



CARROT FLY – 30 July 2020

Page	Contents
1	Introduction
2	Carrot fly forecasts 2020
4	Carrot fly monitoring at Wellesbourne 2020
7	Historical information from 2019

Introduction

The forecast outputs below are based on weather data collected by Plantsystems Limited and funded by Syngenta. The forecasts predict the timing of fly activity. They do not predict the number of insects present in the crop, as this depends on the size of the local fly population. For control purposes, we consider that the pest has become active when 10% of the insects have emerged/laid eggs and that the peak of activity has occurred when 50% have emerged/laid eggs. The predictions will change over time depending on weather conditions.



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Carrot fly forecasts 2020

N.B. the forecast for Lancashire looks unusually late.

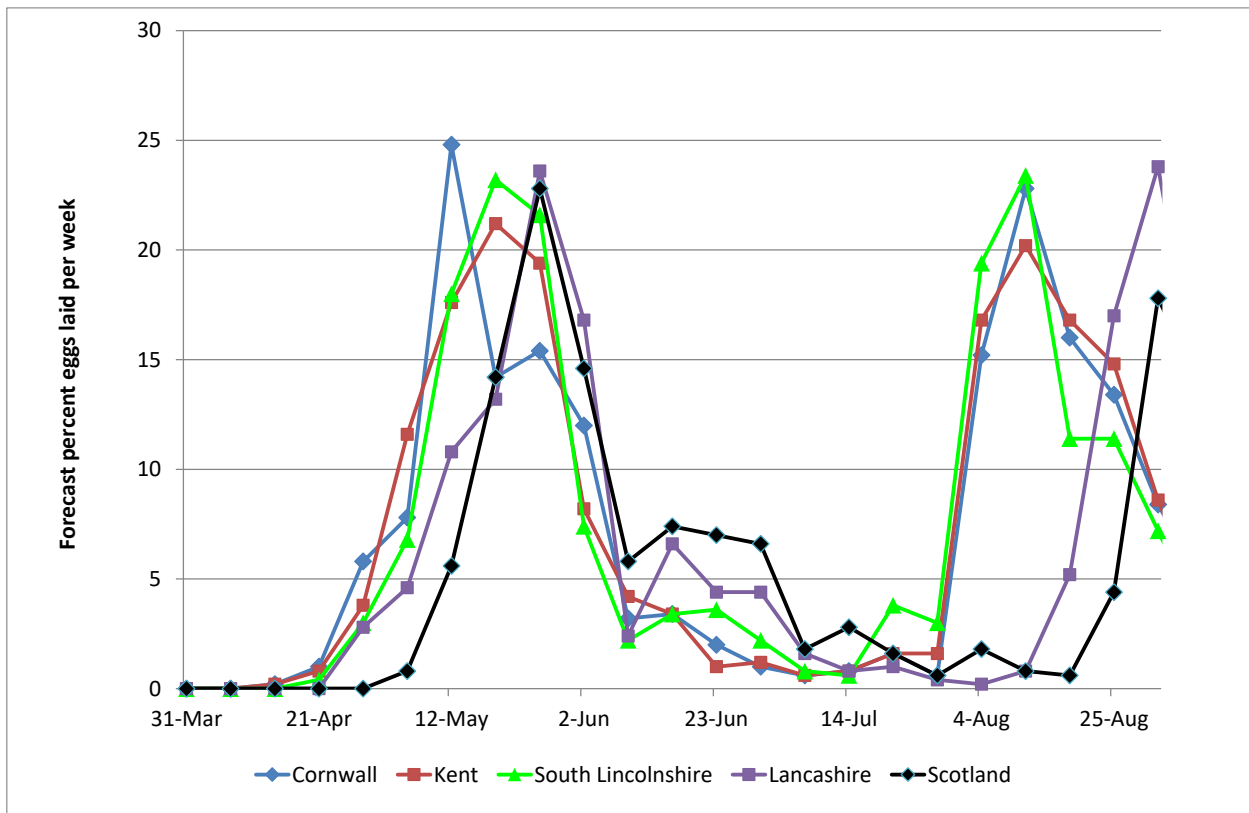
Region	First generation Forecast 10% EMERGENCE in 2020	First generation Forecast 10% EGG- LAYING in 2020	First generation Forecast 50% EGG- LAYING in 2020	Second generation Forecast 10% EMERGENCE in 2020	Second generation Forecast 10% EGG- LAYING in 2020	Second generation Forecast 50% EGG- LAYING in 2020
Cornwall (Newquay)	14 Apr	29 Apr	16 May	20 Jul	1 Aug	12 Aug
Kent (Sittingbourne)	13 Apr	30 Apr	17 May	18 Jul	30 Jul	12 Aug
Suffolk (Woodbridge)	14 Apr	3 May	19 May	16 Jul	28 Jul	7 Aug
Wellesbourne (Warwick)	11 Apr	24 Apr	7 May	5 Jul	15 Jul	31 Jul
Norfolk (Norwich)	16 Apr	6 May	19 May	22 Jul	2 Aug	13 Aug
South Lincolnshire (Boston)	16 Apr	5 May	16 May	18 Jul	29 Jul	9 Aug
Nottingham (Bilsthorpe)	15 Apr	4 May	20 May	28 Jul	5 Aug	16 Aug
Lancashire (Ormskirk)	17 Apr	5 May	25 May	11 Aug	21 Aug	30 Aug
York (Market Weighton)	17 Apr	3 May	19 May	22 Jul	1 Aug	12 Aug
Scotland (Blairgowrie)	18 Apr	14 May	25 May	20 Aug	27 Aug	10 Sep



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The graph below shows the forecast pattern of egg-laying in 2020 by carrot fly at 5 of sites in the table above.





Carrot fly monitoring 2020

Trap captures at Wellesbourne in 2020 are summarised below. The traps have been out all winter.

Date	Adult carrot flies (overwintered carrots) (total on 3 traps)
8 Jan – 17 Mar	0
24 Mar	1
31 Mar	1
7 Apr	0
14 Apr	5
21 Apr	46
28 Apr	504
1 May	59
5 May	493
8 May	90
12 May	432
15 May	66
19 May	46 – moved to new carrot plot
22 May	140
26 May	56
29 May	60
2 June	45
5 June	15
9 June	14
12 June	8
16 June	15
19 June	4
23 June	2
26 June	1
30 June	13
3 July	11
7 July	60



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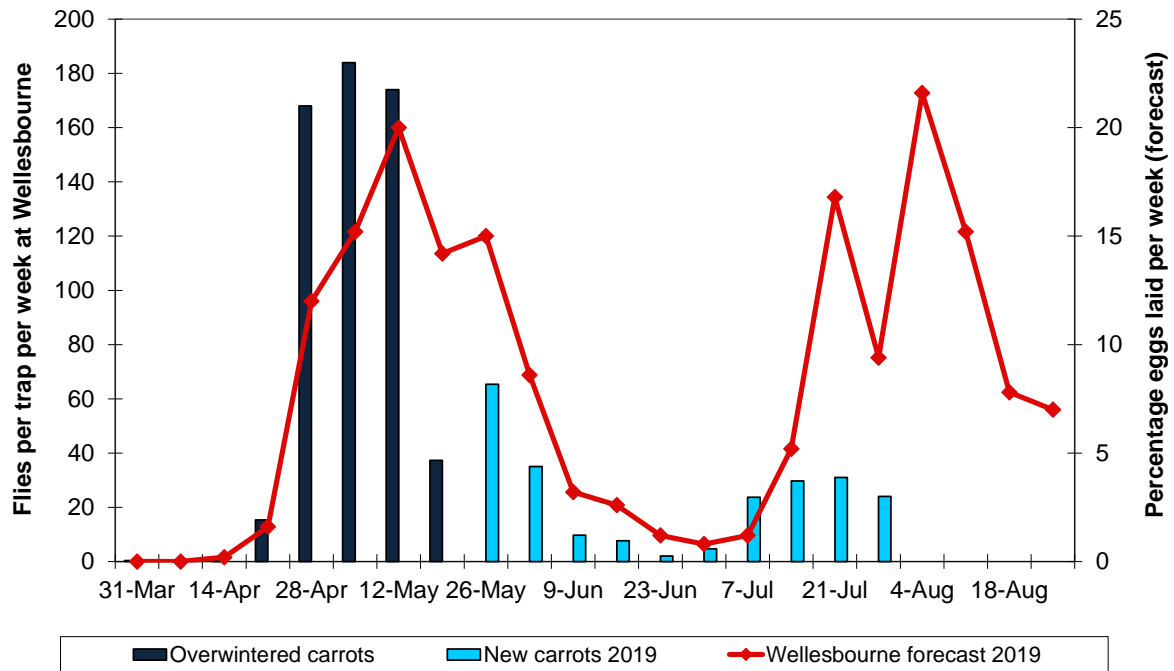
Date	Adult carrot flies (overwintered carrots) (total on 3 traps)
10 July	39
14 July	50
17 July	37
21 July	56
24 July	20 (2 traps)
28 July	42



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The graph below compares trap captures at Wellesbourne with forecast egg-laying for 2020.



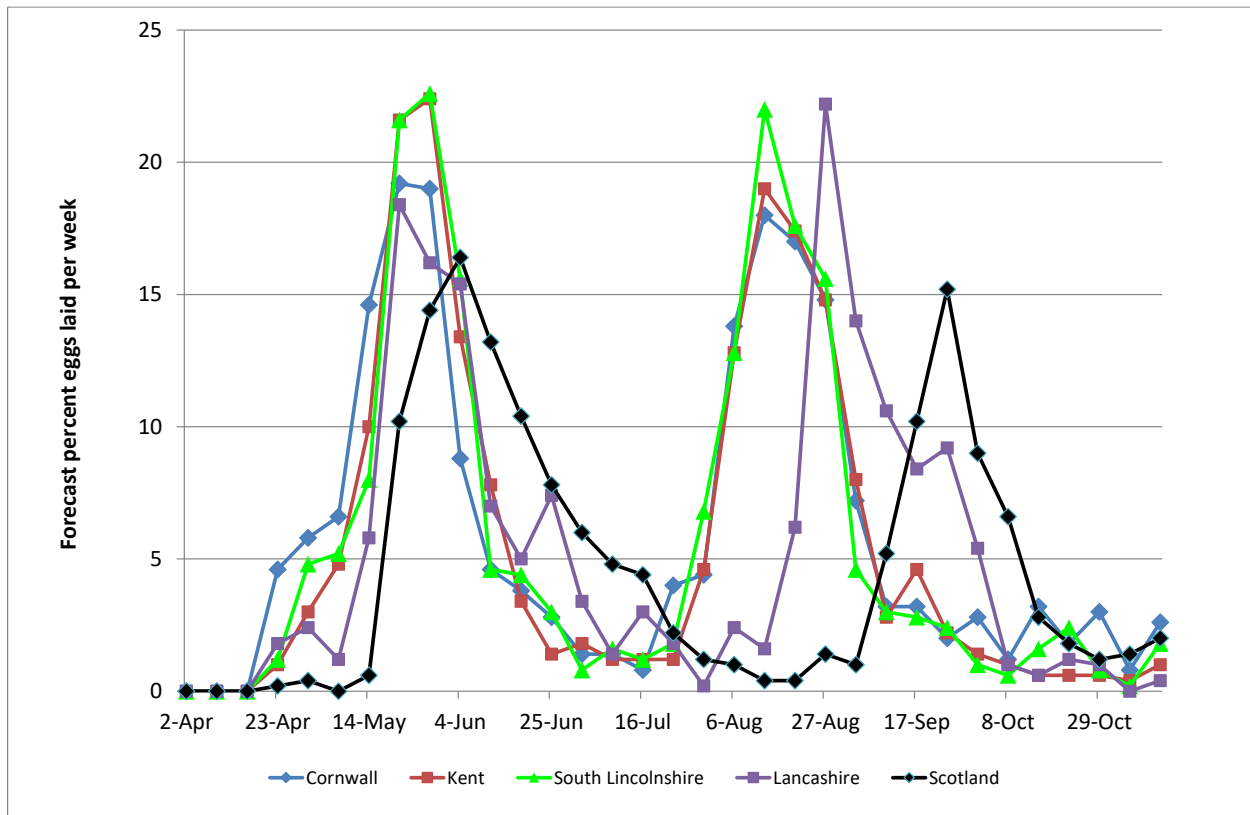


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Historical information from 2019

This graph shows the forecast pattern of egg-laying in 2019 for 5 sites from the table above.





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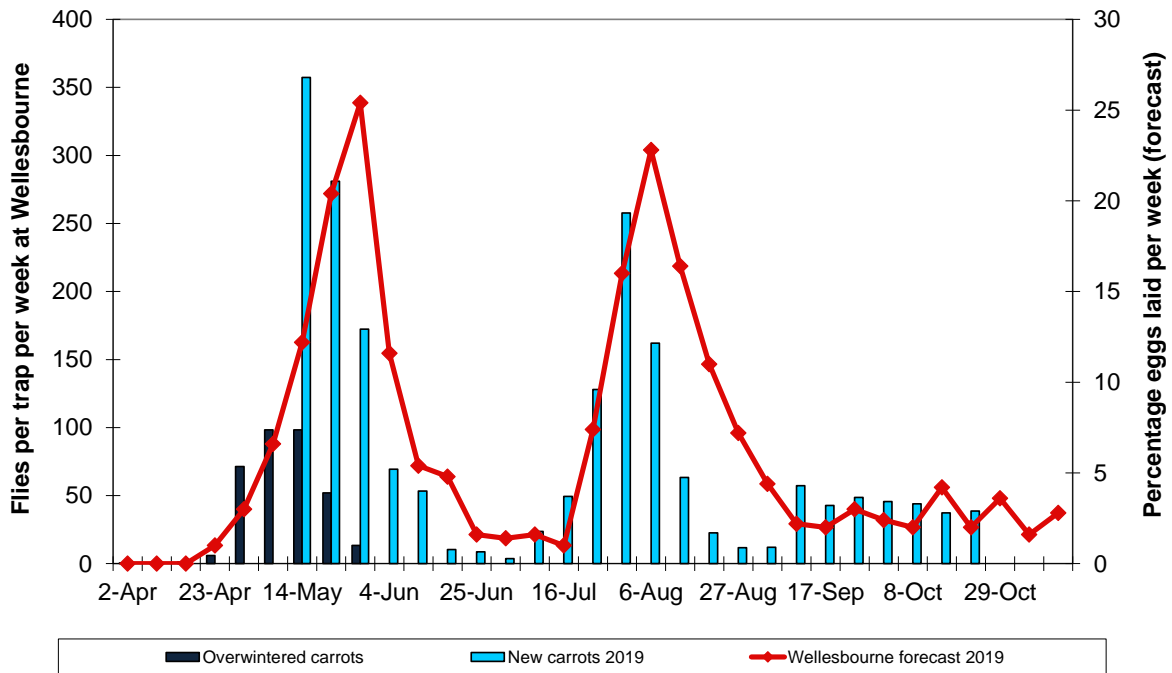
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This graph shows the forecast pattern of **egg-laying in 2019** at Wellesbourne compared with fly captures on sticky traps in a plot of overwintered carrots and, later on, in a newly-sown plot of carrots.





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Trap captures at Wellesbourne in 2019 are summarised below. The traps have been out all winter.

Date	Adult carrot flies (overwintered carrots) (total on 3 traps)	Adult carrot flies (new carrots) (total on 3 traps)
8 Jan	0	
5 Mar	0	
12 Mar	0	
19 Mar	0	
26 Mar	0	
2 April	1	
9 April	0	
16 April	4	
23 April	18	
26 April	36	
30 April	178	
3 May	89	
7 May	206	-
10 May	91	374
14 May	204	698
17 May	88	555
21 May	68	288
24 May	19	380
28 May	21	137
31 May	-	92
4 June		116
7 June		133
11 June		27



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Trap captures at Wellesbourne in 2019 are summarised below. The traps have been out all winter.

Date	Adult carrot flies (overwintered carrots) (total on 3 traps)	Adult carrot flies (new carrots) (total on 3 traps)
14 June		4
18 June		27
21 June		15
25 June		11
28 June		5
2 July		6
5 July		8
9 July		63
12 July		59
16 July		89
19 July		58
23 July		326
26 July		360
30 July		413
2 August		232
6 August		254
9 August		133
13 August		57
16 August		22
20 August		46
23 August		27
27 August		8
30 August		10
3 September		26
6 September		50
10 September		122
13 September		58
17 September		70



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Trap captures at Wellesbourne in 2019 are summarised below. The traps have been out all winter.

Date	Adult carrot flies (overwintered carrots) (total on 3 traps)	Adult carrot flies (new carrots) (total on 3 traps)
20 September	-	63
24 September		83
27 September		48
1 October		89
4 October		36
7 October		96
11 October		49
15 October		63
18 October		74
22 October		42
25 October		36
29 October		25