 1 March, 2018)

Date	Baskerville-Emin (BE) DD Accumulations (previous day NEWA)		Field Observations / Trap Catches / Models
	43 F	**50 F**	**# / trap / day (pheromone trap)**
7/9	1956.7	1332.9	Beginning degree day accumulations beginning 1 January, 2018

Trap Captures (Attractant / Pheromone)

Apple

	8.6	Redbanded Leafroller (RBLR) (72/49)
	9.4	Spotted Tentiform Leafminer (STLM) (76/55)
	1.1	Codling Moth (CM) (5/10)
	0.2	Oriental Fruit Moth (OFM) (3/0)
	0.3	Dogwood Borer (DWB) (0/2)
	0.0	Lesser Apple Worm (LAW) (0/0)
	0.0	Brown Marmorated Stink Bug (BMSB) (0)
	1.0	San Jose Scale (SJS) (0/14)
	2.4	Obliquebanded Leafroller (OBLR) (25/9)
	0.6	Tufted Apple Budmoth (TABM) (9/0)
	1.1	Sparganothis (SPAR) (11/4)
	0.6	Apple Maggot (AM) (4/0/7/6) **First Sustained Catch**

Pear

	1.2	Psylla eggs / bud (29 egg / 25 leaves / 5 UT Bart.)
	3.1	Psylla nymph / bud (77 nym. / 25 leaves/ 5 UT Bart.)

Cherry, Small Fruit, Alternate Hosts

	0.4	Spotted Wing Drosophila (SWD) (4/5/0)

Predictive Modeling

1072 DD CM model: The flight of 2nd gen CM usually starts during this time

1072 DD PC model: Adults inactive, PC sprays are no longer necessary

1010 DD SJS Model: 2nd generation adults emerge
2nd Generation males caught 7/9/18

960 DD OBLR model: Flight of the first summer gen of adults is diminishing
It is too late to apply controls for the summer gen of OBLR larvae.

Tree Fruit Injury in UTC

AM 12.0% in UT Ginger Gold Fruit

Rainfall

	0.16	Weekly Rainfall
	14.66	Total Rainfall (From 1 March, 2018)

Date	Baskerville-Emin (BE) DD Accumulations (previous day NEWA)		Field Observations / Trap Catches / Models
	43 F	**50 F**	**# / trap / day (pheromone trap)**
7/16	2180.5	1507.8	Beginning degree day accumulations beginning 1 January, 2018

Trap Captures (Attractant / Pheromone)

Apple

10.7	Redbanded Leafroller (RBLR) (73/77)
8.1	Spotted Tentiform Leafminer (STLM) (74/40)
4.9	Codling Moth (CM) (39/30)
0.0	Oriental Fruit Moth (OFM) (0/0)
0.4	Dogwood Borer (DWB) (2/3)
0.0	Lesser Apple Worm (LAW) (0/0)
0.3	Brown Marmorated Stink Bug (BMSB) (2)
38.4	San Jose Scale (SJS) (118/420)
0.0	Obliquebanded Leafroller (OBLR) (0/0)
0.2	Tufted Apple Budmoth (TABM) (0/3)
0.5	Sparganothis (SPAR) (6/1)
0.4	Apple Maggot (AM) (4/3/1/4)

Pear

0.8	Psylla eggs / bud (21 egg / 25 leaves / 5 UT Bart.)
3.9	Psylla nymph / bud (99 nym. / 25 leaves/ 5 UT Bart.)

Cherry, Small Fruit, Alternate Hosts

0.1	Spotted Wing Drosophila (SWD) (0/1/2)

Predictive Modeling

1246 DD CM model: 2nd generation of moths emerges

1246 DD PC model: Adults inactive, PC sprays are no longer necessary

151 DD SJS Model: 2nd generation crawlers developing

**1184 DD OBLR model: Flight of the first summer gen of adults is diminishing
It is too late to apply controls for the summer gen of OBLR larvae.**

Tree Fruit Injury in UTC

AM 12.0% in UT Ginger Gold Fruit

Rainfall

1.14	Weekly Rainfall
15.8	Total Rainfall (From 1 March, 2018)

Date	Baskerville-Emin (BE) DD Accumulations (previous day NEWA)		Field Observations / Trap Catches / Models
	43 F	**50 F**	**# / trap / day (pheromone trap)**
7/23	2390.3	1668.6	Beginning degree day accumulations beginning 1 January, 2018

Trap Captures (Attractant / Pheromone)

Apple

	3.5	Redbanded Leafroller (RBLR) (19/30)
	3.0	Spotted Tentiform Leafminer (STLM) (11/31)
	6.5	Codling Moth (CM) (44/47)
	0.0	Oriental Fruit Moth (OFM) (0/0)
		Dogwood Borer (DWB) (na)
	0.0	Lesser Apple Worm (LAW) (0/0)
	4.3	Brown Marmorated Stink Bug (BMSB) (30)
	63.6	San Jose Scale (SJS) (109/782)
	0.0	Obliquebanded Leafroller (OBLR) (0/0)
	0.0	Tufted Apple Budmoth (TABM) (0/0)
	0.0	Sparganothis (SPAR) (0/0)
	0.5	Apple Maggot (AM) (4/3/4/4)

Pear

	0.8	Psylla eggs / bud (19 egg / 25 leaves / 5 UT Bart.)
	3.0	Psylla nymph / bud (73 nym. / 25 leaves/ 5 UT Bart.)

Cherry, Small Fruit, Alternate Hosts

Spotted Wing Drosophila (SWD) ()

Predictive Modeling

1407 DD CM model: 2nd generation of moths emerges

525 DD AM model: Adults and first eggs, Initial pesticide treatments should be applied as soon as trap catches exceed recommended threshold levels (average 5 flies/trap).
336 DD SJS Model: 2nd generation emergence through 7/22

Tree Fruit Injury in UTC

AM 12.0% in UT Ginger Gold Fruit
CM 36.0% in UT Ginger Gold Fruit

Rainfall

	3.06	Weekly Rainfall *New Paltz weather station data*
	19.1	Total Rainfall (From 1 March, 2018)

Date	Baskerville-Emin (BE) DD Accumulations (previous day NEWA)		Field Observations / Trap Catches / Models
	43 F	**50 F**	**# / trap / day (pheromone trap)**
7/30	2439.8	1697.7	Beginning degree day accumulations beginning 1 January, 2018

Trap Captures (Attractant / Pheromone)

Apple

1.6	Redbanded Leafroller (RBLR) (9/14)
12.3	Spotted Tentiform Leafminer (STLM) (67/105)
6.5	Codling Moth (CM) (27/64)
0.2	Oriental Fruit Moth (OFM) (0/3)
	Dogwood Borer (DWB) (na)
0.1	Lesser Apple Worm (LAW) (0/1)
12.0	Brown Marmorated Stink Bug (BMSB) (84)
189.7	San Jose Scale (SJS) (206/2,450)
0.1	Obliquebanded Leafroller (OBLR) (0/2)
0.0	Tufted Apple Budmoth (TABM) (0/0)
0.0	Sparganothis (SPAR) (0/0)
1.4	Apple Maggot (AM) (6/8/2/25) ** high numbers **

Pear

1.0	Psylla eggs / bud (26 egg / 25 leaves / 5 UT Bart.)
0.6	Psylla nymph / bud (14 nym. / 25 leaves/ 5 UT Bart.)

Cherry, Small Fruit, Alternate Hosts

0.1	Spotted Wing Drosophila (SWD) (sweet cherry:0, honeysuckle:2)

Predictive Modeling

1468 DD CM model: 2nd generation of moths emerges

668 DD AM model: Adults and first eggs, Initial pesticide treatments should be applied as soon as trap catches exceed recommended threshold levels (average 5 flies/trap).
328 DD SJS Model: 2nd generation crawlers emerging

Tree Fruit Injury in UTC

AM 12.0% in UT Ginger Gold Fruit
CM 56.0% in UT Ginger Gold Fruit
SJS 16.0% in UT Ginger Gold Fruit

Rainfall

3.74	Weekly Rainfall *New Paltz WG Minard weather station data*
21.2	Total Rainfall (From 1 March, 2018)

Date	Baskerville-Emin (BE) DD Accumulations (previous day NEWA)		Field Observations / Trap Catches / Models
	43 F	**50 F**	**# / trap / day (pheromone trap)**
8/6	2661.7	1870.6	Beginning degree day accumulations beginning 1 January, 2018

Trap Captures (Attractant / Pheromone)

Apple

1.2	Redbanded Leafroller (RBLR) (4/13)
20.0	Spotted Tentiform Leafminer (STLM) (98/182)
3.7	Codling Moth (CM) (23/29)
0.1	Oriental Fruit Moth (OFM) (0/2)
1.5	Dogwood Borer (DWB) (0/9)
0.1	Lesser Apple Worm (LAW) (1/0)
7.3	Brown Marmorated Stink Bug (BMSB) (58)
236.5	San Jose Scale (SJS) (1351/1960)
0.0	Obliquebanded Leafroller (OBLR) (0/0)
0.0	Tufted Apple Budmoth (TABM) (0/0)
0.0	Sparganothis (SPAR) (0/0)
1.1	Apple Maggot (AM) (9/1/5/15) ** high numbers **

Pear

0.8	Psylla eggs / bud (19 egg / 25 leaves / 5 UT Bart.)
0.4	Psylla nymph / bud (9 nym. / 25 leaves/ 5 UT Bart.)

Cherry, Small Fruit, Alternate Hosts

0.1	Spotted Wing Drosophila (SWD) (sweet cherry:0, honeysuckle:2)

Predictive Modeling

841 DD AM model: Adults move into orchards, eggs laid
8/6/18 2nd generation SJS crawlers emerged at HVRL

Tree Fruit Injury in Ginger Gold UTC

AM 36.0% in UT Ginger Gold Fruit
CM 32.0% in UT Ginger Gold Fruit

Rainfall

2.15	Weekly Rainfall *New Paltz WG Minard weather station data*
23.4	Total Rainfall (From 1 March, 2018)