Bedfordshire and Luton Species Action Plan: Adder

Updated July 2010

Adder, Vipera berus
Photo by Marek Szczepanek
The adder (*Vipera berus*) is Britain’s only venomous snake. It is diurnal, feeding on lizards, small mammals, amphibians and nestling birds. It hibernates, frequently communally, between late September/early October and late February/early March, the duration of hibernation depending on the sex of the adder as well as its geographical location.

The adder is able to colonise a variety of habitats ranging from open woodland, hedgerows, commons, heathland, moors and sand dunes, to damp meadows, riverbanks and bogs.

The active period of the adder’s life cycle has three distinct phases. In the spring the adders emerge from their hibernation sites and spend much of their time basking. During this phase the males shed their skins and search for females, and mating occurs. They then disperse more widely to feed over the summer. The third phase in autumn sees a return to their hibernation sites, the females entering hibernation following the birth of their young in August/September. Hibernation sites are usually on higher, dry ground, often within the burrows of small mammals.

### Current status

#### National status

In the United Kingdom the adder is found right up to the extreme north of mainland Scotland, but is absent from Ireland and the Isle of Man. Within England the adder is widely distributed but its abundance varies greatly. It can be locally common in areas such as the south-west however it is less common and even rare over much of central, eastern and north-west England.

The adder has proved vulnerable to habitat loss due to intensive agriculture, forestry and urban development. A 2004 report for Natural England on the status of the adder in England shows evidence of a national decline – the Midlands being an area of particular concern. This survey supported the findings of other earlier surveys and suggests that adders have been declining in Britain since the 1930s.

#### Local status

Historically, although not considered common, adders have been recorded from all parts of the county, however most records have been from the Greensand Ridge and the chalk hills. During the period 1979 – 1999, confirmed records were received from King’s Wood, Heath &
Reach; Rowney Warren; near the River Ivel at Blunham; near Land Park Wood at Whipsnade and Leighton Buzzard.

Since 2000, regular confirmed reports of adders have come from only three sites within the county, all on the Greensand Ridge - Rowney Warren, the edge of Kings Wood, Heath & Reach (sightings are more frequently received from adjacent Rammamere Heath over the border in Bucks) and the population re-introduced to Maulden Heath in 2000. In 2009 an injured female adder was found among rubbish collected from the Luton area, so it appears there may also be a population remaining in the south of the county.

Current factors affecting the adder

- Habitat loss: This has historically been the major threat to the adder over much of its range, in particular the loss of open habitats such as heathland, on which it relies, to afforestation, agriculture, urbanisation and scrub encroachment. The effect of this has been to reduce the overall size of the adder population and to fragment it into small, increasingly isolated colonies which are more vulnerable to loss due to factors such as predation, disease and inbreeding depression.

- Habitat management: Although management is vital to maintain the open habitat adders rely on, increased mechanisation and large scale habitat management can be detrimental to adder populations.

- Public pressure: More recently the disturbance caused by public recreational pressure on sites has been identified as having a negative impact on adder populations.

- Persecution: This is felt to be less of a problem than in the past, however the finding of an injured adder in rubbish in the county recently shows that, despite legal protection, persecution still occurs.

Current action

Legal
The adder is protected under the Wildlife & Countryside Act 1981 (as amended), Schedule 5, which prohibits the intentional killing, injuring or trade of the species.

The Natural Environment and Rural Communities Act 2006 places a statutory duty on public authorities to conserve biodiversity. Section 41 of this Act lists species and habitats of principal importance for conserving biodiversity in England; the adder is included on this list.

National action
The National Amphibian & Reptile Recording Scheme (NARRS), run by the Amphibian & Reptile Conservation Trust, has two schemes relating to adders:

- Make the Adder Count – a national monitoring scheme which has been running since a pilot project in 2005. By collating annual peak counts from a number of sites throughout the country it aims to monitor long term population trends.

- Add an Adder – a web-based survey where people can send in records of sightings, historical information, anecdotes concerning adders etc. to add to our knowledge of the species in Britain
The adder was added to the UK List of Priority Species in June 2007 and in July 2009 a national Species Action Plan for widespread reptiles, including the adder, was produced.

**Local action**
Within Bedfordshire, the Bedfordshire Reptile & Amphibian Group (BRAG) encourages survey and monitoring of adders. Records are collected and validated by the Herpetological Recorder of the Bedfordshire Natural History Society (BNHS) and this information is held at the Bedfordshire & Luton Biodiversity Recording & Monitoring Centre (BRMC).

All three sites where adders have been regularly recorded in recent years are within or near Sites of Special Scientific Interest or County Wildlife Sites which have management plans in which the presence of adders is taken into account. The presence of an adder population qualifies a site for designation as a County Wildlife Site under the county’s CWS selection guidelines.

The county heathland and acid grassland Habitat Action Plans contain a range of actions for the restoration, recreation and beneficial management of these habitats which will be beneficial to adder populations.

**Action plan objectives and targets**

**Objective**
Maintain and expand the range of the adder in Bedfordshire

**Targets**

- **A.** Determine the current range and number of sites occupied by the adder in Bedfordshire
- **B.** Maintain the existing range and number of occupied adder sites
- **C.** Expand the range and number of sites occupied by the adder
Fig. 1  Distribution of confirmed adder records in Bedfordshire over the last 30 years. Squares indicate 1km squares in which adders have been recorded. The location of the Luton square indicates the presence of adders somewhere in the surrounding area, rather than illustrating a precise location. Map prepared by the BRMC.
## Proposed action

### Abbreviations

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<th>Description</th>
<th>Implemented by</th>
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<tr>
<td>BRAG</td>
<td>Bedfordshire Reptile &amp; Amphibian Group</td>
<td>Lafarge, Lafarge Aggregates</td>
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<tr>
<td>FC</td>
<td>Forestry Commission</td>
<td>FC, GST, Lafarge</td>
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<tr>
<td>GST</td>
<td>The Greensand Trust</td>
<td>GST, Lafarge</td>
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<td>WT</td>
<td>The Wildlife Trust</td>
<td>FC, GST, Lafarge, WT</td>
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### Action

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<td>1. Ensure that information on the distribution of adders and their conservation needs is available for use by local authorities and other relevant organisations to assist both the protection and enhancement of known sites and prevent further population fragmentation</td>
<td>FC, GST, Lafarge, WT</td>
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| 2. Management plans for known adder sites should include appropriate management for this species and ensure protection of hibernacula, if locations are known. All sites should wherever possible contain the following features:  
  ● Herbaceous and shrubby vegetation to provide shelter  
  ● Unshaded short vegetation or bare ground for basking  
  ● A mosaic of heather, bracken, gorse and scrub on heaths  
  ● In wooded areas, tree canopy should not exceed 60%. Permanent glades and interconnecting rides should be maintained to aid local dispersal. | FC, GST, Lafarge, WT             |
| 3. Encourage the creation/restoration of areas of habitat suitable for adders adjacent to and linking known adder populations | FC, GST, Lafarge                 |
| 4. Investigate whether translocation would be a useful tool for restoring adders to sites from which they have been lost or introducing them to new suitable sites and, if so, decide on suitable potential receptor sites | GST                              |
### Advisory

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<td>5.</td>
<td>Liaise closely with owners/managers of existing and future sites that support populations of adders to provide advice</td>
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<td>6.</td>
<td>Train and support volunteers to help with survey and monitoring</td>
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### Future research and monitoring

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<td>7.</td>
<td>Survey all sites with historic records of adders or where unconfirmed records have been reported</td>
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<td>8.</td>
<td>Monitor all currently known adder sites and any additional sites that are discovered, and submit records to the national Make the Adder Count survey. In particular the location of hibernacula should be identified</td>
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<td>9.</td>
<td>Monitor and report on the success of the adder reintroduction at Maulden Heath</td>
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### Communication and publicity

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<td>10.</td>
<td>Increase public understanding of adders and their conservation needs</td>
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Monitoring the Action Plan
This action plan will be reviewed every five years.

Complementary plans
A UK Species Action Plan has been written for widespread reptiles, including the adder, by the Herpetological Conservation Trust, now the Amphibian & Reptile Conservation Trust.

None of the counties surrounding Bedfordshire and Luton have Species Action Plans for the adder.

This action plan should be read alongside the habitat action plans written for heathland and acid grassland in Bedfordshire and Luton.

Acknowledgements
This action plan has been updated by Sue Raven of the Greensand Trust with the assistance of Helen Muir-Howie, the BNHS Recorder for Reptiles & Amphibians, Marcus & Sue Phillips of the Bedfordshire Reptile & Amphibian Group and Keith Balmer of the Bedfordshire & Luton Recording & Monitoring Centre.

References
