



In partnership with



BRASSICA FLEA BEETLES – 14 October 2021

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Introduction

Eight species of the genus *Phyllotreta* (flea beetles) feed on cruciferous/brassicaceous crops and weeds in the UK and they tend to be considered together. However they may have slightly different life-cycles and biology. Most of the information on their basic biology and ecology in the UK was collected many years ago and there do not appear to have been many recent studies, apart from those on methods of control, mainly with insecticides. The basic life-cycle of these species is described as follows:

- Adult beetles hibernate from October to March in hedgerows, under trees and in other sheltered locations.
- When temperatures rise in the spring the beetles come out of hibernation.
- They first stay close to hedgerows and feed on weeds, but they gradually disperse more widely and then when temperatures get to about 20°C more widespread dispersal occurs and they can fly with the prevailing wind.
- The older literature says that the period of greatest activity is from 10th April – 20th May – but more recently damage appears to have occurred over a much more extended period than this.
- The beetles mate and lay eggs towards the end of May.
- The larvae hatch and feed on plant roots and form pupae after about 4 weeks.
- The pupal stage lasts for about 4 weeks and then adults emerge in late July – early August when they again feed on crops.
- In autumn the beetles move into shelter, away from crops, and hibernate. The older literature suggests that the flea beetle population in any field is a drifting one and that different species dominate in different parts of the country.

Monitoring data 2021

No forecasts for flea beetles have been developed. However, they are recorded (all species together) from water trap captures at Wellesbourne in Warwickshire and these will be summarized during the year in the table below. Numbers of cabbage stem weevil, cabbage seed weevil and cabbage stem flea beetle are also shown.

Date	Total in 3 traps at Wellesbourne in swede plot			
	No. flea beetles	No. cabbage stem weevils	No. cabbage seed weevils	No. cabbage stem flea beetles
16 Feb	0	0	0	0
23 Feb	0	0	1	0
02 Mar	0	6	0	0
09 Mar	0	0	0	0
16 Mar	0	0	0	0
23 Mar	6	5	0	0
30 Mar	20	64	0	0
5 Apr	141	177	1	3
13 Apr	2	2	0	0
16 Apr	20	21	2	0
20 Apr	52	67	1	0
23 Apr	40	63	0	0
27 Apr	11	13	0	0
30 Apr	5	15	0	0
4 May	5	22	0	1
7 May	3	5	0	0
11 May	4	21	0	1
14 May	27	4	0	0
18 May	35	3	0	0
21 May	34	1	0	0
25 May	7	0	0	0
28 May	602	0	0	0
1 June	546	47	6	7

Monitoring data 2021

Date	Total in 3 traps at Wellesbourne in swede plot			
	No. flea beetles	No. cabbage stem weevils	No. cabbage seed weevils	No. cabbage stem flea beetles
4 June	296	28	4	1
8 June	196	49	11	1
11 June	66	16	0	0
15 June	153	119	9	0
18 June	47	51	1	0
22 June	14	19	1	0
25 June	26	91	1	0
29 June	9	31	0	0
2 July	16	48	0	1
6 July	17	113	1	0
9 July	68	39	1	0
13 July	81	68	4	1
16 July	66	46	2	0
20 July	33	43	2	0
23 July	53	150	1	1
27 July	17	11	0	0
30 July	114	27	0	0
3 August	348	63	0	1
6 August	331	92	1	0
10 August	336	25	0	1
13 August	350	21	0	0
17 August	203	11	0	0
20 August	346	8	1	0
24 August	207	16	1	0
27 August	227	4	0	0
31 August	260	9	0	1
3 September	131	4	0	1
7 September	257	8	1	5



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Monitoring data 2021

Date	Total in 3 traps at Wellesbourne in swede plot			
	No. flea beetles	No. cabbage stem weevils	No. cabbage seed weevils	No. cabbage stem flea beetles
10 September	106	0	0	0
14 September	45	1	0	1
17 September	23	0	0	0
21 September	57	2	0	1
24 September	19	1	0	0
28 September	24	1	1	0
1 October	4	0	0	0
5 October	5	0	0	0
8 October	0	17	0	0
12 October	5	68	0	2

Historical data from 2020

Monitoring data 2020

No forecasts for flea beetles have been developed. However, they are recorded (all species together) from water trap captures in Warwickshire and these will be summarized during the year in the table below. Numbers of cabbage stem weevil, cabbage seed weevil and cabbage stem flea beetle are also shown. We first set up the traps in some overwintered swedes at Wellesbourne but the traps were then moved to allotments and a garden in Tysoe in Warwickshire before returning to Wellesbourne on 19th May.

Date	Total in 3 traps near overwintered swedes at Wellesbourne. Traps out all winter.				
	No. flea beetles	No. cabbage stem weevils	No. cabbage seed weevils	No. cabbage stem flea beetles	Number of traps
3rd March	0	0	0	0	3
10th March	0	1	0	0	3
17th March	0	1	0	0	3
Total in traps at Tysoe, Warwickshire – from 26th March					
27 th March	0	0	0	0	3
28 th March	0	0	0	0	3
29 th March	0	0	0	0	3
30 th March	0	0	0	0	8
31 st March	0	0	0	0	9
1 st April	0	0	0	0	9
2 nd April	0	0	0	0	9
3 rd April	0	0	0	0	9
4 th April	0	0	0	0	9
5 th April	0	0	0	0	9
6 th April	0	2	0	0	9
7 th April	0	12	0	3	9
8 th April	0	21	0	21	9
9 th April	0	10	0	7	9
10 th April	0	10	0	2	9



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11 th April	0	4	0	9	9
12 th April	0	6	0	8	9

Date	Total in traps at Tysoe, Warwickshire – from 26 th March				
	No. flea beetles	No. cabbage stem weevils	No. cabbage seed weevils	No. cabbage stem flea beetles	Number of traps
13 April	0	0	0	2	9
14 April	0	1	0	1	9
15 April	0	4	0	3	9
16 April	0	6	0	2	9
17 April	0	0	0	2	9
18 April	0	0	0	0	9
19 April	0	3	0	2	9
20 April	0	0	0	1	9
21 April	0	0	0	1	9
22 April	0	0	0	2	9
23 April	0	2	0	3	9
24 April	2	9	0	1	9
25 April	0	7	0	2	9
26 April	0	2	0	1	9
27 April	0	0	0	1	9
28 April	0	0	0	2	9
29 April	0	0	0	0	9
30 April	0	0	0	0	9
1 May	0	0	0	1	9
2 May	0	0	0	3	9
3 May	0	0	0	0	9
4 May	0	0	0	1	9
5 May	0	0	0	2	9
6 May	0	0	0	1	9



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Date	Total in traps at Tysoe, Warwickshire – from 26 th March				
	No. flea beetles	No. cabbage stem weevils	No. cabbage seed weevils	No. cabbage stem flea beetles	Number of traps
7 May	0	0	0	0	9
8-9 May	0	0	0	1	9
10-11 May	0	0	0	0	9
12 May	0	0	0	1	9
13 May	0	0	0	0	9
14 May	0	0	0	3	9
15 May	0	0	0	0	9
16 May	0	0	0	1	9
17 May	0	0	0	0	9
18 May	0	0	0	0	9
19 May	0	0	0	0	9
20 May	0	0	0	0	9
21 May	0	0	0	0	9
Traps set up at Wellesbourne in swede plot on 19 th May					
22 May	7	51	13	4	3
26 May	14	31	1	0	3
29 May	13	71	7	0	3
2 June	10	47	1	2	3
5 June	1	21	8	1	3
9 June	0	18	0	0	3
12 June	1	82	3	1	3
16 June	6	335	3	1	3
19 June	2	100	3	1	3
23 June	1	105	0	1	3
26 June	5	256	5	2	3
30 June	7	41	3	1	3
3 rd July	5	20	0	2	3
7 th July	9	18	0	1	3



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Date	Total in 3 traps at Wellesbourne in swede plot			
	No. flea beetles	No. cabbage stem weevils	No. cabbage seed weevils	No. cabbage stem flea beetles
10 July	4	4	0	1
14 July	35	38	1	1
17 July	51	12	1	3
20 July	84	6	0	2
24 July	46	11	0	0
28 July	32	11	2	2
31 July	85	11	1	1
4 August	105	4	1	1
7 August	55	2	2	1
11 August	133	6	0	0
14 August	169	3	0	1
18 August	205	3	1	0
21 August	52	2	0	0
25 August	50	0	0	0
28 August	14	0	0	0
1 September	10	0	0	0
4 September	5	0	0	0
8 September	0	0	0	0
11 September	3	1	0	0
15 September	10	1	0	2
18 September	4	1	0	2
22 September	2	3	0	2
25 September	1	0	0	1
29 September	0	4	0	2
2 October	3	35	1	2
6 October	0	1	0	0
9 October	0	1	0	0
13 October	0	7	0	0
16 October	0	2	0	0
20 October	0	0	0	0



In partnership with



Date	Total in 3 traps at Wellesbourne in swede plot			
	No. flea beetles	No. cabbage stem weevils	No. cabbage seed weevils	No. cabbage stem flea beetles
23 October	2	1	0	0
26 October	1	0	0	0
30 October	0	0	0	0
3 November	0	0	0	0