

Barn Owls

How you can help them



ABOUT BARN OWLS

The classic image of a barn owl is of a large, ghostly white bird flying low over open countryside at dusk. Indeed its Latin name, *Tyto alba*, means white owl. Barn owls are not actually white all over, but have orange-buff upper parts mottled with grey. A close sighting will reveal the distinctive, heart-shaped white face, with black eyes. The tail is short and the wings rounded. From head to tail they are approximately 35 cm long (1' 2"), with a wingspan of 85 cm (nearly 3').

Barn owls are 'crepuscular' – this means they are particularly active at dawn and dusk. They can also hunt at night, thanks to their superb hearing, but when feeding young they are sometimes seen seeking food in broad daylight. The other name for the barn owl is 'screech owl' from its long, drawn out shrieking call - an unsettling sound to hear in the darkness, but a clear sign that barn owls are in the area.

To hear a barn owl call, go to:
www.rspb.org.uk/wildlife/birdguide/name/b/barnowl/index.asp



SIGNS OF BARN OWLS

You don't have to see or hear a barn owl to know that they are about – you may find signs of their presence in the form of pellets, droppings and feathers.

Owl pellets are the regurgitated remains of their prey – the bits they cannot digest, such as fur and bones. Generally, fresh barn owl pellets are black and glossy, moist and soft to the touch, sausage-shaped and anything from thumbnail to whole thumb size. However, they do vary in shape (for example if they've fallen on a hard surface they will be flattened on one side) and, as they age, become matt, grey and dry. They can take years to fully decompose, depending on where they fall.

Barn owl droppings appear as white splashes or patches on roofs, fence posts, and on the floors, walls and roof timbers of farm buildings. They are not easily distinguished from the droppings of other birds, but if inside a building can be an initial indication that it is being used by barn owls.

Adult barn owls moult their distinctive feathers from May to November. Wing feathers are the largest and most noticeable. Nestlings shed white fluff (downy material with no quill) and this can be a sign of a nesting place, as can a layer of pellets.

Feeding

Barn owls are predators, feeding mainly on small mammals, particularly field voles, but occasionally taking birds and insects. They hunt over rough grassland where small mammal numbers are high. Their hunting range extends to about 1 km from the nest site in the breeding season 4 to 5 km in winter when prey is harder to find. A good supply of food is vital to successful breeding.

Breeding and roosting

Barn owls will use a range of buildings as roosting and nesting sites, as well as hollow trees and other natural sites (see 'Habitat Requirements'). Unlike many birds, they can breed all year round, but eggs are usually laid in April and May. Eggs, usually 3 to 7, are laid one at a time, two to three days apart. Incubation begins immediately, and the egg laid first will hatch first (incubation takes 31 days). This leads to a brood with chicks of different sizes, and later, smaller nestlings may lose out to their larger siblings. Generally, only two or three chicks will survive. Chicks fledge after about nine weeks, and may return to the nest but are usually independent by 14 weeks.



Barn owl feathers

HABITAT REQUIREMENTS

The two crucial things that barn owls need are places to roost/ breed and places to feed.

Roosting/breeding sites

- Old farm buildings
- Other old structures/buildings – church towers, ruins, bridges, chimneys,
- Hollow trees
- Spaces provided in barn conversions
- Haystacks
- Occasionally mines, wells, cliffs, quarries

In Kent, barn owls live in open, low lying landscapes, particularly marshlands and river valleys, but also in areas with open fields and small woodlands such as the Weald.

Feeding habitats

- Rough grassland (permanent pasture, good field margins), especially with a deep litter layer and/or tussocky sward
- Water meadows/floodplain grassland if rank
- Hay meadows
- Drainage ditches – bank vegetation
- Young tree plantations
- Woodland edges and hedgerows if grassy or with rank vegetation
- Roadside verges

LEGAL PROTECTION

Barn Owls are protected under the Wildlife and Countryside Act 1981. It is an offence to kill, injure or take a barn owl or to destroy its eggs. It is also an offence to disturb a barn owl or its young while in or near an active nest. Therefore anyone who is going to monitor barn owl boxes must be licensed (via Natural England).

THREATS TO BARN OWLS

Although Barn Owls are now recovering in numbers they have declined significantly during the last century. It is estimated that numbers had fallen by 70% since the 1930s. This is thought to be due to two main factors:

Loss of roosting and breeding sites

Old barns and other farm buildings, with their high beams and easily accessible lofts and roof spaces, provide ideal sites for barn owls to roost and breed. Barn owls have long been associated with farmsteads, and because they control rodents have traditionally been valued by farmers – many old barns were built with an ‘owl window’ to give access to nest sites. As these buildings age, they tend to go one of two ways – decay and demolition, or conversion and conservation. The latter can be carried out with consideration for owls, but this has seldom been the case. Modern farm buildings are not usually suitable unless they possess a nest box.



Good barn owl feeding habitat

Before there were barns, barn owls used hollows in trees and crevices in cliffs but the former have been disappearing from the landscape, due to Dutch elm disease, loss of hedgerows and the tidying up of the countryside.

To make matters worse, barn owls are very faithful to their territories and nesting sites. If a nest site is lost, they are reluctant to move to an alternative location, even when they have been habitually using a number of sites; often they will abandon the territory completely, and are much less likely to survive in unfamiliar country.

Loss of feeding habitat

Changes in agriculture have led to a loss of rough grassland habitat in the countryside. Some pastures have been ploughed up for arable crops or grazed intensively and generally the countryside is a tidier place with less fallow ground. While arable fields and short-cropped grassland may provide some food for barn owls, it is usually insufficient for them to breed and produce young..

Other threats

Unfortunately, road and railway verges are good hunting habitat for barn owls, leading to a high rate of mortality due to vehicle collisions. Water troughs present another danger – drownings are not uncommon. Barn owls can also be killed by eating poisoned rodents.

HELPING BARN OWLS

Nest boxes

Barn owl boxes provide nesting places to compensate for the general loss of old farm buildings and hollow trees. Boxes can be put in buildings, on trees or on wooden poles (e.g. telegraph poles) where no suitable trees exist. This is a very direct way of helping barn owls, but it is crucial that they are located in the right sort of landscape, with plenty of feeding habitat (see 'locating boxes' below).

Types of nest box

Internal boxes

An indoor nest box to be positioned in a dry location could be made from a box or packing case, such as a tea-chest, or constructed from plywood and softwood battens. It should be box-shaped, have an entrance hole near the top about 13 cm square, a lift-off front lid and a platform in front of the entrance.



Internal nest boxes

External boxes

There are various designs for external boxes – some are rectangular with sloping roofs, others are triangular in shape – but all have pitched roofs or sides to allow rainwater to run off the box. They can be constructed from external ply, bought as kits or ready assembled.



External nest boxes

Locating nest boxes

Habitat

The most crucial factor in locating boxes is that there are suitable feeding habitats available – see 'Feeding habitats' above. You also need to ensure that there is enough habitat:

- In pasture land, at least 50 ha of rough grassland within 1 km radius of nest site
- In arable areas, at least 15-25 km of 6m field margins within 4 km radius

It is important to be sure that these habitats are going to remain and not be ploughed up or otherwise lost, and be managed favourably in the long-term.

Siting internal boxes:

- Building must have an owl access hole at least 3m above ground level.
- Box entrance hole is clearly visible and has a clear flight path from most likely entry point.
- Position box at least 3m above ground level; if there is a pitched roof, normally at or near the apex.
- Away from increased disturbance in late winter/spring (e.g. lambing areas).

Siting external boxes:

- Locate boxes in pairs, between 200m and 500m apart.
- If erecting many boxes, aim for a density of 1 pair of boxes per square km.
- Locate boxes 1 km from any motorway/dual carriageway or busy railway.
- Site preferably in river corridor or linked to river corridor.
- A box located in strip or patch of rough grassland will be discovered sooner.
- Not in an occupied barn owl territory but not too far from existing populations.
- Intersections of water courses are good locations.
- Away from direct disturbance.
- Facing open ground (entrance obvious to passing owl).
- Avoid facing into prevailing wind/rain (usually west or south-west) – south-east facing is preferable.
- Consider ease of access to site both to install and then to monitor.
- Consider access to the box with a ladder for monitoring; where can you stand a ladder?
- If using poles, the box should be at least 3m above ground level.
- If using trees, they should be single, isolated trees, preferably oak or ash.



Good external location

Avoid:

Woodland, known tawny owl territories, isolated pockets of habitat, sites with water troughs nearby (drownings are common).

Buildings

Many traditional farm buildings incorporated 'owl windows' in their gable ends to give barn owls access to hay lofts and grain stores. These should be retained wherever possible in restoration and conversion projects. Semi-derelict buildings may still be in use by barn owls, and if restored, provision should be made for owls. It is important to establish whether owls are present before development starts – ideally a licensed person should inspect the building. Your local authority planning department should advise you about the need for this and the requirements for appropriate mitigation prior to submission of your application.

Owl windows and 'owl lofts' are not difficult to create or reinstate. For more information, go to www.barnowltrust.org.uk, go to the Information and Downloads section and click on 'Accommodating Barn Owls within building projects'.

Improving habitats

Providing the right feeding areas for barn owls is just as crucial to their conservation as providing nesting places. See the 'Feeding habitats' section for descriptions of what they need. Any area of rough grassland in a marshland, river corridor or low lying landscape will provide habitat for small mammals, and therefore food for barn owls. However, small isolated pockets are not ideal; a network of linked areas - rough pastures, meadows, field margins, ditch banks - is what is required. Through agri-environment schemes such as Environmental Stewardship, landowners can get payments to manage and create farmland habitats that will benefit barn owls (and a range of other wildlife).

For more information go to www.barnowltrust.org.uk, go to the Information and Downloads section and click on Entry Level Stewardship for Barn Owls or Higher Level Stewardship for Barn Owls.

COUNTRYSIDE MANAGEMENT PARTNERSHIPS – HELPING YOU TO HELP BARN OWLS

Countryside Management Partnerships (CMPs) work with landowners and communities to conserve and enhance the countryside and its wildlife. There are seven CMPs in Kent, covering most of the county. There are a number of ways that CMPs can help you to benefit barn owls:

Advice on:

- Whether there are likely to be barn owls in your area.
- Whether signs found are from barn owls.
- Where and how to locate barn owl boxes.
- Monitoring boxes and licensing.
- How to create and manage habitats
- The Environmental Stewardship Scheme.

Site visits:

CMP Officers may be able to make visits to advise on the above, to look at the suitability of habitats, explore grant options or generally advise on improving land for wildlife.

Useful contacts

Barn Owl Conservation Network- www.bocn.org
The Barn Owl Trust - www.barnowltrust.org.uk
The Hawk and Owl Trust - www.hawkandowl.org
RPSB – www.rspb.org.uk
The British Trust for Ornithology – www.bto.org
Natural England – www.naturalengland.org.uk

Suppliers of barn owl boxes
Forsham Cottage Arks
01233 820229
www.forshamcottagearks.com

The Owl Box
www.theowlbox.co.uk
01248 421091

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Barn owl box schemes:

Some CMPs have run barn owl box schemes over the years, often with the help of volunteers. The Wildlife Conservation Partnership has worked with CMPs to run schemes.

The Medway Valley Countryside Partnership have an active box scheme through which they can supply and install boxes to anyone who owns or manages land with suitable habitats. They will also undertake regular monitoring of the boxes.

The Kentish Stour Countryside Partnership and Romney Marsh Countryside Partnership monitor extensive networks of boxes in their areas but at present are not installing any more.

How to contact CMPs:

Kentish Stour Countryside Partnership
01233 813307 www.kentishstour.org.uk

Romney Marsh Countryside Partnership
01797 367934 www.rmcp.co.uk

Kent High Weald Countryside Partnership
01580 212972 www.khwp.org.uk

Medway Valley Countryside Partnership
01622 683695 www.medwayvalley.org

Mid Kent Downs Partnership
01303 815173 www.kentdowns.org.uk/mid_kent

North West Kent Countryside Partnership
01322 294727 www.nwkcp.org

White Cliffs Countryside Partnership
01304 241806 www.whitecliffscountryside.org.uk