

Wyre Forest Reptile Report, 2019

correlated with meteorological data

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2019 Weather Data

Total Rainfall/Precipitation = 989mm (38.9 inches).

Rain Days with +0.2mm = 203 days.

Wettest Day, with 43.1mm (1.8 inches) on 26th October.

Wettest Month, with 156.4mm (6.3 inches) was October.

Warmest Day, with 31.8°C on 25th July.

Coldest Night, with an air temperature of -7.2°C was on 4th February with a ground temperature of -14°C.

This data was recorded at Knowles Mill, Dowles Brook, Wyre Forest, at approximately 9am GMT. The site is located only some 31 metres above sea level, with the steep sided valley forming a frost pocket, and limiting direct sunshine to just a few hours daily, even during the summer months.

Discussion

Despite the absence of any further dramatic decline in adder numbers in 2019, this once numerous and iconic species still remains in a precarious position in Wyre Forest. The adder has a naturally slow reproduction rate, as it takes up to five years for any neonates or juveniles to reach sexual maturity and thus produce offspring of their own. Even then, infant mortality appears to be very high. Therefore, any significant

Table 1: Rainfall at Knowles Mill

Year	Total Rainfall		Days with Minimum Of 0.2mm Rainfall	Maximum Daily Rainfall (mm)	Date of Maximum Rainfall
	mm	Inches			
1990	964.3	38	167	42.5	28-Jan
1991	633.5	24.9	158	33	30-Apr
1992	880.4	34.7	196	42.9	28-May
1993	785.9	30.9	177	38	10-Jun
1994	814	32	198	54.8	14-Aug
1995	625.9	24.6	164	41.3	10-Jul
1996	624.8	24.6	169	17.4	12-Apr
1997	753.7	29.7	161	32	25-Jun
1998	805.4	31.7	195	27.2	01-Jun
1999	968.6	38.1	212	45.6	19-Sep
2000	1011.6	39.9	223	36.8	29-Oct
2001	738.1	29.1	187	40.2	17-Jul
2002	843.7	33.3	191	22.8	20-Dec
2003	560.2	22.1	155	27.3	30-Oct
2004	849.6	33.4	209	46.3	03-Aug
2005	748.8	29.5	183	35.3	24-Jul
2006	652.5	25.7	191	20.1	24-Nov
2007	1046	41.25	184	74.7	20-Jul
2008	930	36.67	197	37.2	05-Sep
2009	724.5	28.6	184	25	06-Jun
2010	659.2	25.99	168	27	25-Aug
2011	498.6	19.66	166	18.7	07-May
2012	1077.1	42.47	202	82.3	23-May
2013	807.7	31.35	169	28	14-May
2014	976	38.48	212	26.7	25-Aug
2015	775.5	30.06	207	40	13-Aug
2016	848.7	33.46	197	33	21-Nov
2017	722.2	28.48	207	24.8	26-Dec
2018	734.2	28.9	184	26.1	20-Sep
2019	989	38.93	203	43.1	26-Oct

increase in the population, particularly with regard to mature individuals, at least in the short term, is most unlikely to materialise unless.....

A. A new, previously unknown site or adder population is discovered in the Forest. This scenario, while highly desirable, will rarely, if ever occur, unless of course there have been intrinsic and continuing inaccuracies in the survey methodology.

B. Major predators, such as Buzzard, Pheasant, or Corvids are greatly reduced in number, and continual disturbance/deliberate persecution by humankind is eliminated.

C. The status of the Adder in Wyre Forest reaches a previous high level, with numerous interactive colonies of breeding individuals. This situation would hopefully result in a positive annual recruitment rate to replenish the population and thus negate the almost inevitable incidence of high natural mortality.

D. Additional specimens are translocated from elsewhere in the country, preferably from the nearest suitable donor population, i.e., Kinver Edge, Cannock Chase. This option might be considered unrealistic or undesirable by some authorities. However, Adder numbers are now so low, with only two or three sites,

Table 2: Phenology data in the Wyre Forest

RECORD	2004	2005	2006	2007	2008	2009	2010	2011	2012	2013	2014	2015	2016	2017	2018	2019
Frogs Croaking	23-Jan	31-Jan	18-Jan	12-Jan	16-Jan	13-Feb	24-Feb	18-Feb	03-Mar	07-Mar	18-Feb	N/S	N/S	21-Feb	10-Mar	21-Feb
First Frogspawn	16-Feb	09-Feb	26-Feb	15-Feb	09-Feb	18-Feb	26-Feb	22-Feb	03-Mar	08-Mar	21-Feb	07-Mar	22-Feb	22-Feb	11-Mar	23-Feb
First Male adder	04-Mar	15-Feb	15-Feb	14-Feb	12-Feb	16-Feb	20-Feb	12-Feb	21-Feb	17-Mar	19-Feb	18-Feb	01-Mar	24-Feb	20-Feb	15-Feb
First common lizard	25-Mar	15-Feb	22-Feb	07-Mar	12-Feb	02-Mar	07-Mar	12-Feb	25-Feb	13-Mar	24-Feb	18-Mar	01-Mar	14-Mar	13-Mar	20-Mar
First Slow-Worm	16-Mar	18-Mar	25-Mar	07-Mar	01-Mar	25-Feb	18-Feb	17-Mar	25-Feb	16-Apr	24-Feb	10-Mar	01-Mar	02-Apr	26-Mar	20-Mar
First female adder	16-Mar	18-Mar	26-Mar	14-Feb	21-Mar	02-Mar	14-Mar	12-Mar	17-Mar	18-Mar	18-Mar	07-Mar	14-Mar	14-Mar	03-Apr	20-Mar
First grass snake	02-Apr	21-Mar	12-Apr	07-Mar	27-Mar	06-Mar	21-Mar	12-Mar	25-Feb	23-Apr	17-Mar	20-Mar	12-Mar	02-Apr	21-Mar	23-Apr
First grass snake copulation	N/S	04-Apr	N/S	N/S	01-Apr	21-Mar	04-Apr	N/S	N/S	N/S	N/S	N/S	14-Apr	N/S	N/S	N/S
First male adder slough	19-Apr	16-Apr	19-Apr	06-Apr	02-Apr	26-Mar	13-Apr	08-Apr	17-Apr	24-Apr	08-Apr	13-Apr	20-Apr	10-Apr	26-Apr	10-Apr
First adder courtship and combat	24-Apr	27-Apr	25-Apr	12-Apr	22-Apr	03-Apr	14-Apr	08-Apr	17-Apr	N/S	16-Apr	18-Apr	N/S	18-Apr	N/S	23-Apr
First adder mating	25-Apr	27-Apr	26-Apr	12-Apr	23-Apr	11-Apr	14-Apr	08-Apr	17-Apr	N/S	18-Apr	18-Apr	N/S	18-Apr	N/S	23-Apr
Last adder courtship	07-May	06-May	07-May	27-Apr	03-May	29-Apr	05-May	30-Apr	26-Apr	N/S	28-Apr	18-Apr	N/S	25-Apr	N/S	N/S
Last adder	05-Oct	16-Oct	20-Oct	02-Nov	21-Oct	26-Sep	23-Sep	16-Oct	05-Nov	18-Sep	22-Sep	23-Sep	28-Sep	19-Sep	24-Sep	18-Sep

all with a high degree of spatial separation, still supporting viable populations, that only swift and Draconian measures will prevent the ultimate demise of this species, already functionally extinct in Wyre Forest.

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Table 3: Cumulative data of Adders

Year	First Sighting	Air Temp. (°C)	Grass Temp. (°C)	First Slough	Year	First Sighting	Air Temp. (°C)	Grass Temp. (°C)	First Slough
1990	05-Feb	13	14	08-Apr	2005	15-Feb	10	14	16-Apr
1991	23-Feb	14	17	19-Apr	2006	15-Feb	10	17.3	19-Apr
1992	23-Feb	13	15	22-Apr	2007	14-Feb	11.3	19	06-Apr
1993	17-Feb	10.7	12.5	16-Apr	2008	12-Feb	7	27	02-Apr
1994	10-Feb	10	15	18-Apr	2009	16-Feb	11.7	13.7	26-Mar
1995	12-Feb	11.4	11	10-Apr	2010	20-Feb	4	20	13-Apr
1996	16-Feb	12.2	15	24-Apr	2011	12-Feb	11.5	15.6	08-Apr
1997	15-Feb	8.6	11	08-Apr	2012	21-Feb	15	28	17-Apr
1998	11-Feb	13.6	12.5	17-Apr	2013	17-Feb	5.5	13	24-Apr
1999	16-Feb	8	9	16-Apr	2014	19-Feb	10	16	08-Apr
2000	19-Feb	6.3	12.5	07-Apr	2015	18-Feb	10	16	13-Apr
2001	07-Feb	10	11.5	17-Apr	2016	01-Mar	13	18	20-Apr
2002	11-Feb	13.5	16	09-Apr	2017	24-Feb	14.5	12.5	10-Apr
2003	23-Feb	11	23.8	31-Mar	2018	20-Feb	9.2	12	26-Apr
2004	04-Mar	11	17.5	19-Apr	2019	15-Feb	11.3	21	10-Apr

Table 4: Adder numbers

Year	Sites Surveyed	Sites with Adders	Mature Males	Mature Females	Total	Average per Site	Year	Sites Surveyed	Sites with Adders	Mature Males	Mature Females	Total	Average per Site
1990	56	50	185	55	240	4.8	2005	54	25	40* 38*	16* 38*	56* 103*	4.1* 2.4*
1991	76	61	211	56	267	4.4	2006	38	21	74	26	100	2.1
1992	78	55	159	33	192	3.5	2007	28	19	67	24	101	5.3
1993	80	59	186	70	256	4.3	2008	51	24	120	35	155	6.5
1994	76	50	153	29	182	3.6	2009	55	22	96	30	126	5.7
1995	76	44	103	14	117	2.6	2010	55	24	83	23	106	4.4
1996	80	41	112	32	144	3.5	2011	44	20	59	27	86	4.3
1997	84	44	102	31	133	3	2012	27	14	56	19	75	5.4
1998	85	42	103	34	137	3.3	2013	26	12	35	22	57	4.8
1999	67	35	100	20	120	3.4	2014	26	15	43	16	59	3.9
2000	87	24	69	13	82	3.4	2015	26	12	44	18	62	5.2
2001	Data incomplete due to FMD						2016	26	10	26	16	42	4.2
2002	20	13	36	17	53	4	2017	26	9	24	18	42	4.7
2003	20	9	26	10	36	4	2018	26	11	21	18	39	3.5
2004	47	20	40	19	59	3.6	2019	26	8	16	12	28	3.5

*Usual Sites without three new sites added

* Total when three new sites were added

FDM – Foot & Mouth Disease

Table 5: Other reptiles recorded during Adder census

Year	Grass Snakes	Slow-Worms	Lizards	Year	Grass Snakes	Slow-Worms	Lizards
1990	36	26	24	2005	12/16*	53/71*	58/144*
1991	20	35	20	2006	11	49	70
1992	30	35	13	2007	12	45	52
1993	49	62	38	2008	34	129	169
1994	20	46	23	2009	18	156	98
1995	23	36	11	2010	28	124	90
1996	22	48	15	2011	26	59	117
1997	28	53	42	2012	16	43	34
1998	21	42	37	2013	13	42	21
1999	34	41	19	2014	19	43	23
2000	12	24	23	2015	16	70	38
2001	Data incomplete due to FMD			2016	49	97	31
2002	9	17	14	2017	41	96	32
2003	5	10	26	2018	40	87	18
2004	7	18	19	2019	38	116	39

** the total with the three new sites added
FMD – Foot & Mouth Disease

