



## BARN OWL

### *Tyto alba*

#### 1. INTRODUCTION

The ghostly white form of a barn owl searching hedgerows, ditches and rough, grassy fields for small mammals was once a familiar sight in Warwickshire. As agriculture intensified, however, many such habitats disappeared and the barn owl vanished with them. The barn owl's widespread decline has been attributed primarily to this change in the landscape, with pesticides and road mortality as further negative factors. Development, especially the conversion of barns into residences, also contributed to the barn owl's decline by reducing the number of sheltered nest sites within buildings, especially old hay barns.



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The food supply and feeding habitats of the barn owl are crucial to its success. It relies heavily on small mammals (e.g. voles and shrews) for much of its food and these are most abundant in open areas of rough grassland, or fields with wide, rough grassy margins. The barn owl also requires fence posts, dense hedgerows or hedgerow trees for perches. Being a specialist small mammal feeder, its presence is a good indication that the area is also a rich habitat for a range of small mammals and other animals.

Eggs are laid from March or early April and the clutch size is normally four to seven, but may be larger when food is especially abundant. Currently single-brooded in the UK, but two broods are possible in years of plentiful food. Juvenile mortality is always quite high, with 80% surviving less than one year. Requires several roost sites, as the male roosts away from the female during the breeding season, while the female herself may roost away from the nest site once the young are about a month old. Barn owls reuse their nests in successive years.

#### 2. OUR OBJECTIVES & TARGETS

#### Target

- |    |   |      |
|----|---|------|
| A. | To increase the breeding range to its 1972 range  | 2020 |
| B. | To increase the size of the breeding population to 100 pairs (with medium-term objective of 60 pairs by 2010) | 2020 |
| C. | To increase the extent of suitable barn owl habitat to 5000ha (with medium-term aim of 3000ha by 2010)        | 2020 |

**ASSOCIATED HABITAT PLANS**

- Grasslands( all types)
- Field Margins
- Hedgerows
- Rivers & Streams
- Built Environment

**ASSOCIATED SPECIES**

- Bats

### 3. NATIONAL BAP OBJECTIVES & TARGETS

This is not a National BAP priority species.

### 4. CURRENT STATUS

The barn owl is the most widely distributed land bird in the world. In Europe, its conservation status is unfavourable and 75% of the population is concentrated in the UK, France, Germany, Italy and Spain.

In Britain, it is on the *Amber* list of Birds of Conservation Concern (Gregory et al, 2002), having shown a decline in the breeding range of 25-49% during the past 25 years. However, population decline had largely been halted by the late 1990s and is now steady (Mead, 2000).

Past surveys in Warwickshire recorded barn owls in 46% of 10-km squares in 1966-68, 90% in 1968-72 and 50% in 1988-91 but it seems likely that the first figure was under-recorded, with a real decline between the early 1970s and the early 1990s. Estimating numbers is complicated because the population fluctuates with the cycles in voles. However, it seems likely that the county held around 50 ( Hawk & Owl Trust survey) breeding pairs during 1982-85, compared with 200 in 1932. The range then contracted and numbers plummeted, but there has since been some recovery, aided in part by positive land management. In 2000 the population was estimated at around 40 pairs, with the vast majority in south Warwickshire.

#### 4.1 Legal and Policy Status

The barn owl is protected under the Wildlife and Countryside Act, 1981. It is also listed in the EC Birds Directive; listed under Appendix II of the Bern Convention; on the Amber List of Birds of Conservation Concern (Gregory et al, 2002); given an unfavourable conservation status in Europe (Tucker *et al.*, 1994) and listed as globally threatened on the UK Biodiversity Steering Group Report (1995) "Long List".

## 4.2 Current Factors Affecting The Species

The barn owl is a specialist feeder on small mammals, mostly voles, mice and shrews, and is restricted to open areas of rough grassland, field margins, ditches, hedges, riverbanks and the edges of woods. Most nest and roost in farm buildings, though some resort to cavities in trees or even church towers. Barn owls do not survive well in cold, wet or windy weather and prolonged or heavy rainfall. These, coupled with the characteristic population cycles of their favoured prey, can dramatically affect breeding success.

The main threats to the barn owl have been:

- **Loss and fragmentation** of rough grassland;
- **Loss of nest and roost sites** through the demolition of old barns, or their conversion into dwellings and also the felling of old trees for safety reasons;
- **Possible poisoning by rodenticides:** these may be consumed by eating contaminated small mammals;
- **Road mortality** through increasing traffic volumes and speed; birds being forced through loss of other habitat to hunt roadside verges.
- **Changing climate** with the recent increase in flooding perhaps reducing populations of small rodents and thereby increasing barn owl mortality. Prolonged wet weather is a continued threat.
- **Disappearance of stack yards and straw-bedding**, which were important sources of prey, especially in hard weather;

## 5. CURRENT LOCAL ACTION

- Some nest-boxes have been erected in various parts of the county. The Environment Agency, Hawk and Owl Trust and West Midland Bird Club have also erected several boxes along the Trent, Sence and Tame valleys in Staffordshire.
- "Barn Owls on Site – a Guide for Developers and Planners", published by the Barn Owl Trust and English Nature (2002) is supplied to every Local Authority in the UK and contains a set of recommendations for changes in planning policy.
- "The barn owl" and "Barn owls and the law" leaflets are published by the RSPB and are publicly available.
- Agri-environment schemes are helping to increase the habitat suitable for hunting barn owls.
- Advice to landowners/managers, by organisations such as FWAG, RSPB and the Hawk and Owl Trust, on land management for barn owls, encouraging them to take up agri-environment schemes.
- Two projects, one on the River Leam and the other on the Rivers Blythe, Anker and Tame, aim to enhance farmland habitats for a variety of species including barn owl.

## Warwickshire, Coventry and Solihull Local Biodiversity Action Plan

- The presence of barn owl is taken into account in the determination of planning applications.
- The lack of annual population change data for this species is now being addressed by the BTO's Barn Owl Monitoring Programme, which began in 2000; additional nest record, ringing and biometric information is also being collected through this scheme (Leech et al. 2003).

## 6. PROPOSED LOCAL ACTIONS (some dates amended - Core Steering Group - Feb 2008)

ACTION	Lead	Partners	By	Meets objective
<b>Policy &amp; Legislation</b>				
<b>PL1.</b> Ensure that all relevant policy is included in Local Planning Documents (see ODPM Planning Policy Statement PPS9) to safeguard and promote barn owls and their habitats.	LBAPSG	LAs	2010	A, B
<b>PL2.</b> Raise awareness of the HSE statutory rules and guidelines on the use of second-generation anticoagulant rodenticides.	NE	RSPB WWT	review 2007	A, B, D
<b>Site / Species Safeguard &amp; Management</b>				
<b>SM1.</b> Provide nest-boxes where the habitat is suitable but birds are absent, prioritising efforts around known existing breeding sites.	WCP	LOs	review 2007	A, B
<b>SM2.</b> Extend the Staffordshire nest-box scheme along the Tame and Blythe valleys.	WCP	EA WMBC	2005	A, B
<b>SM3.</b> To protect and re-establish rough grassland, particularly along field margins, watercourses and woodland edges.	FWAG	WWT WM LOs	review 2007	A, B, C
<b>SM4.</b> To arrest the fragmentation of the above habitats and create networks of linked corridors for hunting.	FWAG	WWT WM	review 2007	A, B, C
<b>Advisory</b>				
<b>A1.</b> Alert landowners and users to presence of breeding and wintering barn owls.	LBAPSG	WMBC EN WWT	review 2007	A, B, D
<b>A2.</b> Advise landowners and managers of the habitat/nest site requirements of barn owls and promote beneficial management practices to them (e.g. provision of rough grass field	RSPB	WWT WM WMBC NE	review 2007	A, B, D

margins, extensive grassland management, owl-friendly rodent control practice).		FWAG		
<b>A3.</b> Establish at least one demonstration site in Warwickshire at which practices of good land management for barn owls are carried out, and set up and promote training days at sites.	FWAG	EN LOs WCP FWAG RSPB	2005	B, D
<b>Research &amp; Monitoring</b>				
<b>RM1.</b> Maintain the Habitat Biodiversity Audit as a measure of suitable habitat for barn owl.	HBA	WWT	2005-2015 review annually	A, B
<b>RM2.</b> Support the current Breeding Bird Survey, which will provide up-to-date and more detailed distribution data.	WMBC	WM WWT	2005	A, B
<b>RM3.</b> Establish effective monitoring of range and population.	WMBC	WWT WM	2005-2015 review annually	A, B
<b>RM4.</b> Establish an up-to-date database of landowners implementing action for barn owl conservation.	FWAG	WWT NE BOT WM WMBC	2005	A, B
<b>Communication, Education &amp; Publicity</b>				
<b>CP1.</b> Promote the barn owl as an important part of the fauna in Warwickshire, Coventry & Solihull and as an indicator species of the general wellbeing of the agricultural environment.	LBAPSG	WMBC WWT BOT WM BTO RSPB	2005-2015	A, B, D
<b>CP2.</b> Publicise introduction of nest-box schemes and their success rate.	LBAPSG	WMBC WWT	2005-2015	A, B, D
<b>CP3.</b> Encourage the public to report barn owl sightings to the County Bird Recorder.	WM	WWT WMBC	review 2005	D

**Abbreviations:** BOT – Barn Owl Trust, BTO British Trust for Ornithology, EA - Environment Agency, NE – Natural England, FWAG – Farming & Wildlife Advisory Group, LBAPSG – Local Biodiversity Action Plan Steering Group, LA – Local Authority, LO – Landowner, RSPB – Royal Society for the Protection of Birds, WCP – Wildlife Conservation Partnership, WM – Warwickshire Museum, WMBC - West Midland Bird Club, WWT – Warwickshire Wildlife Trust.

**7. REFERENCES** (see also **LBAP Bibliography** web page)

Gregory, R.D.; Wilkinson, N.I.; Noble, D.G.; Robinson, J.A.; Brown, A.F.; Hughes, J.; Proctor, D.A.; Gibbons, D.W. and Galbraith, C.A. (2002) The population status of birds in the United Kingdom, Channel Islands and Isle of Man: an analysis of conservation concern 2002-2007, *British Birds* 95, pp410-450

Mead, C. (2000) . *The State of the Nation's Birds*. Whittet Books, Stowmarket.

Tucker, G.M. and Heath, M.F. 1994. *Birds in Europe: their conservation status*. Cambridge. BirdLife International (BirdLife Conservation Series no.3).

UK Biodiversity Steering Group 1995. *Biodiversity: The UK Steering Group Report, Volume 2: Action Plans*. HMSO, London.

**8. FURTHER INFORMATION** (see separate **Links** web page for links to web sites)

Barn Owl Trust: Waterleat, Ashburton, Devon. Tel. 01364 653026  
Email: [info@barnowltrust.org.uk](mailto:info@barnowltrust.org.uk).

Barn Owl Conservation Network, Sheepdrove Organic Farm, Warren Farm, Lambourn, Berkshire, RG17 7UU. Tel. 01582 832182.

Royal Society for the Protection of Birds: The Lodge, Sandy, Bedfordshire SG19 2DL Tel: 01767 680551

RSPB: '*Management Guide to Birds of Lowland Farmland*' (2005) and '*Farm Wildlife Handbook*' (2007), from Publications, RSPB, Unit 17, St Martin's Business Centre, St Martin's Way, Bedford MK42 0LF, tel. 01234 263616 or email: [publications@rspb.org.uk](mailto:publications@rspb.org.uk) .

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