

Evidence that agri-environmental measures in arable fields could be a conservation benefit to northern vipers *Vipera berus* and other reptiles

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Table 1S. Occurrence of individual vipers of all life stages in the field margin, 2017 to 2022, indicating the years in which some individuals were also detected in Reserve 1 or Reserve 2. Note that sub-adults and adults are assigned different numbers from the neonates and juvenile stages, each row of the table is a single individual.

	2017	2018	2019	2020	2021	2022	Total no. encounters
Females	F2	F2	F2	F2	F2	F2	24
	F3	-	F3	F3	F3	F3	32
					F4	-	1
					F6	F6	9
	J2	-	-	-	-	-	1
	J3	-	-	-	-	-	2
			J6	SF1	SF1	SF1	10
			-	SF2	-	-	1
			-	SF3	-	-	1
				J*8	J8	-	7
				J*9	J9	SF12	3
					J10		1
					J13	SF11	7
					J14	-	1
					SF5	SF5	7
					SF6	-	5
						SF8	1
						SF9	1
						SF10	1
						F7	1
					J*19	1	
					J*20	1	
Male	M3		-	-	-	-	20
	M5	M5	-	-	-	-	5
			M6	-	-	-	1
				SM2	M8	M8	6
					M9	M9	3
					M10	M10	1
						M11	2
			J4	SM1	SM1	-	7
				J7	-	SM7	5
					SM3	-	2

					SM4	-	5
					SM5	SM5	12
					J11	SM8	1
					J12	SM6	9
						J*15	1
						J*16	1
						J*17	1
						J*18	2
						J*21	
Total no. individuals							
	6	2	5	10	21	26	
% immature	33 %	0 %	40 %	80 %	67 %	68 %	

F = Adult female

SF = sub-adult female

J = juvenile

M = Adult male

SM = sub-adult male

J* = neonate

Also detected on:-

Reserve 1

Reserve 2

Table 2S. Number of individual *Vipera berus* observed in the arable field margin on survey visits in the period 2017 to 2022, with neonates listed separately

2017		2018		2019		2020		2021		2022	
27-Mar-17	0	22-Mar-18	0	15-Mar-19	0	13-Mar-20	0	09-Mar-21	0	08-Mar-22	0
31-Mar-17	0	06-Apr-18	1	28-Mar-19	0	22-Mar-20	0	19-Mar-21	0	23-Mar-22	0
05-Apr-17	0	16-Apr-18	0	01-Apr-19	0	01-Apr-20	0	23-Mar-21	0	26-Mar-22	0
08-Apr-17	0	19-Apr-18	0	15-Apr-19	0	11-Apr-20	0	25-Mar-21	0	28-Mar-22	3
22-Apr-17	0	25-Apr-18	0	17-Apr-19	0	19-Apr-20	0	09-Apr-21	0	02-Apr-22	2
11-May-17	0	22-Apr-18	0	26-Apr-19	0	04-May-20	1	17-Apr-21	0	06-Apr-22	0
20-May-17	0	03-May-18	0	07-May-19	0	06-May-20	1	22-Apr-21	0	09-Apr-22	1
02-Jun-17	0	08-May-18	0	15-May-19	0	17-May-20	0	24-Apr-21	0	13-Apr-22	3
04-Jun-17	0	10-May-18	0	20-May-19	0	23-May-20	0	01-May-21	0	16-Apr-22	1
10-Jun-17	0	12-May-18	0	26-May-19	0	30-May-20	0	07-May-21	0	20-Apr-22	0
14-Jun-17	0	16-May-18	0	28-May-19	0	03-Jun-20	0	26-May-21	1	23-Apr-22	1
25-Jun-17	0	01-Jun-18	0	09-Jun-19	0	09-Jun-20	0	29-May-21	3	27-Apr-22	6
02-Jul-17	0	10-Jun-18	0	23-Jun-19	1	13-Jun-20	0	02-Jun-21	3	30-Apr-22	2
13-Jul-17	1	24-Jun-18	0	08-Jul-19	0	20-Jun-20	0	05-Jun-21	0	05-May-22	3
23-Jul-17	1	26-Jun-18	0	17-Jul-19	0	28-Jun-20	2	09-Jun-21	0	07-May-22	3
25-Jul-17	1	30-Jun-18	0	21-Jul-19	2	01-Jul-20	2	12-Jun-21	1	11-May-22	1
04-Aug-17	2	04-Jul-18	0	29-Jul-19	2	07-Jul-20	2	26-Jun-21	6	14-May-22	1
06-Aug-17	2	14-Jul-18	0	31-Jul-19	3	11-Jul-20	1	01-Jul-21	2	18-May-22	0
08-Aug-17	1	22-Jul-18	0	07-Aug-19	2	15-Jul-20	2	03-Jul-21	6	21-May-22	1
10-Aug-17	1	28-Jul-18	0	13-Aug-19	1	26-Jul-20	3	07-Jul-21	5	24-May-22	5
15-Aug-17	1	30-Jul-18	0	01-Sep-19	2	01-Aug-20	4	11-Jul-21	4	26-May-22	4
20-Aug-17	2	05-Aug-18	0	12-Sep-19	0	05-Aug-20	1	14-Jul-21	2	28-May-22	3
22-Aug-17	2	08-Aug-18	0	23-Sep-19	0	20-Aug-20	1	17-Jul-21	2	01-Jun-22	2
24-Aug-17	0	11-Aug-18	0	30-Sep-19	0	26-Aug-20	1	28-Jul-21	3	03-Jun-22	1
28-Aug-17	1	19-Aug-18	0	09-Oct-19	0	30-Aug-20	0	31-Jul-21	4	08-Jun-22	2
31-Aug-17	0	22-Aug-18	0	27-Oct-19	0	02-Sep-20	0	04-Aug-21	3	11-Jun-22	3
03-Sep-17	2	24-Aug-18	0			08-Sep-20	0	08-Aug-21	2	15-Jun-22	2
07-Sep-17	1	28-Aug-18	0			12-Sep-20	0	11-Aug-21	2	18-Jun-22	2
17-Sep-17	0	31-Aug-18	0			16-Sep-20	0	14-Aug-21	5	22-Jun-22	1

24-Sep-17	0	02-Sep-18	0			19-Sep-20	0	18-Aug-21	5	25-Jun-22	1
28-Sep-17	0	11-Sep-18	1			01-Oct-20	0	25-Aug-21	6	29-Jun-22	3
03-Oct-17	0	13-Sep-18	0			07-Oct-20	0	28-Aug-21	2	02-Jul-22	4
12-Oct-17	0	16-Sep-18	0			14-Oct-20	0	01-Sep-21	3	06-Jul-22	2
15-Oct-17	0	10-Oct-18	0			17-Oct-20	0	04-Sep-21	0	09-Jul-22	3
17-Oct-19	0	24-Oct-18	0			26-Oct-20	0	15-Sep-21	1	12-Jul-22	3
								25-Sep-21	1	16-Jul-22	1
								29-Sep-21	6	20-Jul-22	0
								04-Oct-21	0	24-Jul-22	0
								09-Oct-21	1	27-Jul-22	3
								11-Oct-21	0	30-Jul-22	2
								13-Oct-21	0	03-Aug-22	3
								28-Oct-21	1	06-Aug-22	0
										10-Aug-22	0
										14-Aug-22	0
										18-Aug-22	4
										20-Aug-22	2
										24-Aug-22	0
										28-Aug-22	0
										31-Aug-22	1
										03-Sep-22	0
										10-Sep-22	1
										15-Sep-22	0
										17-Sep-22	0
										20-Sep-22	1
										21-Sep-22	0
										25-Sep-22	1
										28-Sep-22	1
										01-Oct-22	0
										05-Oct-22	0
										09-Oct-22	0

2017	Neonates only		2018	2019	2020	2021	2022	
					2-Sept-20	1	12-Oct-22	0
					7-Oct-20	1	16-Oct-22	0
							18-Oct-22	0
							22-Oct-22	0
							18-Aug-22	3
							20-Aug-22	1
							3-Sept-22	1
							25-Sept-22	1
							28-Sept-22	1