

2020 Hudson Valley Research Lab Scouting Report

Cornell AgriTech Entomology Department, Highland, NY

<u>Date</u>	Baskerville-Emin (BE)		<u>Field Observations / Trap Catches / Models</u>	
	DD Accumulations (previous day NEWA)			
	43 F	50 F	# / trap / day (pheromone trap)	
3/2	50.2	17.4		Degree day accumulations beginning 1 January, 2020
			0.0	Redbanded Leafroller (RBLR) (0/0)
			0.0	Pear Psylla 0 Eggs/25 Buds
			0.0	Speckled Green Fruitworm (SGFW) (0/0)
			0.0	Weekly Rainfall
			0.0	Total Rainfall (Since 1 March, 2020)
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3/9	69.5	22.8		Degree day accumulations beginning 1 January, 2020
			0.0	Speckled Green Fruitworm (SGFW) (0/0)
			0.0	Redbanded Leafroller (RBLR) (0/0)
			0.0	Pear Psylla 0 Eggs/25 Buds
				Phenology
			0.05	Weekly Rainfall
			0.05	Total Rainfall (Since 1 March, 2020)
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Baskerville-Emin (BE)			
<u>Date</u>	<u>DD Accumulations (previous day NEWA)</u>		<u>Field Observations / Trap Catches / Models</u>
3/16	114.8*	44.3*	Degree day accumulations beginning 1 January, 2020
		0.0	Speckled Green Fruitworm (SGFW) (0/0)
		0.0	Spotted Tentiform Leafminer (0/0)
		0.0	Lesser Apple Worm (LAW) (0/0)
		0.0	Oriental Fruitmoth (OFM) (0/0)
		0.0	Pear Psylla 0 Eggs/25 Buds
		0.3	Redbanded Leafroller (RBLR) (1/3) FIRST CATCH
			Phenology
			Apple
			Zestar M9 90% Green Tip
			Jersey Mac M9 53% Green Tip
			McIntosh M26 15% Green Tip
			Red Chief M26 28% Green Tip
			Ginger Gold M26 53% Green Tip
			Smoothie M26 22% Green Tip
			Empire M9T337 61% Green Tip
			Gala M9 71% Green Tip
			Honey Crisp Nic29 30% Green Tip
			Pear
			Bartlett 79% Swollen Bud
			Bosc 37% Swollen Bud
			Sweet Cherry
			Black Pearl Gi5 100% dormant
			Peach
			Red Haven 100% dormant
		0.25	Weekly Rainfall*
		0.53	Total Rainfall (Since 1 March, 2020)*
			*Taken from Marlboro, NY NEWA Station

Baskerville-Emin (BE)				
<u>Date</u>	<u>DD Accumulations (previous day NEWA)</u>		<u>Field Observations / Trap Catches / Models</u>	
3/23	140.8*	55.5*	Degree day accumulations beginning 1 January, 2020	
		0.0	Spotted Tentiform Leafminer (0/0)	
		0.0	Lesser Apple Worm (LAW) (0/0)	
		0.0	Oriental Fruitmoth (OFM) (0/0)	
		0.0	Pear Psylla 0 Eggs/25 Buds	
		0.1	Speckled Green Fruitworm (SGFW) (1/1) FIRST CATCH	
		1.0	Redbanded Leafroller (RBLR) (6/8) FIRST SUSTAINED CATCH	
			Phenology	
			Apple	Green Tip (GT)
			McIntosh M26	48% GT
			Red Chief M26	74% GT
			Ginger Gold M26	81% GT
			Smoothie M26	44% GT
			Empire M9T337	89% GT
			Gala M9	76% GT
			Honey Crisp Nic29	77% GT
			Pear	Swollen Bud (SB)
			Bartlett	79% SB
			Bosc	71% SB
			Sweet Cherry	
			Black Pearl Gi5	18% SB
			Peach	
			Red Haven	48% SB
		0.89	Weekly Rainfall*	
		1.42	Total Rainfall (Since 1 March, 2020)*	
			*Taken from Marlboro, NY NEWA Station	

Baskerville-Emin (BE)			
<u>Date</u>	<u>DD Accumulations (previous day NEWA)</u>		<u>Field Observations / Trap Catches / Models</u>
3/30	160.7*	62.1*	Degree day accumulations beginning 1 January, 2020
		0.0	Lesser Apple Worm (LAW) (0/0)
		0.0	Oriental Fruitmoth (OFM) (0/0)
		0.7	Pear Psylla 17.5 Eggs/25 Buds
		2.8	Redbanded Leafroller (RBLR) (18/21)
		0.0	Speckled Green Fruitworm (SGFW) (0/0)
		1.8	Spotted Tentiform Leafminer (24/1) FIRST CATCH
			Phenology
			Apple
			Zestar M9 24% ½” Green
			Jersey Mac M9 95% Green Tip
			McIntosh M26 76% Green Tip
			Red Chief M26 4% ½” Green
			Ginger Gold M26 7% ½” Green
			Smoothie M26 61% Green Tip
			Empire M9T337 21% ½” Green
			Gala M9 21% ½” Green
			Honey Crisp Nic29 97% Green Tip
			Pear
			Bartlett 80% Swollen Bud
			Bosc 61% Swollen Bud
			Sweet Cherry
			Black Pearl Gi5 90% Swollen Bud
			Peach
			Red Haven 97% Swollen Bud
		1.32	Weekly Rainfall*
		2.74	Total Rainfall (Since 1 March, 2020)*
			*Taken from Marlboro, NY NEWA Station

Baskerville-Emin (BE)			
<u>Date</u>	<u>DD Accumulations (previous day NEWA)</u>		<u>Field Observations / Trap Catches / Models</u>
4/6	198.9*	78.6*	Degree day accumulations beginning 1 January, 2020
		0.0	Lesser Apple Worm (LAW) (0/0)
		0.1	Oriental Fruitmoth (OFM) (1/0) FIRST CATCH
		0.6	Pear Psylla 16 Eggs/25 Buds (Untreated Bartlett)
		15.7	Redbanded Leafroller (RBLR) (122/98)
		0.0	Speckled Green Fruitworm (SGFW) (0/0)
		33.9	Spotted Tentiform Leafminer (431/43) FIRST SUSTAINED CATCH
			Phenology
			Apple
		Zestar M9	100% Half-inch Green (HIG)
		Jersey Mac M9	82% HIG
		McIntosh M26	50% HIG
		Red Chief M26	88% HIG
		Ginger Gold M26	94% HIG
		Smoothie M26	41% HIG
		Empire M9T337	18% TC
		Gala M9	92% HIG
		Honey Crisp Nic29	53% HIG
			Pear
		Bartlett	89% Bud Burst
		Bosc	74% Bud Burst
			Sweet Cherry
		Black Pearl Gi5	100% Swollen Bud
			Peach
		Red Haven	87% HIG
		0.26	Weekly Rainfall*
		3.07	Total Rainfall (Since 1 March, 2020)*
			*Taken from HVRL Highland, NY NEWA Station

Baskerville-Emin (BE)			
<u>Date</u>	<u>DD Accumulations (previous day NEWA)</u>		<u>Field Observations / Trap Catches / Models</u>
4/13	235.1*	89.0*	Degree day accumulations beginning 1 January, 2020
		0.0	Codling Moth (CM) (0/0)
		0.8	Pear Psylla 18.75 Eggs/25 Buds; no nymphs observed (UTC)
		0.0	Lesser Apple Worm (LAW) (0/0)
		0.3	Oriental Fruitmoth (OFM) (4/0) FIRST SUSTAINED CATCH
		13.1	Redbanded Leafroller (RBLR) (105/78)
		0.0	Speckled Green Fruitworm (SGFW) (0/0)
		35.3	Spotted Tentiform Leafminer (398/96)
			<u>Degree Day Modeling</u>
		76	STLM (biofix 3/30) Actively flying & first eggs are usually laid at early tight cluster
		43	OFM (biofix 4/6) Actively flying, hatch during petal fall.
			<u>Fruit Phenology</u>
			Apple
			Zestar M9 85% TC, 15% P
			Jersey Mac M9 100% TC
			McIntosh M26 90% TC
			Red Chief M26 96% TC
			Ginger Gold M26 87% TC
			Smoothie M26 98% TC
			Empire M9T337 88% TC, 12% P
			Gala M9 100% TC
			Honey Crisp Nic29 100% TC
			Pear
			Bartlett 83% GC
			Bosc 88% GC
			Sweet Cherry
			Black Pearl Gi5 62% BB, 38% Early WB
			Peach
			Red Haven 46% P, 53% Bloom
		0.72	Weekly Rainfall*
		3.79	Total Rainfall (Since 1 March, 2020)*
			*Taken from HVRL Highland, NY NEWA Station

Baskerville-Emin (BE)			
<u>Date</u>	<u>DD Accumulations (previous day NEWA)</u>		<u>Field Observations / Trap Catches / Models</u>
4/20	265.2	101.0	Degree day accumulations beginning 1 January, 2020
		0.0	Black Stem Borer (BSB) (0/0)
		1.3	Pear Psylla 33 Eggs/25 Buds;
		0.0	Codling Moth (CM) (0/0)
		0.0	Lesser Apple Worm (LAW) (0/0)
		0.4	Oriental Fruitmoth (OFM) (4/1)
		0.01	Pear Psylla 0.25 Nymphs/25 Buds FIRST NYMPHS OBSERVED
		10.8	Redbanded Leafroller (RBLR) (74/55)
		0.0	Speckled Green Fruitworm (SGFW) (0/0)
		13.2	Spotted Tentiform Leafminer (126/32)
			Lepidopteran feeding on pear flower buds observed
			<u>Degree Day Modeling</u>
		107	STLM (biofix 3/30) Actively flying & first eggs are usually laid at early tight cluster until end of pink
		73	OFM (biofix 4/6) Actively flying, eggs hatch during petal fall.
			<u>Fruit Phenology</u>
			Apple
			Zestar M9 71% P
			Jersey Mac M9 100% TC
			McIntosh M26 9% P
			Red Chief M26 100% TC
			Ginger Gold M26 13% P
			Smoothie M26 2% P
			Empire M9T337 74% P
			Gala M9 7% P
			Honey Crisp Nic29 3% P
			Pear
			Bartlett 19% WB
			Bosc 14%WB
			Sweet Cherry
			Black Pearl Gi5 15% Bloom
			Peach
			Red Haven 100% Bloom
			Grape
			Cabernet Franc 88% Swollen Bud (SB)
			Pinot Noir 65% SB
		1.55	Weekly Rainfall
		5.34	Total Rainfall (Since 1 March, 2020)

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)
4/27	285.4	106.7	Degree day accumulations beginning 1 January, 2020
			0.0 Black Stem Borer (BSB) (0/0)
			1.3 Pear Psylla 33 Eggs/25 Buds;
			0.0 Codling Moth (CM) (0/0)
			0.0 Lesser Apple Worm (LAW) (0/0)
			0.4 Oriental Fruitmoth (OFM) (9/2)
			0.01 Pear Psylla 0.25 Nymphs/25 Buds FIRST NYMPHS OBSERVED
			10.8 Redbanded Leafroller (RBLR) (78/67)
			0.0 Speckled Green Fruitworm (SGFW) (0/0)
			13.2 Spotted Tentiform Leafminer (231/72)
			Lepidopteran feeding on pear flower buds observed
			<u>Degree Day Modeling</u>
			141 STLM (biofix 3/30) Actively flying & first eggs are usually laid at early tight cluster – pink, 1 st mines appear in early bloom.
			108 OFM (biofix 4/6) Actively flying, eggs hatch during petal fall.
			<u>Fruit Phenology</u>
			Apple
			Zestar M9 5% Bloom
			Jersey Mac M9 100% Tight Cluster
			McIntosh M26 100% Pink
			Red Chief M26 50% TC
			Ginger Gold M26 100% P
			Smoothie M26 50% P
			Empire M9T337 100% P
			Gala M9 58% P
			Honey Crisp Nic29 50% P
			Liberty, Scarlet O'Hara, Florina Querina 10% Bloom
			Pear
			Bartlett 5-20% Bloom
			Bosc 90%WB
			Sweet Cherry
			Black Pearl Gi5 90% Bloom
			Peach
			Red Haven 75% Petal Fall
			Grape
			Cabernet Franc Early leaf
			Pinot Noir Early leaf
			0.97 Weekly Rainfall
			3.38 Monthly Rainfall

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)
5/4	360.7	148.0	Degree day accumulations beginning 1 January, 2020
			4.5 Black Stem Borer (BSB) (28/35) FIRST CATCH
			0.7 Pear Psylla 36 Eggs/50 Buds;
			0.0 Codling Moth (CM) (0/0)
			0.0 Lesser Apple Worm (LAW) (0/0)
			9.4 Oriental Fruitmoth (OFM) (101/30)
			< 0.1 Pear Psylla 3 Nymphs/50 Buds
			13.6 Redbanded Leafroller (RBLR) (94/71)
			0.0 Speckled Green Fruitworm (SGFW) (0/0)
			25.9 Spotted Tentiform Leafminer (275/101)
			<u>Degree Day Modeling</u>
			141 STLM (biofix 3/30) Actively flying & first eggs are usually laid at early tight cluster – pink, 1 st mines appear in early bloom.
			108 OFM (biofix 4/6) Actively flying, eggs hatch during petal fall.
			<u>Fruit Phenology</u>
			Apple
			Zestar M9 Full Bloom
			Jersey Mac M9 Full Bloom
			McIntosh M26 50% King Bloom
			Red Chief M26 50% King Bloom
			Ginger Gold M26 Full Bloom
			Smoothie M26 50% King Bloom
			Empire M9T337 Full Bloom
			Gala M9 70% King Bloom
			Honey Crisp Nic29 40% King Bloom
			Liberty, Scarlet O'Hara, Florina Querina 60% F.Bloom
			Pear
			Bartlett Full Bloom
			Bosc 90%Bloom
			Sweet Cherry
			Black Pearl Gi5 35% PF
			Peach
			Red Haven 95% Petal Fall / 32% Shucks on
			Grape
			Cabernet Franc 82% Bud Burst
			Pinot Noir 40% Bud Burst
			0.72 Weekly Rainfall
			0.43 Monthly Rainfall (April 4.13")
			6.06 Total Rainfall (Since 1 March, 2020)

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)
5/11	407.4	168.4	Degree day accumulations beginning 1 January, 2020
			< 0.1 Black Stem Borer (BSB) (1/0)
			0.4 Pear Psylla 21 Eggs/50 leaves
			0.0 Codling Moth (CM) (0/0)
			< 0.1 Lesser Apple Worm (LAW) (1/0) FIRST CATCH
			2.8 Oriental Fruitmoth (OFM) (36/3)
			< 0.1 Pear Psylla 1 Nymphs/50 leaves
			12.8 Redbanded Leafroller (RBLR) (87/92)
			0.0 Speckled Green Fruitworm (SGFW) (0/0)
			8.2 Spotted Tentiform Leafminer (74/41)
			<u>Degree Day Modeling</u>
			249 STLM (biofix 3/30) Flight in decline, eggs near completely laid and beginning to hatch during bloom.
			216 OFM (biofix 4/6) Moths are still flying and usually about 50-60% of eggs from the first generation have hatched.
			<u>Fruit Phenology</u>
			Apple
			Zestar M9 Full Bloom
			Jersey Mac M9 Full Bloom
			McIntosh M26 Full Bloom
			Red Chief M26 Full Bloom
			Ginger Gold M26 Full Bloom
			Smoothie M26 Full Bloom
			Empire M9T337 Full Bloom
			Gala M9 Full Bloom
			Honey Crisp Nic29 Full Bloom
			Liberty, Scarlet O'Hara, Florina Querina Full Bloom
			Pear
			Bartlett Petal Fall
			Bosc Petal Fall
			Sweet Cherry
			Black Pearl Gi5 Fruit Set
			Peach
			Red Haven Fruit Set
			Grape
			Cabernet Franc NA
			Pinot Noir NA
			0.63 Weekly Rainfall
			1.06 Monthly Rainfall (April 4.13")
			6.06 Total Rainfall (Since 1 March, 2020)

Baskerville-Emin (BE)

<u>Date</u>	<u>DD Accumulations (previous day NEWA)</u>	<u>Field Observations / Trap Catches / Models</u>
5/15		Degree day accumulations beginning 1 January, 2020
	0.25	Codling Moth (CM) (2/0) FIRST TRAP CATCH
5/16		Degree day accumulations beginning 1 January, 2020
	4.5	Codling Moth (CM) (8/1) FIRST SUSTAINED CATCH CM biofix 5/16/20

Baskerville-Emin (BE)			
Date	DD Accumulations (previous day NEWA)		Field Observations / Trap Catches / Models
	43 F	50 F	# / trap / day (pheromone trap)
5/18	518.9	236.5	Degree day accumulations beginning 1 January, 2020
			5.0 Black Stem Borer (BSB) (37/33)
			-. Pear Psylla Eggs/50 leaves
			0.0 Codling Moth (CM) (34/7) FIRST CATCH 5/15
			0.1 Fruit Tree Leafroller (FTLR) (1/1) FIRST CATCH
			1.1 Lesser Apple Worm (LAW) (7/9)
			6.9 Oriental Fruitmoth (OFM) (56/41)
			-. Pear Psylla Nymphs/50 leaves
			4.2 Redbanded Leafroller (RBLR) (8/51)
			0.0 Sparganothis Fruitworm (SPAR) (0/0)
			0.0 Speckled Green Fruitworm (SGFW) (0/0)
			6.1 Spotted Tentiform Leafminer (51/34)
			Degree Day Modeling
			344 STLM (biofix 3/30) eggs hatching, sap feeding mines appear
			311 OFM (biofix 4/6) Moths are still flying and usually about 50-60% of eggs from the first generation have hatched.
			46 CM (biofix 5/15) Moths flying and first eggs laid
			Fruit Phenology
			0.47 Weekly Rainfall
			1.53 Monthly Rainfall (April 4.13")
			8.65 Total Rainfall (Since 1 March, 2020)

Crop	Cultivar	Rootstock	Phenological Stage (%)		
			Bloom	Petal Fall	Fruit Set
Apple	Zestar	M9		NA	
	Jersey Mac	M9		NA	
	McIntosh	M26		31	69
	Red Chief	M26		63	37
	Ginger Gold	M26		47	53
	Smoothie	M26		77	23
	Empire	M9T337		82	18
	Gala	B9		89	11
	Honey Crisp	Nic29	49	51	
				Petal Fall	Fruit Set
Pear	Bartlett			12	88
	Bosc			25	75
					Fruit Set - Shucks on
Sweet Cherry	Black Pearl	Gi5			100
				Fruit Set - Shucks on	Fruit Set - Shucks off
Peach	Red Haven			71	29

Variety	Primary Shoots Frost Damage (%)	Secondary Buds Phenology Stage
Cabernet Franc	91	Swollen Bud
Pinot Noir	85	Swollen Bud

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)
5/26	645.6	316.6	Degree day accumulations beginning 1 January, 2020
			6.5 Black Stem Borer (BSB) (54/39)
			2.5 Codling Moth (CM) (26/9)
			0.0 Grape Fruitworm (0/0)
			1.1 Lesser Apple Worm (LAW) (6/9)
			1.7 Oriental Fruitmoth (OFM) (6/18)
			1.0 Pear Psylla 25 Nymphs/25 leaves
			3.7 Redbanded Leafroller (RBLR) (26)
			1.0 San Jose Scale (SJS) (0/14) FIRST CATCH
			0.2 Pear Psylla 6 Eggs/25 leaves
			0.0 Speckled Green Fruitworm (SGFW) (0/0)
			3.3 Spotted Tentiform Leafminer (28/18)
			1.4 Tufted Apple Budmoth (14/5) FIRST CATCH
			<u>Fruit Injury</u>
			4% Lepidopteran feeding in Untreated (UT) Ginger Gold (GG) fruitlets
			8% Plum Curculio (PC) feeding in UT GG fruitlets
			20% Tarnished Plant Bug (TPB) feeding in UT GG fruitlets
			4% European Apple Sawfly (EAS) feeding in UT GG fruitlets
			24% PC on UT cherry, multiple varieties
			<u>Degree Day Modeling</u>
			487 STLM (biofix 3/30) eggs hatching, sap feeding mines appear
			454 OFM (biofix 4/6) End of hatch at 646DD _{43BE} . 2 nd flight at 700-1100DD _{43BE} .
			134 CM (biofix 5/15) Moths flying and first eggs laid. Eggs hatch at 220 DD. Action threshold at 220DD _{50BE} , predicted on May 30. SJS (biofix 5/26)
			0.2 Weekly Rainfall
			1.73 Monthly Rainfall
			8.79 Total Rainfall (Since 1 March, 2020)

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)
5/31	801.5	430.9	Degree day accumulations beginning 1 January, 2020
			6.5 Black Stem Borer (BSB) (19/72)
			Brown Marmorated Stink Bug (6 adults/trap)
			3.7 Codling Moth (CM) (45/7)
			0.9 Dogwood Borer (DWB) (5/7) 1 st CATCH
			0.1 Fruit Tree Leafroller (FTLR) (1) 1 st CATCH
			12.4 Grape Berry Moth (GBM) (87)
			2.2 Lesser Apple Worm (LAW) (26/5)
			0.6 Oriental Fruitmoth (OFM) (1/7)
			1.2 Pear Psylla 61 Nymphs/50 leaves
			0.8 Redbanded Leafroller (RBLR) (4/7)
			0.0 San Jose Scale (SJS) (0/0)
			0.1 Sparganothis (SPAR) 1 st CATCH
			0.4 Pear Psylla 19 Eggs/ 50 leaves
			0.0 Speckled Green Fruitworm (SGFW) (0/0)
			0.8 Spotted Tentiform Leafminer (2/9)
			1.1 Tufted Apple Budmoth (14/5) 1 st SUSTAINED CATCH
			0.3 Variegated Leafroller (VLR) (2/2) 1 st CATCH
			<u>Fruit Injury</u>
			1.3% Lepidopteran feeding in Untreated (UT) Ginger Gold (GG) fruitlets
			41.3% Plum Curculio (PC) feeding in UT GG fruitlets
			9.3% Tarnished Plant Bug (TPB) feeding in UT GG fruitlets
			0% European Apple Sawfly (EAS) feeding in UT GG fruitlets
			32% PC on UT cherry, multiple varieties
			<u>Degree Day Modeling</u>
			209DD ₅₀ Plum Curculio migration model. Residue needed to 308DD ₅₀
			643 STLM (biofix 3/30) Sap feeding and tissue mines are present.
			610 OFM (biofix 4/6) 1 st moth flight and egg hatch over. 2 nd flight at 700 1100DD _{43BE} .
			249 CM (biofix 5/15) Moths capture increasing, eggs hatching.
			Application for CM larval 10% hatch at 250 DD after first adult SC.
			114 SJS (biofix 5/26) 1 st generation crawlers developing.
			0.31 Weekly Rainfall
			2.04 Monthly Rainfall (May 2020)
			9.1 Total Rainfall (Since 1 March, 2020)

Baskerville-Emin (BE)			
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	43 F	50 F	# / trap / day (pheromone trap)
6/8	971.0	553.4	Degree day accumulations beginning 1 January, 2020
			1.4 Black Stem Borer (BSB) (10/29)
			0.1 Brown Marmorated Stink Bug (1 adult)
			4.3 Codling Moth (CM) (52/16)
			2.2 Dogwood Borer (DWB) (19/16) 1 st SUSTAINED CATCH
			0.0 Fruit Tree Leafroller (FTLR) (0/0)
			1.6 Grape Berry Moth (GBM) (16/10)
			1.2 Lesser Apple Worm (LAW) (11/21)
			0.6 Obliquebanded Leafroller (OBLR) (0/9) 1 st CATCH (Biofix)
			0.8 Oriental Fruitmoth (OFM) (4/1)
			4.5 Pear Psylla 113 Eggs/ 25 leaves
			2.0 Pear Psylla 49 Nymphs/25 leaves
			0.1 Redbanded Leafroller (RBLR) (1/1)
			0.0 San Jose Scale (SJS) (0/0)
			0.1 Sparganothis (SPAR) (1/0) 1 st SUSTAINED CATCH
			0.0 Speckled Green Fruitworm (SGFW) (0/0)
			4.6 Spotted Tentiform Leafminer (63/10)
			2.5 Tufted Apple Budmoth (21/19)
			0.1 Variegated Leafroller (VLR) (0/2) 1 st SUSTAINED CATCH
			<u>Fruit Injury</u>
			12% Lepidopteran feeding in Untreated (UT) Ginger Gold (GG) fruitlets
			64% Plum Curculio (PC) feeding in UT GG fruitlets
			4% Tarnished Plant Bug (TPB) feeding in UT GG fruitlets
			<u>Terminals</u>
			96% UT GG terminals with aphid colonies
			<u>Degree Day Modeling</u>
	379DD ₅₀		Plum Curculio migration over
	812		STLM (biofix 3/30) 2 nd gen moths emerging
	779		OFM (biofix 4/6) 1 st moth flight and egg hatch over. 2 nd flight at 700 1100DD _{43BE} .
	371		CM (biofix 5/15) Adult flight heavy, majority of eggs likely to hatch control critical
	237		SJS (biofix 5/26) 1 st generation crawlers developing.
			Emergence June 10th (260) - June 14th (360) @ HVRL
	0.09		Weekly Rainfall
	0.09		Monthly Rainfall (June 2020)
	9.19		Total Rainfall (Since 1 March, 2020)

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)
6/14	1147.0	681.1	Degree day accumulations beginning 1 January, 2020
			1.4 Black Stem Borer (BSB) (5/12)
			0.1 Brown Marmorated Stink Bug (1 adult)
			3.0 Codling Moth (CM) (18/18)
			1.0 Dogwood Borer (DWB) (4/8)
			0.0 Fruit Tree Leafroller (FTLR) (0/0)
			0.9 Grape Berry Moth (GBM) (11/0)
			1.2 Lesser Apple Worm (LAW) (9/5)
			0.9 Lesser Peach Tree Borer (LPTB) (0/11) 1 st Catch
			2.3 Obliquebanded Leafroller (OBLR) (17/10) 1 st Sust. Catch
			0.8 Oriental Fruitmoth (OFM) (7/2)
			5.8 Pear Psylla 146 Eggs/ 25 leaves (UT Bartlett)
			3.6 Pear Psylla 90 Nymphs/25 leaves (UT Bartlett)
			0.0 Redbanded Leafroller (RBLR) (0/0)
			0.0 San Jose Scale (SJS) (0/0)
			0.0 Sparganothis (SPAR) (0/0)
			0.0 Speckled Green Fruitworm (SGFW) (0/0)
			32.5 Spotted Tentiform Leafminer (294/96)
			0.8 Spotted Wing Drosophila (SWD) (10/0) 1 st Catch (Cherry)
			1.9 Tufted Apple Budmoth (10/13)
			0.4 Variegated Leafroller (VLR) (2/3)
			<u>Fruit Injury</u>
			4.0% Lepidopteran feeding in Untreated (UT) Ginger Gold (GG) fruitlets
			36.0% Plum Curculio (PC) damage in UT GG fruitlets
			12.0% Tarnished Plant Bug (TPB) feeding in UT GG fruitlets
			<u>Terminals</u>
			92.0% UT GG terminals with aphid colonies
			4.0% UT GG terminals with Potato Leaf Hopper (PLH)
			<u>Degree Day Modeling</u>
	506DD ₅₀		Plum Curculio migration complete
			DWB larval emergence 2-3 weeks post biofix.
	15		STLM (biofix 6/14 2 nd gen flight) 2 nd gen moths flying & ovipositing. Eggs from 2 nd gen hatch at 690-840 _{43BE} .
	955		OFM (biofix 4/6) 2 nd flight at 700-1100DD _{43BE} .
	499		CM (biofix 5/15) Adult flight heavy, majority of eggs likely to hatch control critical
	364		SJS (biofix 5/26) 1 st generation crawlers June 11 @ HVRL, 1 st gen "white caps" developing.
	1.01		Weekly Rainfall
	1.1		Monthly Rainfall (June 2020)
	10.2		Total Rainfall (Since 1 March, 2020)

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)
6/22	1341.3	826.5	Degree day accumulations beginning 1 January, 2020
			<u>Insect Pest Trap Captures</u>
			0.3 Apple Maggot (AM) (3/1/0/4) 1st Sust.Catch
			1.1 Black Stem Borer (BSB) (7/11)
			0.1 Brown Marmorated Stink Bug (1 adult)
			2.6 Codling Moth (CM) (20/21)
			0.8 Dogwood Borer (DWB) (6/6)
			0.0 Fruit Tree Leafroller (FTLR) (0/0)
			0.4 Grape Berry Moth (GBM) (6/1)
			1.4 Lesser Peach Tree Borer (LPTB) (23/0) 1st Sust. Catch
			2.1 Obliquebanded Leafroller (OBLR) (23/11)
			0.5 Oriental Fruitmoth (OFM) (8/0)
			1.8 Pear Psylla 46 Eggs/ 25 leaves (UT Bartlett)
			3.2 Pear Psylla 80 Nymphs/25 leaves (UT Bartlett)
			1.7 Redbanded Leafroller (RBLR) (11/16)
			0.0 San Jose Scale (SJS) (0/0)
			0.1 Sparganothis (SPAR) (0/1)
			38.4 Spotted Tentiform Leafminer (427/188)
			1.1 Spotted Wing Drosophila (SWD) (16/1) 1st Sust. Catch
			1.6 Tufted Apple Budmoth (9/16)
			0.0 Variegated Leafroller (VLR) (0/0)
			<u>Fruit Injury</u>
			4.0% Lepidopteran feeding in Untreated (UT) Ginger Gold (GG) fruitlets
			22.0% Plum Curculio (PC) damage in UT GG fruitlets (old damage)
			<u>Terminals Injury</u>
			100 % UT GG terminals with aphid colonies
			<u>Degree Day Modeling</u>
			DWB larval emergence 2-3 weeks post biofix (5/31/20).
			209 STLM (biofix 6/14 2 nd gen flight) 2 nd gen moths flying & ovipositing. Eggs from 2 nd gen hatch at 690-840 _{43BE} .
			1150 OFM (biofix 4/6) 2 nd flight at 700-1100DD _{43BE} . Adults emerge
			644 CM (biofix 5/15) 1 st moth flight over and egg hatch complete.
			510 SJS (biofix 5/26) 1 st gen “white caps” developing.
			<u>Weather</u>
			0.0” Weekly Rainfall
			1.1” Monthly Rainfall (June 2020)
			10.2” Total Rainfall (Since 1 March, 2020)

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)
6/29	1553.4	989.6	Degree day accumulations beginning 1 January, 2020
			<u>Insect Pest Trap Captures</u>
			0.6 Apple Maggot (AM) (8/3/3/2)
			1.5 Black Stem Borer (BSB) (6/15)
			0.0 Brown Marmorated Stink Bug (BMSB) (0)
			2.8 Codling Moth (CM) (9/30)
			1.0 Dogwood Borer (DWB) (3/11)
			0.0 Fruit Tree Leafroller (FTLR) (0/0)
			0.1 Grape Berry Moth (GBM) (1/1)
			1.3 Lesser Peach Tree Borer (LPTB) (18/0)
			1.7 Obliquebanded Leafroller (OBLR) (15/9)
			0.9 Oriental Fruitmoth (OFM) (2/10)
			2.1 Pear Psylla 53 Eggs/ 25 leaves (UT Bartlett)
			1.8 Pear Psylla 45 Nymphs/25 leaves (UT Bartlett)
			5.3 Redbanded Leafroller (RBLR) (45/29)
			0.0 San Jose Scale (SJS) (0/0)
			0.0 Sparganothis (SPAR) (0/0)
			33.7 Spotted Tentiform Leafminer (162/310)
			2.0 Spotted Wing Drosophila (SWD) (28/0)
			5.0 Tufted Apple Budmoth (49/21)
			0.2 Variegated Leafroller (VLR) (0/3)
			<u>Fruit Injury</u>
			24% Lepidopteran feeding in Untreated (UT) Ginger Gold (GG) fruitlets
			16% San Jose Scale (SJS) damage in UT GG fruitlets
			<u>Terminals Injury</u>
			16 % UT GG terminals with aphids (small colonies)
			20% UT GG terminals with Potato Leafhopper (PLH)
			12% UT GG terminals with lepidopteran injury
			<u>Degree Day Modeling</u>
			421 STLM (biofix 6/14 2 nd gen flight) 2 nd gen moths flying & ovipositing. Eggs from 2 nd gen hatch at 690-840 _{43BE} .
			752 OFM (2 nd gen biofix 6/1) Second flight of OFM diminishing
			807 CM (biofix 5/15) 2 nd gen moths emerge
			673 SJS (biofix 5/26) 1 st gen “white caps”
			<u>Weather</u>
			1.03” Weekly Rainfall
			2.13” Monthly Rainfall (June 2020)
			11.23” Total Rainfall (Since 1 March, 2020)

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)
7/6	1769.9	1157.1	Degree day accumulations beginning 1 January, 2020
			<u>Insect Pest Trap Captures</u>
			0.9 Apple Maggot (AM) (4/3/5/13)
			2.0 Black Stem Borer (BSB) (18/10)
			0.3 Brown Marmorated Stink Bug (BMSB) (2 adults)
			1.0 Brown Marmorated Stink Bug (BMSB) (7 nymphs)
			1.1 Codling Moth (CM) (13/2)
			1.4 Dogwood Borer (DWB) (8/11)
			0.1 Fruit Tree Leafroller (FTLR) (1/0)
			0.0 Grape Berry Moth (GBM) (0/0)
			1.2 Lesser Peach Tree Borer (LPTB) (17/0)
			0.6 Obliquebanded Leafroller (OBLR) (7/2)
			0.9 Oriental Fruitmoth (OFM) (8/4)
			1.0 Pear Psylla 24 Eggs/ 25 leaves (UT Bartlett)
			1.8 Pear Psylla 46 Nymphs/25 leaves (UT Bartlett)
			3.1 Redbanded Leafroller (RBLR) (11/32)
			1.7 San Jose Scale (SJS) (20/4) 2 nd gen adult emergence
			0.2 Sparganothis (SPAR) (2/1)
			29.7 Spotted Tentiform Leafminer (232/184)
			3.4 Spotted Wing Drosophila (SWD) (39 cherry, 8 honeysuckle)
			5.1 Tufted Apple Budmoth (36/36)
			0.3 Variegated Leafroller (VLR) (0/4)
			<u>Fruit Injury</u>
			16% Lepidopteran feeding in Untreated (UT) Ginger Gold (GG) fruitlets
			12% San Jose Scale (SJS) damage in UT GG fruitlets
			<u>Terminals Injury</u>
			18% UT GG terminals with Potato Leafhopper (PLH)
			2% UT GG terminals with lepidopteran injury
			<u>Degree Day Modeling</u>
			638 STLM (biofix 6/14 2 nd gen flight) 2 nd gen moths flying & ovipositing. Eggs from 2 nd gen hatch at 690-840 _{43BE} . Predicted emergence starting 7/9.
			968 OFM (2 nd gen biofix 6/1) Second flight of OFM ends, egg hatch over
			975 CM (biofix 5/15) 2 nd gen moths emerge
			840 SJS (biofix 5/26) 2 nd gen adults emerge
			799 OBLR (biofix 6/8) Larvae damaging fruit
			485 AM (biofix 6/14) Adults and first eggs
			<u>Weather</u>
			0.99" Weekly Rainfall
			0.7" Monthly Rainfall (July 2020)
			12.22" Total Rainfall (Since 1 March, 2020)

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)
7/13	2003.7	1259.6	Degree day accumulations beginning 1 January, 2020
			<u>Insect Pest Trap Captures</u>
			0.9 Apple Maggot (AM) (9/3/3/17)
			0.1 Black Stem Borer (BSB) (0/2)
			0.4 Brown Marmorated Stink Bug (BMSB) (3 adults)
			3.9 Brown Marmorated Stink Bug (BMSB) (27 nymphs)
			2.2 Codling Moth (CM) (24/7)
			1.4 Dogwood Borer (DWB) (7/12)
			0.0 Fruit Tree Leafroller (FTLR) (0/0)
			0.1 Grape Berry Moth (GBM) (1/0)
			1.3 Lesser Peach Tree Borer (LPTB) (7/11)
			0.3 Obliquebanded Leafroller (OBLR) (0/2)
			1.1 Oriental Fruitmoth (OFM) (10/5)
			0.4 Pear Psylla 10 Eggs/ 25 leaves (UT Bartlett)
			1.2 Pear Psylla 31 Nymphs/25 leaves (UT Bartlett)
			6.4 Redbanded Leafroller (RBLR) (17/72)
			4.9 San Jose Scale (SJS) (62/7) 2 nd gen adults
			0.1 Sparganothis (SPAR) (0/1)
			19.1 Spotted Tentiform Leafminer (142/125)
			5.3 Spotted Wing Drosophila (SWD) (61 cherry, 13 honeysuckle)
			3.4 Tufted Apple Budmoth (24)
			0.1 Variegated Leafroller (VLR) (1/0)
			<u>Fruit Injury</u>
			4.0% Codling moth feeding in Untreated (UT) Ginger Gold (GG) fruitlets
			16.0% Internal Lepidopteran feeding in UT GG fruitlets
			4.0% Apple Maggot damage in UT GG fruitlets
			<u>Terminals Injury</u>
			28.0% UT GG terminals with Potato Leafhopper (PLH)
			8.0% UT GG terminals with aphids
			8.0% UT GG terminals with lepidopteran
			<u>Degree Day Modeling</u>
			872 STLM (biofix 6/14 2 nd gen flight) 2 nd gen eggs & feeding mines on leaves
			1202 OFM (2 nd gen biofix 6/1) 3 rd gen moths emerge mid to late August
			1160 CM (biofix 5/15) 2 nd gen moths emerge
			1025 SJS (biofix 5/26) 2 nd gen adults emerged 7/6, look for crawlers
			1033 OBLR (biofix 6/8) Large larvae
			670 AM (biofix 6/14) Adults and first eggs
			<u>Weather</u>
			1.23" Weekly Rainfall
			1.93" Monthly Rainfall (July 2020)
			13.45" Total Rainfall (Since 1 March, 2020)

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)
7/20	2232.2	1521.4	Degree day accumulations beginning 1 January, 2020
			<u>Insect Pest Trap Captures</u>
			2.4 Apple Maggot (AM) (17/6/10/34)
			1.0 Black Stem Borer (BSB) (9/5)
			1.4 Brown Marmorated Stink Bug (BMSB) (10 adults)
			12.3 Brown Marmorated Stink Bug (BMSB) (86 nymphs)
			2.2 Codling Moth (CM) (20/11)
			0.9 Dogwood Borer (DWB) (0/12)
			0.0 Fruit Tree Leafroller (FTLR) (0/0)
			0.0 Grape Berry Moth (GBM) (0/0)
			0.5 Lesser Peach Tree Borer (LPTB) (3/4)
			0.0 Obliquebanded Leafroller (OBLR) (0/0)
			0.9 Oriental Fruitmoth (OFM) (7/6)
			0.2 Pear Psylla 4 Eggs/ 25 leaves (UT Bartlett)
			0.6 Pear Psylla 15 Nymphs/25 leaves (UT Bartlett)
			0.0 Redbanded Leafroller (RBLR) (27/37)
			29.1 San Jose Scale (SJS) (376/31) no crawlers on tape
			0.1 Sparganothis (SPAR) (0/1)
			54.3 Spotted Tentiform Leafminer (508/252)
			7.0 Spotted Wing Drosophila (SWD) (58 cherry, 40 honeysuckle)
			1.5 Tufted Apple Budmoth (13/8)
			0.0 Variegated Leafroller (VLR) (0/0)
			<u>Fruit Injury</u>
			12.0% Codling moth feeding in Untreated (UT) Ginger Gold (GG) fruit
			28.0% Internal Lepidopteran feeding in UT GG fruit (includes CM)
			12.0% External Lep feeding in UT GG fruit
			4.0% Plum Curculio feeding in UT GG fruit
			16.0% Apple Maggot damage in UT GG fruit
			<u>Terminals Injury</u>
			12.0% UT GG terminals with Potato Leafhopper (PLH)
			4.0% UT GG terminals with lepidopteran
			<u>Degree Day Modeling</u>
			1100 STLM (biofix 6/14 2 nd gen flight) 2 nd gen eggs & feeding mines on leaves
			1431 OFM (2 nd gen biofix 6/1) 3 rd gen moths emerge mid to late August
			1339 CM (biofix 5/15) 2 nd gen moths emerge
			364 SJS (biofix 5/26) 2 nd gen adults emerged 7/6, look for crawlers
			1261 OBLR (biofix 6/8) Large larvae
			849 AM (biofix 6/14) Adults and first eggs, 7/20 observed AM ovipositing in UT Red Delicious at HVRL
			<u>Weather</u>
			0.29" Weekly Rainfall
			2.22" Monthly Rainfall (July 2020)
			13.74" Total Rainfall (Since 1 March, 2020)

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)
7/27	2486.6	1726.8	Degree day accumulations beginning 1 January, 2020
			<u>Insect Pest Trap Captures</u>
			6.0 Apple Maggot (AM) (27/17/24/59)
			1.3 Black Stem Borer (BSB) (7/11)
			1.1 Brown Marmorated Stink Bug (BMSB) (8 adults)
			5.7 Brown Marmorated Stink Bug (BMSB) (40 nymphs)
			2.1 Codling Moth (CM) (17/12)
			5.1 Dogwood Borer (DWB) (49/22)
			0.0 Fruit Tree Leafroller (FTLR) (0/0)
			0.3 Grape Berry Moth (GBM) (2/2)
			0.9 Lesser Peach Tree Borer (LPTB) (6/7)
			0.1 Obliquebanded Leafroller (OBLR) (0/1)
			0.7 Oriental Fruitmoth (OFM) (4/6)
			0.4 Pear Psylla 9 Eggs/ 25 leaves (UT Bartlett)
			0.0 Pear Psylla 1 Nymph/25 leaves (UT Bartlett)
			1.6 Redbanded Leafroller (RBLR) (9/14)
			27.8 San Jose Scale (SJS) (354/35) no crawlers on tape
			0.0 Sparganothis (SPAR) (0/0)
			51.4 Spotted Tentiform Leafminer (442/277)
			18.1 Spotted Wing Drosophila (SWD) (199 cherry, 54 honeysuckle)
			0.1 Tufted Apple Budmoth (1/0)
			0.2 Variegated Leafroller (VLR) (2/1)
			<u>Fruit Injury</u>
			4.0% Codling moth feeding in Untreated (UT) Ginger Gold (GG) fruit
			12.0% Internal Lepidopteran feeding in UT GG fruit (includes CM)
			8.0% External Lep feeding in UT GG fruit
			36.0% Apple Maggot damage in UT GG fruit
			<u>Terminals Injury</u>
			4.0% UT GG terminals with Japanese Beetle feeding
			4.0% UT GG terminals with lepidopteran feeding
			4.0% UT GG terminals with leaf roller injury
			<u>Degree Day Modeling</u>
			1355 STLM (biofix 6/14 2 nd gen flight) feeding mines & pupae in leaves, 3 rd gen moths flying
			1685 OFM (2 nd gen biofix 6/1) 3 rd gen moths emerge
			385 CM (biofix 5/15) 2 nd gen moths emerged 7/13, egg hatch almost over
			570 SJS (biofix 5/26) SJS management decisions over for season
			1841 OBLR (biofix 6/8) Peak flight 2 nd gen moths
			1054 AM (biofix 6/14) Adults and first eggs
			<u>Weather</u>
			0.19" Weekly Rainfall
			2.41" Monthly Rainfall (July 2020)
			13.93" Total Rainfall (Since 1 March, 2020)

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)
8/3	2738.3	1929.5	Degree day accumulations beginning 1 January, 2020
			<u>Insect Pest Trap Captures</u>
			5.3 Apple Maggot (AM) (44/14/33/58)
			0.9 Black Stem Borer (BSB) (5/7)
			2.1 Brown Marmorated Stink Bug (BMSB) (15 adults)
			18.0 Brown Marmorated Stink Bug (BMSB) (126 nymphs)
			2.5 Codling Moth (CM) (22/13)
			4.4 Dogwood Borer (DWB) (43/18)
			0.0 Fruit Tree Leafroller (FTLR) (0/0)
			0.7 Grape Berry Moth (GBM) (1/9)
			1.3 Lesser Peach Tree Borer (LPTB) (8/10)
			0.2 Obliquebanded Leafroller (OBLR) (2/1)
			1.1 Oriental Fruitmoth (OFM) (13/3)
			0.3 Pear Psylla 8 Eggs/ 25 leaves (UT Bartlett)
			0.1 Pear Psylla 2 Nymph/25 leaves (UT Bartlett)
			2.1 Redbanded Leafroller (RBLR) (10/20)
			3.9 San Jose Scale (SJS) (48/6)
			0.0 Sparganothis (SPAR) (0/0)
			44.9 Spotted Tentiform Leafminer (364/264)
			8.9 Spotted Wing Drosophila (SWD) (31 cherry, 93 honeysuckle)
			0.6 Tufted Apple Budmoth (5/4)
			0.4 Variegated Leafroller (VLR) (0/6)
			<u>Fruit Injury</u>
			12.0% Codling moth feeding in Untreated (UT) Ginger Gold (GG) fruit
			22.0% Apple Maggot damage in UT GG fruit
			<u>Terminals Injury</u>
			12.0% UT GG terminals with Japanese Beetle feeding
			48.0% UT GG terminals with mite bronzing
			4.0% UT GG terminals with leaf roller injury
			<u>Degree Day Modeling</u>
			1606 STLM (biofix 6/14 2 nd gen flight) 3 rd gen moths flying
			139 OFM (2 nd gen biofix 6/1) 3 rd gen moth flight expected 7/30, monitor traps closely
			588 CM (biofix 5/15, 7/13) 3 rd gen moths flying
			570 SJS (biofix 5/26) SJS management decisions over for season
			1767 OBLR (biofix 6/8) Peak flight 2 nd gen moths
			1257 AM (biofix 6/14) Adults move into orchards, eggs laid
			<u>Weather</u>
			0.11" Weekly Rainfall
			0.08" Monthly Rainfall (August 2020)
			14.04" Total Rainfall (Since 1 March, 2020)

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)
8/10	2961.5	2103.7	Degree day accumulations beginning 1 January, 2020
			<u>Insect Pest Trap Captures</u>
			5.6 Apple Maggot (AM) (31/12/15/59)
			0.6 Black Stem Borer (BSB) (7/1)
			0.7 Brown Marmorated Stink Bug (BMSB) (5)
			4.6 Brown Marmorated Stink Bug (BMSB) (32 nymphs)
			6.1 Codling Moth (CM) (63/22)
			2.5 Dogwood Borer (DWB) (16/19)
			0.1 Fruit Tree Leafroller (FTLR) (1/0)
			0.6 Grape Berry Moth (GBM) (7/1)
			1.1 Lesser Peach Tree Borer (LPTB) (7/9)
			0.3 Obliquebanded Leafroller (OBLR) (0/2)
			0.5 Oriental Fruitmoth (OFM) (5/2)
			0.1 Pear Psylla 2 Eggs/ 25 leaves (UT Bartlett)
			0.2 Pear Psylla 4 Nymph/25 leaves (UT Bartlett)
			1.9 Redbanded Leafroller (RBLR) (8/18)
			0.3 San Jose Scale (SJS) (4/0)
			0.0 Sparganothis (SPAR) (0/0)
			29.5 Spotted Tentiform Leafminer (242/171)
			1.9 Spotted Wing Drosophila (SWD) (16 cherry, 10 honeysuckle)
			0.4 Tufted Apple Budmoth (2/4)
			0.1 Variegated Leafroller (VLR) (0/1)
			<u>Fruit Injury</u>
			4.0% Codling moth feeding in Untreated (UT) Ginger Gold (GG) fruit
			4.0% UT GG fruit with External Lep damage
			12.0% UT GG fruit with San Jose Scale
			96.0% UT GG fruit with Apple Maggot damage
			4.0% UT GG fruit with Codling Moth damage
			<u>Terminals Injury</u>
			16.0% UT GG terminals with mite bronzing
			4.0% UT GG terminals with aphids
			<u>Degree Day Modeling</u>
			1830 STLM (biofix 6/14 2 nd gen flight) 3 rd gen moths declining
			362 OFM (2 nd gen biofix 6/1) 3 rd gen moth flight expected but not observed
			762 CM (biofix 5/15, 7/13) 3 rd gen moths flying
			1991 OBLR (biofix 6/8) Peak flight 2 nd gen moths expected but not yet observed
			1431 AM (biofix 6/14) Adults move into orchards, eggs laid, damage observed on fruit
			<u>Weather</u>
			1.79" Weekly Rainfall
			1.87" Monthly Rainfall (August 2020)
			15.83" Total Rainfall (Since 1 March, 2020)

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)
8/17	3187.3	2280.5	Degree day accumulations beginning 1 January, 2020
			<u>Insect Pest Trap Captures</u>
			5.9 Apple Maggot (AM) (37/13/37/36)
			0.2 Black Stem Borer (BSB) (1/2)
			3.0 Brown Marmorated Stink Bug (BMSB) (21 Adults)
			8.1 Brown Marmorated Stink Bug (BMSB) (57 nymphs)
			3.9 Codling Moth (CM) (27/27)
			2.5 Dogwood Borer (DWB) (20/15)
			0.0 Fruit Tree Leafroller (FTLR) (0/0)
			0.4 Grape Berry Moth (GBM) (0/6)
			1.4 Lesser Peach Tree Borer (LPTB) (0/20)
			0.1 Obliquebanded Leafroller (OBLR) (0/1)
			0.2 Oriental Fruitmoth (OFM) (2/1)
			0.2 Pear Psylla 4 Eggs/ 25 leaves (UT Bartlett)
			0.2 Pear Psylla 6 Nymph/25 leaves (UT Bartlett)
			6.7 Redbanded Leafroller (RBLR) (20/74)
			1.0 San Jose Scale (SJS) (8/6)
			0.1 Sparganothis (SPAR) (1/0)
			19.6 Spotted Tentiform Leafminer (159/116)
			1.2 Spotted Wing Drosophila (SWD) (14 cherry, 3 honeysuckle)
			0.9 Tufted Apple Budmoth (5/7)
			0.3 Variegated Leafroller (VLR) (4/0)
			<u>Fruit Injury</u>
			28.0% Untreated (UT) Ginger Gold (GG) fruit with CM damage
			12.0% UT GG fruit with SJS
			72.0% UT GG fruit with AM damage
			8.0% UT GG fruit with OFM damage
			8.0% UT GG fruit with OBLR damage
			<u>Terminals Injury</u>
			4.0% Terminals with old Japanese Beetle damage
			<u>Degree Day Modeling</u>
			2055 STLM (biofix 6/14 2 nd gen flight) 3 rd gen moths declining
			588 OFM (2 nd gen biofix 6/1) 3 rd gen moth flight not observed, OFM seasonal activity may be over
			939 CM (biofix 5/15, 7/13) 3 rd gen moths flying, high numbers today
			2216 OBLR (biofix 6/8) 2 nd gen moths expected but not observed
			1608 AM (biofix 6/14) Adults flying, eggs laid, damage observed on fruit
			<u>Weather</u>
			0.43" Weekly Rainfall
			2.3" Monthly Rainfall (August 2020)
			16.26" Total Rainfall (Since 1 March, 2020)

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)
8/24	3387.7	2431.9	Degree day accumulations beginning 1 January, 2020
			<u>Insect Pest Trap Captures</u>
			4.7 Apple Maggot (AM) (15/12/39/33)
			0.1 Black Stem Borer (BSB) (1/1)
			6.0 Brown Marmorated Stink Bug (BMSB) (42 Adults)
			9.3 Brown Marmorated Stink Bug (BMSB) (65 nymphs)
			1.4 Codling Moth (CM) (20/0)
			2.0 Dogwood Borer (DWB) (15/13)
			0.1 Fruit Tree Leafroller (FTLR) (1/0)
			0.1 Grape Berry Moth (GBM) (0/2)
			3.1 Peach Tree Borer (PTB) (9/34)
			0.0 Obliquebanded Leafroller (OBLR) (0/0)
			0.7 Oriental Fruitmoth (OFM) (10/0)
			4.6 Redbanded Leafroller (RBLR) (6/59)
			0.1 San Jose Scale (SJS) (2/0)
			0.0 Sparganothis (SPAR) (0/0)
			21.1 Spotted Tentiform Leafminer (182/114)
			2.7 Spotted Wing Drosophila (SWD) (34 cherry, 4 honeysuckle)
			0.9 Tufted Apple Budmoth (5/7)
			0.0 Variegated Leafroller (VLR) (0/0)
			<u>Fruit Injury</u>
			12.0% Untreated (UT) Ginger Gold (GG) fruit with CM damage
			68.0% UT GG fruit with AM damage
			12.0% UT GG fruit with External Lep (includes CM) damage
			24.0% UT GG fruit with Internal Lep damage
			4.0% UT GG fruit with LR damage
			<u>Degree Day Modeling</u>
			2417 OBLR (biofix 6/8) 2 nd gen moths not observed at HVL
			1760 AM (biofix 6/14) Adults flying, eggs laid, damage observed on fruit
			<u>Weather</u>
			0.51" Weekly Rainfall
			2.81" Monthly Rainfall (August 2020)
			16.77" Total Rainfall (Since 1 March, 2020)

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)
8/31	3622	2610	Degree day accumulations beginning 1 January, 2020
			<u>Insect Pest Trap Captures</u>
			3.6 Apple Maggot (AM) (13/12/38/13)
			0.0 Black Stem Borer (BSB) (0/0)
			9.1 Brown Marmorated Stink Bug (BMSB) (64 Adults)
			9.4 Brown Marmorated Stink Bug (BMSB) (66 nymphs)
			1.1 Codling Moth (CM) (9/7)
			0.6 Dogwood Borer (DWB) (4/5)
			0.1 Fruit Tree Leafroller (FTLR) (2/0)
			0.4 Grape Berry Moth (GBM) (6/0)
			0.5 Peach Tree Borer (PTB) (0/7)
			0.1 Obliquebanded Leafroller (OBLR) (1/0)
			0.6 Oriental Fruitmoth (OFM) (7/2)
			4.3 Redbanded Leafroller (RBLR) (10/50)
			2.1 San Jose Scale (SJS) (19/10)
			0.1 Sparganothis (SPAR) (1/0)
			29.9 Spotted Tentiform Leafminer (243/175)
			5.8 Spotted Wing Drosophila (SWD) (70 cherry, 11 honeysuckle)
			1.6 Tufted Apple Budmoth (11/12)
			0.0 Variegated Leafroller (VLR) (0/0)
			<u>Degree Day Modeling</u>
			1924 AM (biofix 6/14) Adults flying, eggs laid, damage observed on fruit
			<u>Weather</u>
			1.1" Weekly Rainfall
			3.91" Monthly Rainfall (August 2020)
			17.87" Total Rainfall (Since 1 March, 2020)

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)
9/8	3805.9	2745.1	Degree day accumulations beginning 1 January, 2020
			<u>Insect Pest Trap Captures</u>
			3.6 Apple Maggot (AM) (20/-/55/11)
			0.0 Black Stem Borer (BSB) (0/0)
			8.8 Brown Marmorated Stink Bug (BMSB) (70 adults)
			2.5 Brown Marmorated Stink Bug (BMSB) (20 nymphs)
			0.3 Codling Moth (CM) (5/0)
			0.4 Dogwood Borer (DWB) (4/3)
			0.0 Fruit Tree Leafroller (FTLR) (0/0)
			0.0 Grape Berry Moth (GBM) (0/0)
			0.0 Peach Tree Borer (PTB) (0/0)
			0.0 Obliquebanded Leafroller (OBLR) (0/0)
			0.4 Oriental Fruitmoth (OFM) (5/1)
			1.8 Redbanded Leafroller (RBLR) (7/22)
			0.0 San Jose Scale (SJS) (0/0)
			0.1 Sparganothis (SPAR) (2/0)
			27.5 Spotted Tentiform Leafminer (318/122)
			8.6 Spotted Wing Drosophila (SWD) (104 cherry, 34 honeysuckle)
			1.4 Tufted Apple Budmoth (12/11)
			0.2 Variegated Leafroller (VLR) (2/1)
			<u>Degree Day Modeling</u>
			2073 AM (biofix 6/14) Adults flying, eggs laid, damage observed on fruit
			<u>Weather</u>
			0.91" Weekly Rainfall
			0.91" Monthly Rainfall (September 2020)
			18.78" Total Rainfall (Since 1 March, 2020)
<hr/>			
9/14	3956.4	2853.4	Degree day accumulations beginning 1 January, 2020
			<u>Insect Pest Trap Captures</u>
			10.3 Brown Marmorated Stink Bug (BMSB) (62 adults)
			1.0 Brown Marmorated Stink Bug (BMSB) (6 nymphs)
			<u>Weather</u>
			0.1" Weekly Rainfall
			1.01" Monthly Rainfall (September 2020)
			18.88" Total Rainfall (Since 1 March, 2020)