

# GREATER HORSESHOE BAT

*Rhinolophus ferrumequinum*

Hampshire Biodiversity Partnership

## SPECIES ACTION PLAN

### 1 INTRODUCTION

The greater horseshoe bat has been identified by the UK Biodiversity steering group report as a species that requires conservation action. It is listed on the priority list of the UK Biodiversity Action Plan. The Hampshire Biodiversity Partnership has identified the greater horseshoe bat as a species requiring action in Hampshire.

### 2 CURRENT STATUS

#### 2.1 Ecology and Habitat Requirements

The greater horseshoe bat is one of the UK's largest bats and has a distinctive noseleaf, which aids its echolocation. Preferred roosting sites for this species include old buildings, cellars and stone mines in summer, and predominantly underground roosts (such as caves, mines and cellars) in winter. A landscape of permanent pasture and ancient woodland, linked with hedges and watercourses is ideal feeding habitat for greater horseshoe bats. This type of landscape provides the bats with both insect food and flight paths. Whilst greater horseshoe bats can live up to 30 years, they may only produce one young per year. They are also limited in suitable roosting places, as unlike other bats, horseshoe bats are unable to crawl and require an entrance to their roost through which they can fly.

#### 2.2 Population and Distribution

During this century the greater horseshoe bat has declined significantly throughout northern Europe. In the UK, this species is generally restricted to southwest England and south Wales. There are currently 35 recognised maternity roosts and all year roosts and 369 hibernation sites. Current estimates range between 4,000 and 6,600 individuals.

In Hampshire there are only two known roosts, both situated in the Avon Valley near Ringwood. Both roosts are considered primarily hibernation roosts, although there are records of greater horseshoe bats being present at one of these roosting sites during the summer months. It is likely that these roosts are satellite roosts of a larger colony in Dorset.

#### 2.3 Protection

The greater horseshoe bat is listed on Appendix II of the Bonn Convention (and its agreement on the Conservation of Bats in Europe, 1994), Appendix II of the Bern Convention, and Annexes II and IV of the EC Habitats and Species Directive. It is protected under Schedules 5 and 6 of the Wildlife and Countryside Act 1981. The 1996 IUCN Red List of Threatened Animals classifies this species as *Endangered*. In Hampshire the only known roost of more than one individual is found bordering the New Forest Candidate Special Area of Conservation and Avon Valley Special Protection Area for Birds, both designations also being Sites of Special Scientific Interest.

### 3 CURRENT FACTORS AFFECTING GREATER HORSESHOE BAT

- Reductions in insect prey abundance, especially loss of old pasture due to high intensity agricultural systems.
- Loss, destruction and disturbance of roosts or potential roosts.
- Loss of insect-rich feeding habitats and flyways, due to loss of wetlands and hedgerows and the conversion of permanent pasture to arable.

### 4 CURRENT ACTION

#### 4.1 National

Approximately 10 maternity roosts and 27 hibernation roosts have been designated SSSI's. Five sites have been made candidate SAC's.

The greater horseshoe bat is the subject of an EN Species Recovery Programme, concentrating on feeding areas.

#### 4.2 Local

The two known roosts in Hampshire are now monitored on a regular basis, with the landowners being fully aware of their obligations in relation to these roosts.

Both roosts in Hampshire are located near the Avon Valley SSSI/SPA and ESA, which promote agri-environment schemes to enhance floodplain habitats and species, including bats.

## **5 OBJECTIVES**

The overall aim of this Plan is to protect and increase the distribution and population of Greater Horseshoe bats in Hampshire. This broad aim translates into a set of more specific objectives as detailed below. Where feasible, objectives have been allocated targets against which achievement can be measured. The objectives have been broken down into more detailed actions in the 'Proposed Action' table in section 6.

	<b>OBJECTIVES</b>	<b>PROPOSED ACTIONS</b>
<b>A</b>	Maintain existing populations and known roosts of Greater Horseshoe bats in Hampshire.	<b>1 - 6</b>
<b>B</b>	Achieve a significant restoration of the Hampshire Greater Horseshoe bat population. Increase the present Hampshire population size by 25%.	<b>1 – 10, 13</b>
<b>C</b>	Establish and maintain a comprehensive understanding of Greater Horseshoe bat distribution, status and ecological requirements within Hampshire through appropriate research, surveying and monitoring.	<b>7 - 11</b>
<b>D</b>	Promote communication, education and awareness of the status and needs of Greater Horseshoe bats.	<b>4 – 6, 11 - 13</b>

**6 PROPOSED ACTION**

The following table lists the actions required to achieve the objectives set out in this Plan. Each action has been assigned to one or more 'Key Partners'. Key Partners are those organisations that are expected to take responsibility for the delivery of the actions assigned to them, according to the targets set in this Plan. Other organisations may also be involved in the delivery of action, and they have been indicated in the 'Others' column.

Key to symbols in Action Table:

- ◆ To be completed by the indicated year. Work can commence at any time before the due date, at the discretion of the Key Partner.
- ◆⇨ Design or production of a plan/strategy to be completed by this year and then followed by its implementation.
- To start by the indicated year and usually followed by ongoing work. A start arrow in year 2000 can indicate a new action or a new impetus to existing work.
- ⇨ Work that has already begun and is ongoing.

	ACTION	DELIVERY BY		YEAR						MEETS OBJ.		
		Key Partner	Others	◆=complete by	◆⇨=design by and implement	➤=start by	⇨=ongoing	2000	2001		2002	2003
<b>Site and Species Policy and Protection</b>												
1	Ensure that consideration is given to habitat surrounding key bat sites when developing local development plans and assessing planning applications.	LA's, EN	HWT, HBG	⇨	⇨	⇨	⇨	⇨	⇨	⇨		A, B
2	Ensure that the requirements of this species are considered during the development of Local Environment Agency Plans.	EA, EN	HWT, HBG	⇨	⇨	⇨	⇨	⇨	⇨	⇨		A, B
3	Ensure the long term protection of known roosts and suitable roosting and feeding habitat surrounding these sites, notify such areas as SSSIs if required.	HWT, HCC, DCs, EN	LO, FC, FA	⇨	⇨	⇨	⇨	⇨	⇨	⇨		A, B
<b>Site and Species Management</b>												
4	Encourage favourable habitat management around known roost sites	EN	MAFF, HWT, FC, EA	➤								A, B
5	Install a bat incubator at one of the known roosts to encourage breeding and rearing of young	EN			◆							A, B

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	ACTION	DELIVERY BY		YEAR						MEETS OBJ.	
		Key Partner	Others	2000	2001	2002	2003	2004	2010		
◆=complete by    ◆⇄=design by and implement ➡=start by       ⇄=ongoing											
<b>Site and Species Management (continued)</b>											
6	Advise relevant project officers for ESA, countryside stewardship, the woodland grant scheme and other agri-environment and forestry schemes of the location of key roost sites, their importance and appropriate management for surrounding areas.	EN, HBG	FC, MAFF, HCC, HWT, FWAG	➡							A, B, D
7	Advise landowners in the vicinity of roosts on the favourable habitat management of woodlands and riparian habitats for this species.	EN, HBG, HWT	FC, MAFF, FWAG	⇄	⇄	⇄	⇄	⇄	⇄	⇄	A, B, D
8	Continue to support the current network providing bat conservation advice including the use of licensed bat workers/wardens for roost visits.	EN, HBG	BCT	⇄	⇄	⇄	⇄	⇄	⇄	⇄	A, B, D
<b>Research, Survey and Monitoring</b>											
9	Continue to search for all roost types of this species where suitable roost sites occur.	EN, HBG	HWT, HBBG	⇄	⇄	⇄	⇄	⇄	⇄	⇄	B, C
10	Follow up inadvertent discoveries of this species with immediate roost location procedures	EN, HBG	FC, HBBG, BCT	⇄	⇄	⇄	⇄	⇄	⇄	⇄	B, C
9	On locating roosts establish monitoring protocols to ensure appropriate roost management	EN	BCT, HBG	⇄	⇄	⇄	⇄	⇄	⇄	⇄	B, C
11	Develop a county database for bat records	EN	HBBG, HBG	◆							B, C
<b>Communication, Awareness and Promotion</b>											
12	Maintain links with the National Greater Horseshoe SAP Group and other county/regional bat BAPs.	EN, HBG	HBBG, BCT	⇄	⇄	⇄	⇄	⇄	⇄	⇄	C, D
13	Use the conservation requirements of the Greater Horseshoe bat to illustrate the importance of underground sites	EN, HWT, FC	HBG, FA	⇄	⇄	⇄	⇄	⇄	⇄	⇄	D
14	Consider this plan in conjunction with plans for floodplain grazing marsh, chalk rivers, especially wet woodlands, wood pastures and parkland	HCC, EN, HWT, EA	HBP, HBBG		➡						B, D
15	Raise awareness and promote this species through leaflets, web sites and other media	HBG, BCT,	HWT		➡						D

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**KEY TO ORGANISATIONS:**

BCT Bat Conservation Trust  
EA Environment Agency  
EN English Nature  
FA Forestry Authority  
FC Forestry Commission

MAFF Ministry of Agriculture, Fisheries and Food  
HBBG Hampshire Biodiversity Bat Group  
HBG Hampshire Bat Group  
HBP Hampshire Biodiversity Partnership  
HCC Hampshire County Council  
HWT Hampshire Wildlife Trust

REFERENCES

- 1 ***A Review of British Mammals: Population estimates and conservation status of British mammals other than Cetaceans***, S Harris et al., JNCC, Peterborough, 1995.

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This is one of many Habitat, Species and Topic Action Plans being prepared by the Hampshire Biodiversity Partnership. It will be monitored by the Partnership and fully reviewed in 2005.

This species action plan has been prepared by Ian Davidson-Watts and the Greater Horseshoe Bat SAP Working Group on behalf of the Hampshire Biodiversity Partnership.

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