



DRAFT REVISED PLAN - AUGUST 2015

HEDGEHOG

Erinaceus europaeus

1. INTRODUCTION

The hedgehog is a familiar and iconic mammal found all over the United Kingdom, occurring in almost every habitat except for moors, coniferous plantations, wetlands and some Scottish islands. Its range extends in similar habitats throughout Europe. Hedgehogs are welcomed by gardeners because of their healthy appetite for 'garden pests'. Their diet consists of worms, slugs, beetles and other insects; the shiny wing cases of the beetles making their droppings distinctive.



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In favourable conditions hedgehogs can have two litters of 4-5 young (hoglets) per year which are dependent for 8 weeks; they can live for up to 8 years, although they usually live around 2 years in the wild. In order to survive hibernation a hedgehog must weigh at least 450g so a ready supply of invertebrate food is very important in their habitat (Morris, 2006)

Home range seasonal averages are 32ha for males and 10ha for females (Morris, 1988). The enclosure of gardens by impenetrable boundaries such as fence panels set into concrete bases prevents them from roaming or dispersing, but is easily corrected by providing gaps in the panels or bases to allow hedgehogs through.

In the wider countryside hedgehogs depend on the availability of insects and earthworms in pasture land, hedgerows, woodlands and field margins. Intensively managed arable land is of low value to them because of a lack of invertebrates (Doncaster, 1994) and populations in open grasslands have been shown to vary in relation to availability of earthworms (Cassini and Föger, 1995). Moorlands and coniferous forest also provide poor sources of food for hedgehogs (Mammal Society, 2012).

2.	OBJECTIVES	TARGETS
	Associated Action Plans are: 'Woodland', 'Churchyards & Cemeteries', 'Gardens', 'Allotments', 'Traditional Orchards', 'Hedgerows', 'Parks & Public Open Spaces', 'School Grounds' and 'Field Margins'	
	PLEASE CONSULT THE '<i>GENERIC SPECIES</i>' ACTION PLAN IN CONJUNCTION WITH THIS DOCUMENT FOR OBJECTIVES COMMON TO ALL SPECIES PLANS	
A.	Reverse the decline of hedgehogs in Warwickshire.	2020

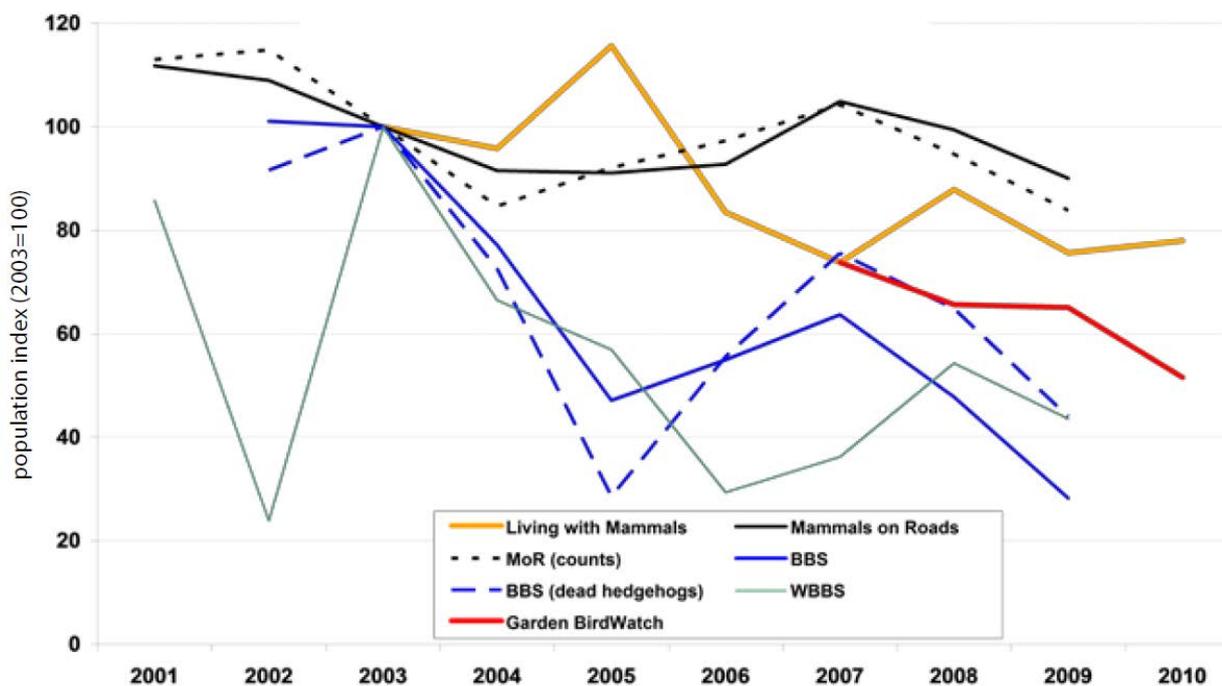
3. NATIONAL BAP OBJECTIVES & TARGETS

The hedgehog is on the current UK Biodiversity Action Plan (BAP) Priority Species list published in 2007 ([Joint Nature Conservation Committee](#)). The targets and objectives for the [Hedgehog BAP](#), updated in 2010, may be seen online.

Nationally, PTES and the [British Hedgehog Preservation Society](#) have joined forces to carry out a three year project to conserve hedgehogs, funding research into how hedgehogs move about the countryside and what features of farmland they like best. [Hedgehog Street](#) is the public participation part of this larger project; people are being asked to become Hedgehog Champions, to rally support from their neighbours and work together to create ideal hedgehog habitat throughout their street, estate or communal grounds.

4. CURRENT STATUS

In the 1950s it was estimated that the population of hedgehogs was about 30million individuals but by 1995 this figure had drastically declined to an estimate of only 1.5million. Studies by the [People's Trust for Endangered Species](#) (PTES) have shown a further 25% population decline between 2005 and 2011. In some regions, particularly rural areas, the numbers have dropped by up to half (Wembridge, 2011).



Figures 1: Graphs showing the decline in hedgehog population between 2001-2010. Population index is based on detection probability from 7 surveys. Source: www.britishhedgehogs.org.uk

Despite subsequent research into the reasons for the decline, there appears to be no further published data.

4.1 Legal and Policy Status

The Hedgehog is partially protected under the [1981 Wildlife & Countryside Act](#) and the [Wild Mammals \(Protection\) Act 1996](#), making it an offence to kill or take hedgehogs from the wild by certain methods.

4.2 Current Factors Affecting the Species

There are several suggested causes for the decline in hedgehog populations. Overall reasons for the decline are:

- **Current threats to conservation status:**
 - the use of pesticides leading to a reduction of available food
 - quality of field margins – more worms if they are not compacted by heavy farm machinery, more insects if sown with a nectar and pollen mix.
 - presence / quality of hedgerows – a laid hedge is better than a flailed hedge as it often has dead wood in the bottom providing extra food .
 - habitat loss and fragmentation – the reduction in accessible gardens and hedgerows; an increasingly fragmented landscape through the building of new roads and impenetrable boundaries.
 - increase in road traffic and new roads leading to high road mortality.
 - climate change - more extreme weather including drier summers and wetter winters.
 - changes in gardening practices - tidier and inaccessible gardens without suitable shelter or areas for adequate foraging and the use of slug pellets that are linked to poisoning.
- **Contributory factors:**
 - cattle/sheep grids without ramps - hedgehogs can get trapped in them.
 - garden ponds – can be a danger if designed without sloping edge or log so that hedgehogs can climb out.
 - bonfires, especially in autumn/winter, can lead to hedgehog deaths if not checked for their presence.
 - electric fencing around poultry runs
- **Constraints to delivery of conservation action:**
 - increase in urban sprawl and rural development leading to further fragmentation of habitats and an increase in traffic.
 - lack of knowledge of the impacts of climate change on hedgehogs.

5. LOCAL ACTION

- Survey work nationally by PTES includes survey within Warwickshire – [tracking tunnels](#) are being piloted by PTES on a 1km basis.
- In the Leam Catchment Area, reduction and management of the level of use of slug pellets is being undertaken by [Severn Rivers Trust](#).
- In Rugby Borough Council and Warwick District Council the use of any type of slug pellets has been discontinued.
- The [Warwickshire Wildlife Trust 'Help for Hedgehogs'](#) campaign began in 2013 to raise £250,000 to work with local schools, planners, developers, local businesses and landowners to raise awareness of the issues facing hedgehogs. This included creating a distribution map detailing where hedgehogs occur and improving habitats for hedgehogs and other wildlife on school grounds, housing estates and new developments in Warwickshire.
 - Advice is given to:
 - leave 'wild areas' with dead wood piles and leaf litter for foraging and hibernacula
 - provide water supplies in shallow containers
 - make fencing 'permeable' by creating gaps in panels and bases
 - provide cat or dog food, not bread and milk
 - In 2015 the first conservation area dedicated to hedgehogs was created, funded by the [British Hedgehog Preservation Society](#) (BHPS) - this 90ha hedgehog improvement area in Solihull will be managed by volunteers to establish a sanctuary and encourage a more wildlife friendly approach amongst gardeners.
- Hedgehog carers across Warwickshire – in 2014 there were 12 registered carer groups (including the BHPS) which rehabilitate many orphaned, injured and underweight hedgehogs. [Warwickshire Hedgehog Rescue](#) took in over 100 animals in 2013, 80% of which were released back into the wild. The staff work from home, treating injuries cause by humans, frequently from the use of strimmers, and caring for juveniles orphaned through nest disturbance and road-kill. A back-up team of 'foster carers' overwinters many underweight animals that would not survive hibernation, for release in the spring.
- Through their newsletters in 2014, the Warwickshire Association of Local Councils (WALC) and the Warwickshire Federation of Women's Institutes (WFWI) are asking for records of hedgehogs, both dead and alive, to be sent to the Local Biological Record Centre.
- Less intensive land use and the improvement of hedgerows and field margins is encouraged and supported by [agri-environment schemes](#) administered by [Natural England](#) at both Entry Level Stewardship (ELS) and Higher Level Stewardship (HLS):
 - Options for **hedgerows** include:
 - **management** - especially **ELS options EB3: hedgerow management for landscape and wildlife** and **EB10: combined hedge and ditch management (incorporating EB3)**, and **HLS options HB11: management of hedgerows of very high environmental value (both sides)** and **HB12: management of hedgerows of very high environmental value (one side)**.

- **restoration - EB14:** to improve the condition of hedgerows and encourage management under long term laying coppicing
- Options for **field margins** include:
 - **EF7:** [beetle banks](#) and options for insect-rich foraging habitats (minimum requirement 2-3ha) under HLS : **HE10** – floristically enhanced margins and **HF20** – uncropped cultivated plots or margins for arable plant
 - Options for **less intensive land use** to create habitat and food for invertebrates, include:
 - **EK3:** Permanent grassland with very low inputs and **EK21** : Legume and herb rich swards
- Canal Rivers Trust has installed hedgehog hotels at Nelson Wharf (2015) as part of their 'Natural Asset Management Strategy'.
- [Stour Valley Wildlife Action Group](#) (2015) "Helping Hedgehogs" public lecture.

6. PROPOSED LOCAL ACTIONS

ACTION	Lead	Partners	By
PLEASE CONSULT THE '<i>GENERIC SPECIES</i>' ACTION PLAN IN CONJUNCTION WITH THIS DOCUMENT FOR ACTIONS COMMON TO ALL SPECIES PLANS			
Policy, Legislation & Protection			
PL1. Encourage the adoption of a policy discouraging the use of pesticides on land controlled by local authorities e.g. parks, allotments.	WCC	LAs	2015
PL2. Promote the adoption of a policy to discontinue the use of all chemical slug repellents on land controlled by all local authorities.	RBC	WCC NE LAs	WWT AS 2015
PL3. Encourage the retention and protection of boundary features such as hedgerows and rough field margins on development sites to support connectivity through the countryside.	WCC	WWT	LAs ongoing
PL4. Actively propose the better management of urban sites and new developments by the use of 'permeable' fencing, i.e. with accessible gaps, to connect gardens.	WCC	LAs	WWT ongoing
PL5. Prepare site management guidance for land managers of semi-improved grassland Local Wildlife Sites (LWS) and other relevant habitats that will benefit hedgehogs.	LWSP	HBA LOs	WWT ongoing

Site / Species Safeguard & Management			
SM1. Develop 10 'Hedgehog Improvement Areas' spread across the county that will show a measurable increase in hedgehog populations through community awareness and habitat management improvements.	WWT	HOs	2016
SM2. Actively propose management prescriptions under agri-environment schemes which are sympathetic to the hedgehog's requirements with: <ul style="list-style-type: none"> • conservation of hedgerow systems & wooded areas near arable fields • wider field margins • non-intensive farming practices 	NE	FC WWT	WCC ongoing
SM3. Care for orphaned, injured and underweight hedgehogs and reintroduce to suitable release sites.	WHR	WWT LA Carer groups	ongoing
Advisory			
A1. Continue to promote take-up of agri-environment schemes for sensitive farming options that will benefit hedgehogs (see SM3).	NE	WWT	CFE ongoing
A2. Continue to promote the rebuilding and checking of bonfires for wildlife before setting alight.	WCC	WWT	LA ongoing
Research & Monitoring			
RM1. Co-ordinate records of hedgehogs collected by individuals and organisations, including targeted surveys.	WBRC	WWT WFWI	WALC Schools ongoing
RM2. Undertake structured random surveys, including urban and rural sites.	WWT	Unis	LOs 2015
RM3. Undertake post-mortem testing of corpses for pesticides and produce report of results.	WWT	Unis	PTES 2015
Communication, Education & Publicity			
CP1. Continue to run an awareness campaign highlighting the difficulties hedgehogs are facing and solutions that individuals can implement.	WWT	WCC Carer groups	LA ongoing

CP2. Hold an annual Wildlife Gardening event .	WWT	PTES GCs AS Carer groups	2020
CP3. Encourage the public to report sightings of hedgehogs, both dead and alive, to the Warwickshire Biological Record Centre.	WWT	WBRC	ongoing
CP4. Actively encourage engagement in the PTES ' Mammals on Roads ' and ' Living with Mammals ' surveys for gardens and schools.	WWT	WBRC PTES	ongoing

Abbreviations: **AS** – Allotment Societies, **CFE** – Campaign for the Farmed Environment, **FC** – Forestry Commission, **GCs** – Gardening Clubs, **HBA** – Habitat Biodiversity Audit partnership, **HOs** – Home owners, **LA**s – Local Authorities, **LWSP** – Local Wildlife Sites Project, **NE** – Natural England, **PCCs** – Parochial Church Councils, **PTES** – Peoples' Trust for endangered species, **RBC** – Rugby Borough Council, **Unis** – Universities, **WALC** – Warwickshire Association of Local Councils, **WBRC** – Warwickshire Biological Record Centre, **WCC** – Warwickshire County Council, **WFWI** – Warwickshire Federation of Women's Institutes, **WHR** – Warwickshire Hedgehog Rescue, **WWT** – Warwickshire Wildlife Trust.

7. PROGRESS WITH ACTIONS

From 2015–2020 there will be a rolling programme of reporting on progress, of 10 action plans per year with an annual summary of results. Results will be entered onto the national Biodiversity Action Reporting System [BARS](#).

8. BIBLIOGRAPHY

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Wembridge D. (2011) [The State of Britain's Hedgehogs](#): *Evidence of a declining hedgehog population*. Report for British Hedgehog Preservation Society & People's Trust for Endangered Species.

Defra (2011) [Biodiversity 2020](#): A strategy for England's wildlife and ecosystem services.

Mammal Society (2012) *Mammals of the British Isles - Factsheets and Information*. Available at: <http://www.mammal.org.uk/species-factsheets/Hedgehog>

Natural England (2013) [Entry Level Stewardship handbook](#)

RSPB (2013) The State of Nature – a stocktake of all our native wildlife by 25 wildlife organisations.

9. FURTHER INFORMATION

Warwickshire Wildlife Trust '[Help for Hedgehogs](#)' campaign.

People's Trust for Endangered Species ([PTES](#)).

[British Hedgehog Preservation Society](#) website and information.

[Hedgehog Street](#) works to increase public awareness of hedgehog ecology and wildlife-friendly gardening as well as conducting large-scale surveys. The initiative [Make a hole, make a difference](#) aims to create hedgehog highways through gardens.

Natural England: [Booklets on Wildlife Gardening](#), [Wildlife Gardening Forum](#)

Royal Horticultural Society & The Wildlife Trusts '[Wild About Gardens](#)' Project and 'Wildlife Gardening for Everyone' Question & Answer book . Tel. 020 7834 4333.

10. CONTACT

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