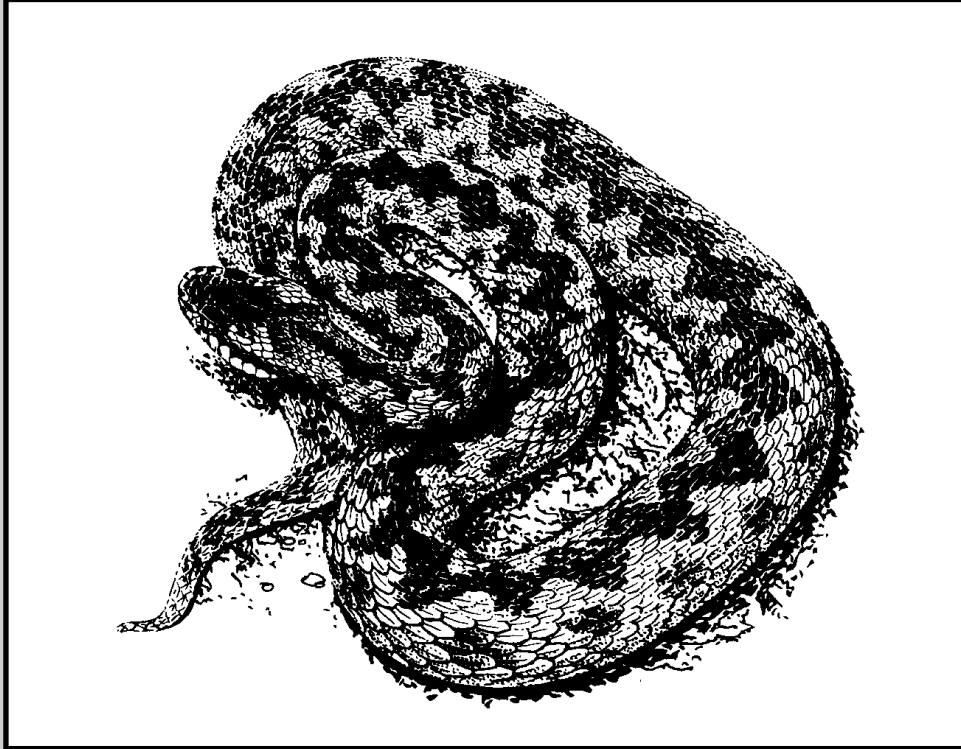


Adder

Vipera berus



National lead organisation(s):

The adder is diurnal, feeding on lizards, small mammals, amphibians, nestling birds and insects. It hibernates 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 adder migrates between various habitat types and requires a range of suitable habitats for the different phases of its life cycle.

County lead organisation(s):

The Greensand Trust

The active period of the adder's life cycle has three distinct phases. In the spring the adders disperse from the hibernation sites and spend much of their time basking. During this phase the males shed their skins and search for females, and mating occurs. In the second phase during the summer they migrate to their feeding areas, following linear features such as hedges and ditches. Feeding areas mostly consist of low-lying damp or boggy areas such as wet meadows, woodland edges and near ditches. The third phase in the 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

The adder (*Vipera berus*) is one of six reptiles native to Britain. It is also known as the European adder, European viper or the common viper and is Britain's only venomous snake.

The adder is the most northerly occurring snake, being the only species found inside the Arctic Circle, and occurs southwards from Scandinavia throughout much of Europe and northern Asia. 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 widespread and locally common, especially in the south-west. The snake is less common and even rare over much of central, eastern and north-west England.

The adder is vulnerable to habitat loss due to intensive agriculture, forestry and urban development, and there is evidence that the numbers of adders decreased throughout Britain in the 1960s and early 1970s, this decline being most severe in the south east of England. The adder is judged to be of unfavourable conservation status within Europe with a decline in population of up to 25% in the last 25 years.

Local status

There are few sightings of adders within the county of Bedfordshire, the main population being present at King's Wood, Heath and Reach and neighbouring Rammamere Heath (in Buckinghamshire). Other recent records include individuals at Blunham near to the River Ivel associated with the riverbank and disused railway, Rowney Warren near Shefford, and a sighting in 1985 of a dead female on the road near Land Park Wood at Whipsnade in the south of the county. There have also been unconfirmed records from the Wavendon Heath and Stockgrove Country Park areas.

Current factors affecting the adder

- c **Habitat loss:** This is the major threat to the adder over much of its range. In lowland England the open habitats such as heathland on which it relies are being lost to afforestation, agriculture, urbanisation and scrub encroachment. Fragmentation of habitats can prevent adders migrating between the various habitats they need for hibernation and feeding. The effect of this habitat change has been to reduce the overall size of the adder population and to fragment it into small, increasingly isolated colonies. These can be affected by fluctuations in size due to adverse weather conditions, fire, predation etc., which could lead to the extinction of small, local colonies.
- c **Persecution:** Man has a deep-rooted fear of snakes, especially the adder, as it is the only venomous snake in Britain. Despite their protection under the Wildlife and Countryside Act there is evidence that widespread killing of adders still occurs. The impact of this persecution depends on the proportion of the population in an area that is affected. As the available habitat is reduced and fragmented the importance of persecution as a threat increases.

Current action

Surveys of adders and other reptiles have been carried out at King's Wood, Bragenham Wood and Rammamere Heath since 1996. Tins were put down in the first year though only one adder was recorded, most sightings being out in the open, so this method was abandoned.

Much work has been carried out at Rammamere Heath since 1994 to restore the heathland vegetation, which will hopefully increase the adder population at this site. A Forest Plan for Rowney Warren is being developed which includes restoring an area of heathland.

A study was carried out in 1997/98 looking at the feasibility of establishing an adder colony at Coopers Hill SSSI at Ampthill.

Twenty seven young adders from the New Forest were released on Maulden Heath SSSI by Forest Enterprise during summer 2000 and further release are planned. Their progress will be monitored by the newly formed Bedfordshire Reptile and Amphibian Group (BRAG). Maulden Heath and the adjacent fields are due to be entered into the Countryside Stewardship Scheme and managed by the Greensand Trust. This will include creating an area of heathland on what is currently a christmas tree plantation. Heathland restoration work is also being carried out at Sandy Warren and Sandy Heath Quarry, all potential sites for adder introductions.

Action plan objectives and targets

- A Determine the location of adder colonies throughout Bedfordshire, using historical locations, recorded sightings and local knowledge.
- B To monitor known adder colonies to determine their population and area.
- C To maintain and increase the population at known sites by appropriate management and protection.
- D Establish new populations at appropriate locations.

Proposed action

Abbreviations

BNHS	Bedfordshire Natural History Society
BLWWG	Beds & Luton Wildlife Working Group
BRAG	Bedfordshire Reptile and Amphibian Group
CMPs	Countryside Management Projects
EN	English Nature
FE	Forest Enterprise
GST	Greensand Trust
IVCP	Ivel Valley Countryside Project
NCT	North Chilterns Trust
RSPB	RSPB
WT	Wildlife Trust for Bedfordshire

Action

Implemented by

Policy and legislation

- a). Ensure all sites supporting populations of adders are identified as County Wildlife Sites.

BLWWG

Site safeguard and management

- a). Ensure close liaison with owners/managers of existing and any future sites that support populations of adders

BNHS, CMPs, WT

- b). Management plans for known adder sites must include appropriate management for this species. All sites should wherever possible contain the following features:

EN, FE, GST, IVCP

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 cover should not exceed 60%. Permanent glades and interconnecting rides should be maintained to aid local dispersal.

Appropriate corridors between the winter and summer habitats.

- c). Ensure the management of all existing heathland sites and associated habitats in the county and encourage the creation of new areas of heathland from arable land and conifer plantations, especially near existing sites with known adder populations

EN, FE, GST, WT, RSPB

- d). Continue adder introduction programme at Maulden Heath.

FE

- e). Establish a colony of adders at Sandy Heath Quarry

Lafarge-Redland Ltd

Action	Implemented by
Species management and protection	
No action proposed	
Advisory	
No action proposed	
Future research and monitoring	
a). Survey all sites with known records for this species and where historical and unconfirmed records obtained	BNHS, GST, IVCP, NCT,
b). Establish a monitoring programme and monitor current known sites and any additional sites that are discovered for size of colony, habitat preferences, location of hibernacula and seasonal migrations	BNHS, GST, IVCP, NCT,
c). Monitor success of adder introduction at Maulden Heath SSSI	BRAG, FE
d). Pass all records on to BNHS reptile recorder and Biodiversity Recording and Monitoring Centre (BRMC) to enable database to be updated	BNHS, GST, IVCP, NCT,
e). Investigate the potential of other sites for adder reintroduction programmes, e.g. Sandy Warren	GST, IVCP, RSPB, WT,
f). Encourage further research into the life history and conservation requirements of the adder	EN, GST, Local Universities, WT
Communication and publicity	
a). Launch campaign to increase public awareness of adders and promote their image	BNHS, GST

Acknowledgements

This action plan has been compiled and written by The Greensand Trust.

Illustration courtesy of English Nature

References

Bulteel, L (1997) Conservation Management for the Adder (*Vipera berus*) in Britain

Bedfordshire and Luton Wildlife Working Group (1998) Bedfordshire and Luton "The Red Data Book"