

## Barn Owl (*Tyto alba*)

The barn owl is a characteristic farmland species. It is largely nocturnal and crepuscular (active at dawn and dusk) when it may be seen hunting in areas of rough grassland, field margins, along hedgerows, ditches and roadside verges. The barn owl feeds almost exclusively on small mammals, especially voles, but also takes shrews, mice, rats and occasionally birds. It nests in sheltered sites within tree cavities and buildings.

UKBAP Priority Habitats of particular importance to this species include ancient and/or species-rich hedgerows, upland hay meadows, cereal field margins, lowland wood-pasture and parkland, coastal floodplain grazing marsh and lowland meadows.

### Current status

#### *National status*

The barn owl is listed on Appendix II of the Bern Convention and is protected under the EC Birds Directive and Schedule 1 of the Wildlife and Countryside Act (1981, as amended). Although it is not a UKBAP Priority Species, it is listed as a Species of Conservation Concern in the UK Biodiversity Steering Group Report and is on the Amber List of Birds of Conservation Concern. The barn owl has undergone a significant decline in numbers in the 20th century. Over the last 20 years the population is believed to have fallen by between 20 and 50%. The current British population was most recently estimated at 5000 pairs. The barn owl is widespread across lowland Britain, with highest densities (10-30 pairs per 100 square kilometres) being recorded in rural lowland areas, such as parts of the Isle of Wight, Anglesey, Cornwall, mid-Devon, Suffolk, Norfolk, Hampshire and Sussex.

#### *Status on the network*

Barn owls are present throughout much of the network. Records in the Highways Agency network ecological information only exist for the A30, A303 and A57, although this is likely to be due to under-recording.

### Current factors affecting the species

#### *Traffic related mortality or injury*

New and existing roads can have a direct impact on barn owls through fatal collisions with vehicles. Increased road construction is estimated to have led to a doubling of barn owl road deaths since the 1950s, to between 3,000 and 5,000 per year.

#### *Habitat loss or degradation and fragmentation*

The building of new roads or road improvements can result in the loss of feeding or breeding habitat for barn owls. Inappropriate management of road verge foraging habitat may also be significant. In addition, owing to the decrease in the area of rough grassland caused by modern agricultural practices, barn owls may now rely more heavily than before on road verges (where this habitat is prevalent) thus increasing the likelihood of road mortality. Substantial new roads can contribute to the fragmentation of barn owl habitat.

### Current action

The Barn Owl Trust (BOT) provides a free national information and advice service and is involved in research and education initiatives. 'Barn Owls on Site – A Guide for Developers and Planners' was published by BOT in 1995, and it contains a set of recommendations for changes in planning policy. BOT have also carried out a study on the effects of major roads on barn owls.

The British Trust for Ornithology and Hawk and Owl Trust undertook 'Project Barn Owl' to survey the distribution of barn owls across the British Isles over three breeding seasons, 1995 to 97. An annual monitoring programme for the barn owl is being evaluated as part of this project.

The British Trust for Ornithology runs the national bird ringing scheme and the national Nest Record Scheme. This data is used to examine the movements and survival of barn owls in relation to changes in, for example, weather, land use and the use of rodenticides.



## Objectives

The aim of the Highways Agency Species Action Plan for the barn owl is to reduce the level of incidental mortality on new and existing roads

whilst ensuring favourable management of barn owl foraging and nesting habitat.

	Objective	Proposed actions
A	To avoid impacts of new road schemes or improvements on barn owls.	5
B	To mitigate unavoidable impacts on barn owls and/or their habitat.	6
C	To develop a greater knowledge of barn owl distribution in the soft estate.	3, 4
D	To reduce the level of incidental barn owl mortality on existing roads through implementation of appropriate actions.	4, 7
E	To raise the awareness of HA staff, Managing Agents and consultants regarding the significance of barn owls on the network.	1, 2, 8

## Proposed action

The following table lists the actions required to achieve the objectives set out in this Plan. For some of the actions, potential partners have

been assigned as likely sources of co-operation. Targets are provided to give an indication of the timescale for the proposed action.

	Action	Potential partners	Target
	<i>Policy, guidance and advice</i>		
1	Consider publication of an Advice Note on barn owls.	-	2004
2	Provide detailed information in TRMM on the management of highway vegetation for the benefit of barn owls, whilst minimising situations which lead to barn owl mortality.	-	2005
	<i>Surveying</i>		
3	Identify all areas of existing and potential barn owl nesting and foraging habitat on and adjacent to the soft estate. Include records on the Environmental Database.	BOT, WTs	2007
	<i>Research and monitoring</i>		
4	Identify worst sites for road casualties and implement appropriate action.	BOT	By 2005
	<i>Mitigation and Management</i>		
5	For all new schemes and road improvements, include search for records of barn owls in desk study at Stage 1 and in surveys at Stage 2. (Early identification may allow impacts to be avoided).	BOT, WTs, EN	Ongoing

	<b>Action (continued)</b>	<b>Potential partners</b>	<b>Target</b>
	<i>Mitigation and Management (continued)</i>		
<b>6</b>	Where impacts of new schemes and road improvements on barn owl habitat are unavoidable, consider the options for habitat recreation and enhancement, and consider mitigation of fragmentation by maintaining "green links" across roads.	<b>BOT</b>	<b>Ongoing</b>
<b>7</b>	Liaise with the Barn Owl Trust regarding their report on the impacts of traffic on barn owls and implement appropriate actions.	<b>BOT</b>	<b>2003</b>
	<i>Communications and publicity</i>		
<b>8</b>	Information on barn owls should be included in environmental training for HA staff and Managing Agents.	<b>-</b>	<b>2003</b>

### Links with other plans

This Plan should be read in conjunction with the HAPs for boundary features and grassland.

### Lead partners

The lead partner for the barn owl in the UKBAP is the Barn Owl Trust.

