

Adder

Vipera berus

Species Action Plan

1. Introduction

The adder is a small snake that occurs naturally in the UK. Whilst widespread and locally common in some areas its distribution is scattered and declining in Worcestershire. It was listed as a priority UK BAP species and subsequently included within Section 41 of the Natural Environment and Rural Communities (NERC) Act 2006.

2. Current Status

2.1 Ecology and habitat requirements

Figure 1. Records of adder in Worcestershire. Data supplied and map prepared by Worcestershire Biological Records Centre.

4. Current Action

4.1 Local protection

There are no sites in Worcestershire that are protected specifically for their adder populations, although many of the key sites where adders are found have designations for other reasons:

1753 ha of the Wyre Forest is designated a Site of Special Scientific Interest (SSSI) and 549 ha as a National Nature Reserve (NNR).

Habberley Valley is managed by Wyre Forest District Council as a Local Nature Reserve (LNR).

Kingsford Forest Park is managed by National Trust as a LNR.

Kinver Edge SSSI is managed by National Trust and the designation covers 124 ha.

732 hectares of the Malvern Hills is designated a SSSI and the main hills and commons constitute around 11% of the Malvern Hills Area of Outstanding Natural Beauty (AONB).

4.2 Site management and programs of action

The 'Wyre Forest National Nature Reserve and Forest Plan 2016-2026' produced jointly by Forestry Commission and Natural England contains specific management prescriptions for key species including adder. These state that adder hibernacula should be identified and measures taken to prevent disturbance to such areas. Periodic (usually annual) reports are produced by Forestry Commission on site management works undertaken to create or improve adder habitat within the forest.

Following survey work in 2006 (see section 4.3) the primary hibernacula sites in Habberley Valley were fenced to restrict and deter public access. Scrub and tree management to thin the canopy cover, concentrating particularly on holly (*Ilex aquifolium*), is carried out by volunteer work parties on the south and south westerly slopes of the valley.

On the Malvern Hills and Commons scrub management is being targeted around adder hibernacula and feeding sites to provide habitat for prey species. Nigel Hand has been instrumental in plotting migration routes from hibernacula to feeding grounds whilst also monitoring individuals on the various sites. Through the results of the survey work the timing and intensity of grazing has been adjusted to make sure the adders are not disturbed at key times.

4.3 Survey, research and monitoring

Sylvia Sheldon and Chris Bradley have carried out an extensive annual population inventory of adders in the Wyre Forest area since 1982 and they have also recorded in other areas of Worcestershire. A report is produced annually and published by the Wyre Forest Study Group. A telemetry study was carried out in Wyre in 2010 by Nigel Hand.

Make the Adder Count began in 2005, supported by the Amphibian and Reptile Groups of the UK (ARG UK), as a national surveillance programme collecting standardised counts of adders lying-out after emerging from hibernation. Between 2005 and 2016, 181 surveyors provided information on

260 sites. 129 [-Á@•^Áã•Á&] dää c^áÁ@^^Á!Á [!^Á^æ•q] [!@Á -Áæá and these were used to derive average population trends over time. A significant decline was confirmed across sites with small populations, while the few sites with large populations (<10 % of sites) were weakly increasing. It was concluded that if these trends continue adders will be restricted to a few large population sites , ä@ ÁÍ GÁ^æ•ÉÚ à|áÁ!^•~!^äãč!àç &^Á was reported as the most frequent negative factor affecting sites, followed by habitat management and habitat fragmentation (Gardner *et al.*, 2019).

In 2006, Wyre Forest District Council commissioned a survey

management operations. Additional funding in 2013 enabled a telemetry project that shed light on the movements of adders around the southern hills.

In 2013 the University of Worcester began an investigation into whether reptile predation by pheasants could be confirmed and quantified using eDNA techniques. Although pheasants were observed during the study to readily consume reptiles, including adders, the eDNA research has so far not been successful in detecting reptile DNA in pheasant droppings.

Telemetry surveys are planned for 2018 on Kinver Edge and Kingsford Forest Park.

5. Associated plans

Lowland Heathland, Woodland, Wet Grassland, Hedgerows, Scrub, Traditional Orchards, Grassland.

6. Conservation Aim

The area of habitat suitable for adders and habitat quality on sites known to hold adder populations has been maintained and those populations have been retained. The connectivity of suitable habitat across landscapes known or likely to support adder populations has been improved.

7. Conservation Objectipion

