**Description of Species**

The barn owl's heart-shaped face, pale buff back and wings, and pure white under-parts make it one of our most distinctive birds. However, its largely nocturnal habits mean that it often goes undetected until someone hears its ghostly, shrieking call.

Barn owls feed mainly on small mammals, especially voles, but they also take shrews, mice, rats and birds. The food supply and hence feeding habitat of the barn owl are crucial to its success. Ideally it requires open areas of rough grassland with hedgerows, and fields with rough grass margins. Rough grassland strips with fences are a favourite habitat.

When hunting, the barn owl uses the high frequency sounds given out by its prey to pinpoint it in total darkness. The prey is caught in sharp talons, and then swallowed whole. After digestion a pellet containing the left-overs - bones, teeth and fur - is regurgitated.

The barn owl nests in dark, sheltered sites inside buildings, especially old hay barns, or in deep holes in trees. It needs a nesting site that is not subject to unexpected disturbance. Young leave the nest at about nine weeks and disperse by about 14 weeks of age. Many young barns owls die at this stage 56 -75% survive less than a year.

**Legislation**

Protected under Schedules 1 & 9 of the Wildlife and Countryside Act (amended by the CRoW Act 2000) and a species of conservation concern.

**Current Status & Distribution**

**International**

The barn owl is perhaps the most widely distributed land bird in the world, and occurs throughout Europe.

**UK**

The most recent national survey (Toms et al. 2001) suggested a population of 4000 pairs in the UK.

**Wales**

By 2000, the total was believed to have fallen to a maximum of only 282 pairs (Green, 2002). A survey of 195 known nesting sites found 90% to be in buildings, 7.5% in trees and 2.5% in caves or cliffs. Of buildings containing nests, around 77% were agricultural, 15% domestic, 3.5% industrial, 3.5% churches and 1% dovecotes.

The status of the barn owl in Wrexham County Borough has not been researched. There is probably a minimum of 20 pairs, but numbers may be considerably higher as this owl can be easily overlooked.
Current Factors Causing Loss or Decline:

Loss of suitable nesting sites

Barn owls need undisturbed nesting sites such as ancient, hollow trees and old-fashioned farm buildings, especially barns. Many of these buildings have been lost to development, whilst large hollow trees have become fewer - a result of elm disease, needless felling and reduced replacement of fallen trees in hedge or fence lines.

Prolonged, severe winters

To survive cold winters, barn owls need to hunt successfully. This is made harder by prolonged rain or blizzards, which make flying difficult, and by deep snow cover, which makes prey hard to reach. Life is hardest for barn owls on high ground, where the air is colder and snow lies longer. Birds in poor condition after long winters are less likely to breed successfully.

Poisoning by pesticides and rodenticides.

Chemicals used for pest control are passed up the food chain to barn owls. There is increasing concern about 'second generation' poisons used where rodents have become resistant to warfarin.

Loss of winter food:

Until the 1940s, stackyards were used to store grain, attracting rats and mice to the buildings. More grain was spilled during harvests, while stubble, left unploughed through the winter, also made good habitat for rodents. Today stubble is an uncommon sight and farms are altogether cleaner places, with grain stores more rodent-proof, making for less prey for the owls.

Loss of rough grass habitats:

Changes in farming since the 1960s have greatly reduced the habitat available to small mammals. Today, crop fields are larger than in the past, often ploughed right up to the edge, and miles of hedgerow have been lost in some areas. Changes like these have taken away the rough grassy areas that give barn owls their richest hunting.

Casualties on roads:

The lack of rough grassland elsewhere can force barn owls to rely on roadside verges for hunting - which makes them vulnerable to road accidents. Shawyer (1998) found that as much as 52% of the UK's barn owl population is killed by traffic each year, whilst early 1990s research estimated between 3000 and 5000 barn owl deaths on the roads annually.
Objectives and Targets

1. To maintain, and seek to increase, the existing range and population of barn owls within Wrexham.

2. To encourage land owners/managers to make provision for suitable feeding habitats for barn owls and to provide suitable nesting sites for them.

3. In the general public, to promote awareness of barn owls and appreciation of their significance in the environment.

4. To establish annual monitoring of nesting attempts by suitably licensed fieldworkers to build on the local database, currently held by the Wales Raptor Study Group.

5. To incorporate considerations within planning guidance to protect current and potential nesting sites within the county.

Current Action

- With the increase of agri-environment schemes in recent years, the barn owl has benefited in a number of ways, either directly or indirectly. Examples of this include payments to maintain rough grassy verges and plant hedgerows.

- Locally, licensed workers from the Wales Raptor Study Group - North Wales (WSRG - NW) monitor sites, ring birds and assess breeding success. They also work in conjunction with the RSPB, Countryside Council for Wales (CCW), Forestry Commission (FC), wildlife conservation organisations and local landowners to encourage barn owls to continue to breed in, or re-populate suitable habitats.

- CCW's agri-environment scheme, Tir Gofal, encourages farmers who enrol in the scheme to make provisions for barn owls where possible.

- FC manages broadleaved and conifer woodland as habitat for prey species. They also put up barn owl nest/roost boxes and monitor these for occupation and breeding success.

Links to other Action Plans:

Denbighshire, Flintshire, Conwy and Cheshire Barn Owl Species Action Plans

Sources of Information:


Barn Owl Conservation Network www.bocn.org

Abbreviations

CCW - Countryside Council for Wales
FC - Forestry Commission
WCBC - Wrexham County Borough Council
WCBCS - Wrexham County Borough Countryside Services
WRSNGW - Wales Raptor Study Group-North Wales
WBG - Wrexham Biodiversity Group
### Proposed Action by Lead Partners

<table>
<thead>
<tr>
<th>Policy and legislation</th>
<th>Lead Partner</th>
<th>Target</th>
<th>Objective</th>
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<tbody>
<tr>
<td>Wherever possible, to use agri-environmental grants (eg Tir Gofal) to benefit schemes that lead to sustainable farming and the conservation of wildlife habitat, especially suitable feeding areas for barn owls.</td>
<td>CCW</td>
<td>From 2004 onwards</td>
<td>1,2</td>
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<tr>
<td>To adopt policies and procedures that will be of benefit to barn owls, especially in relation to the provision and safeguarding of nest sites. Planning conditions should be imposed on building conversions that may affect barn owls. Provision of boxes, owl holes or other means to enable nesting should be incorporated in any plans for conversion work. No related building work should take place between the end of March and the end of September.</td>
<td>WCBC</td>
<td>From 2004 onwards</td>
<td>1,5</td>
</tr>
</tbody>
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### Site/Species Management and Protection

| Encourage the provision, and increase the amount, of suitable feeding habitat, particularly around known breeding sites. | WCBC, CCW | By 2008 | 1,2 |
| Encourage retention of unimproved grass margins and headlands around arable fields. | WCBC, CCW | By 2010 | 1,2 |
| Provide nest boxes in areas with suitable feeding habitat. | WRSG-NW | | 1 |

### Advisory

| Prepare and circulate advice notes for landowners and developers about appropriate feeding habitat and suitable nesting sites. | WRSG-NW, WCBC | From 2004 onwards | 1,2 |

### Communication and publicity

| Encourage members of the public to report road casualties to the WRSG-NW | WCBC, CCW | From 2004 onwards | 1,2,3 |
| Raise awareness among land owners and managers about the need for conservation action for barn owls and how they can contribute. | WCBC, FC, CCW | From 2004 onwards | 1,2 |
| Consider setting up a barn owl project in order to increase awareness of the bird’s requirements and of biodiversity in general. | WBG, WRSG-NW, volunteers, general public | By 2005 | 3 |

### Survey, research and monitoring

| Monitor regularly all known and accessible barn owl nest sites. | WRSG-NW | Annually | 1,4 |
| Examine contents of pellets at roosts and nest-sites to improve our knowledge of local food preferences. | WRSG-NW | Whenever possible | 4 |
| Review this plan every five years. | WBG | 2010 | 1 |

### Further information

**Biodiversity Officer**

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website: www.wrexham.gov.uk/planning

Illustrations courtesy of English Nature.
Photographs: Barn Owl Trust - www.barnowltrust.org.uk
Barn Owl Conservation Network - www.bocn.org.
This leaflet is available in alternative formats. Please call 01978 292019

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