#### Parc Cenedlaethol Bannau Brycheiniog Brecon Beacons National Park

#### PLANNING ADVICE NOTE 18 (October 2008)

### **BARN OWLS AND DEVELOPMENT**

An advice note on how to ensure that barn owls are conserved during development and other operations affecting buildings or mature trees.

#### Barn owls and development

Barn owls are often found to nest close to humans – in attics and barns, as well as old (veteran) trees. They receive full protection under law and therefore provision must be made for them where they are encountered in a development proposal.

It might also be desirable to provide nesting sites for them in suitable buildings (barn or loft/attic conversions for example and landscape gardening) even where they are not known to nest at the time.

These notes provide an outline of the sort of works that you should consider. They are based upon "<u>Barn owls on site: a guide for</u> <u>developers and planners</u>" published by English Nature in association with the Barn Owl Trust (see <u>http://www.english-</u> nature.org.uk/pubs/publication/pub\_search.asp).

#### **General notes**

The cost of incorporating sites for barn owls within a development is minimal. There are no serious nuisance or health implications providing that provision is made according to the appropriate specifications. Nesting barn owls can even enhance the market value of a property.

Provide an area that is free from direct or unusual disturbance – a small hole with a ledge well above ground, leading into a dark chamber about the size of a tea chest - where the birds have somewhere to hide from view. Nest sites need a large cavity or wide ledge because barn owls don't build nests but lay eggs on level surfaces.

Usually, a breeding pair will use several sites in their home range – the breeding site, several roosting sites and other occasional sites, for example feeding perches. Some pairs however use the breeding site as their only roosting site all year.

Adult barn owls show high site fidelity from year to year; this improves their survival chances and breeding success.

# A detailed planning application/design should incorporate the following measures:

- At the earliest possible stage prior to any development commencing, provide alternative nest boxes and entrance points through roofs or gable ends, wherever possible in other parts of the same buildings or structures where the barn owls are known to nest (see <u>Appendices A-D</u>).
- If the nest is within one of a group of buildings, provide additional nest boxes in these buildings too.
- If the nest is within a single or isolated building, provide additional nest boxes on the outside of the building or on poles (see Barn Owl Trust leaflet No. 4 – Outdoor Nestbox Design – www.barnowltrust.org.uk).

Providing additional nesting boxes during development increases the chances that the breeding birds will remain rather than abandon the site altogether.



- During March to August avoid development/demolition/site preparation within the vicinity of the barn owl roost/nest site during the breeding season (see <u>Appendix E</u>).
- Shortly before development works are to commence that will affect the current nesting or roosting sites, search each area again to ensure that breeding has not commenced already.
- Keep all noisy machinery and workers away from other known or potential roosting sites within the development curtilage, in order that the barn owls have some places of sanctuary.
- Avoid leaving any steep-sided water containers exposed on site (to avoid the risk of barn owls drowning).
- Maintain clear flight paths to the new entrance points.
- Provide areas of rough grassland for foraging barn owls and other wildlife.

#### In addition

If barn owls are only discovered during development, all work should cease, any objects covering the nest should be quietly replaced and the site foreman should contact the Countryside Council for Wales to seek further advice (01873 737 000).

Once development is completed, it may be necessary on occasion to inspect the nest box between October and January in order to ensure that other bird species (for example jackdaw) have not filled it with twigs and sticks, in which case it is OK to clear these out.

For further information contact: Brecon Beacons National Park Plas y Ffynnon, Cambrian Way, Brecon, LD3 7HP Tel: (01874) 624437 E-mail: <u>planning.enquiries@beacons-npa.gov.uk</u>

# Appendix A

Indoor nestbox, specification and positioning details

#### Construction

Indoor nestboxes for dry locations are often made using a packing case such as a tea-chest. Alternatively a purpose-built box may be constructed using 9 mm softwood ply (CDX) and batten as necessary. Boxes made of thin plywood are lightweight and therefore easier to erect (see Figure 1 on page 35).

The use of tropical hardwood is not sustainable and should be avoided. Always select Canadian or Scandinavian softwood ply. If a tea-chest is re-used, ensure that the foil lining and any sharp nails or strips of metal that might injure the owls are removed.

#### Note

This design of box is only suitable for use within buildings. For details of an outdoor nestbox design please send for a copy of Barn Owl Trust leaflet No. 4 *Outdoor Nestboxes*.

#### Positioning

Wherever possible, indoor nestboxes should be positioned as follows:

- Within a building with an owl access hole at least 3 metres above ground level.
- So that an owl entering the building through the most likely

opening will see the box entrance hole and have an easy flight path to it.

- At least 3 metres above ground level - normally at or near the apex.
- Within a building where there is some evidence of a barn owl roosting or visiting.
- Within a building which is not subject to increased disturbance in the late winter or spring. Avoid farm buildings used mainly for lambing.

Lining the box - although it is not necessary to put anything in the box you may wish to provide a layer of wood flakes. Do not use sawdust, peat or hay.

The Barn Owl Trust's leaflet No. 3 *Indoor Nestboxes* contains additional information on this subject.

#### Update (October 1999)

Following several years of trials the Barn Owl Trust have changed their recommended indoor nestbox design. The new design reduces the chance of nestlings falling out of the box.

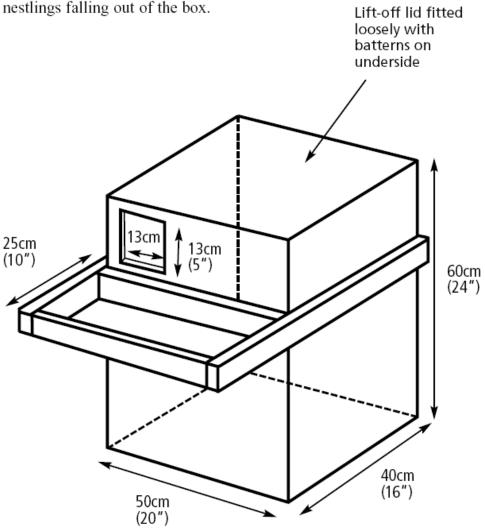


Figure 1 Indoor nestbox design

## Appendices B and C

### Provision for barn owls within loft areas

See illustrations on pages 37 and 38.

There are numerous ways in which provision for barn owls can be incorporated into buildings. Where indoor boxes are provided in traditional agricultural buildings they are normally attached to the roof timbers as shown in Figure 3. (illustration on page 38). As barn owls seem to prefer an enclosed nesting cavity high above the ground the provision of a nestbox (see Appendix A) can greatly enhance the suitability of the site. In houses or barn conversions with a large loft, provision for the birds can be made in this way.

In buildings with only a small loft where the space may be so small as to make the provision of a nestbox impractical, the birds will nest on the floor as shown in Figure 2. (illustration overleaf). As the young owls develop they will move around a great deal before they can fly, for this reason it is important to position the entrance/exit hole at least 40 cm above the level of the nest area to prevent the nestlings falling out. An adult barn owl needs a minimum of 40 cm headroom and the absolute minimum floor area recommended is 40 x 40 cm.

There are various factors to be considered when deciding which part of the development to make provision in. It is very important to incorporate human access into the owls' nesting area as occasional maintenance may be needed. Wherever possible the owls' entrance hole should be positioned:

- So as to allow the birds to enter the building in the same way as they did prior to the development.
- At least 3 metres above ground level.
- Avoiding obstructions such as trees and overhead wires.
- Facing away from the prevailing wind.
- On the side of the site which will be the least disturbed, after the completion of the development.
- Overlooking open countryside and visible to any passing birds.

Although not essential, it is a good idea to provide an external perch or landing platform which will give emerging young owls more room to exercise their wings before their first flight.

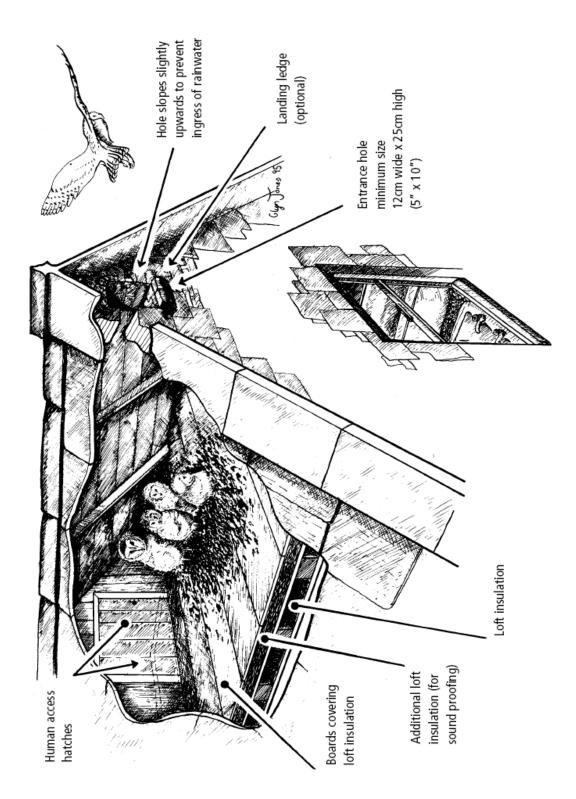


Figure 2 Example of provision for barn owls within a small loft area of a converted barn or other dwelling

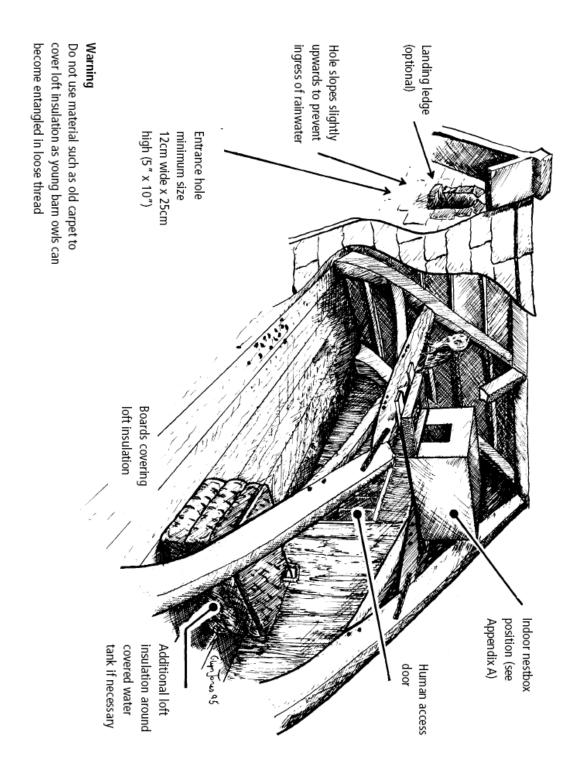


Figure 3 Example of provision for barn owls within the large loft area of a dwelling or traditional agricultural building

# Appendix D

### Example of an owl entrance hole through a hipped roof

It is possible to create an owl access hole through the roof itself (see Figure 4). This is fairly simple during the construction of a slate roof using either a decorative mini-dormer style construction or a ready-made weldedlead 'owl tile' (please contact the Trust for further details). A similar hole can be created during thatching.

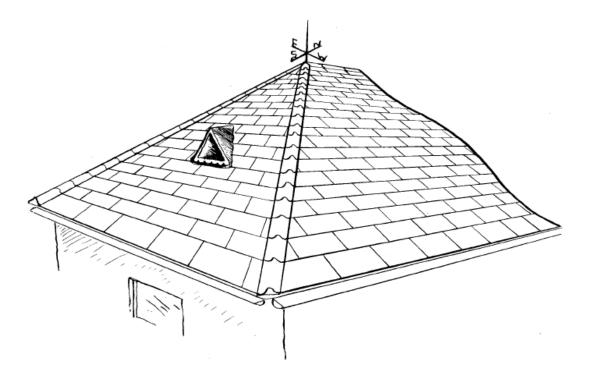


Figure 4 Example of an owl entrance hole through a hipped roof

#### Appendix E Additional information about barn owls in the Brecon Beacons National Park

#### Breeding behaviour and development

Barn owls have been found to breed *throughout the year* but the main egg-laying season is April-May. Usually the offspring have fledged and left the next by about 14 weeks. Second and rarely, third broods may occur. In general, the breeding season is considered to fall between March and August each year.

All birds, their nests and eggs are protected by law. The barn owl receives additional protection, which protects the birds throughout the year, as well as the eggs, and the nest whilst it is being built and/or occupied. They are also protected from disturbance whilst building or occupying the nest.

Within a development, ensure that provision for barn owls is completed by January, i.e., it is installed during the months of September to January, giving the adults enough time to move in. Once this is completed, the adults can be very tolerant of development works being carried out beneath them in the building. However they must not be disturbed directly, i.e., deliberately, recklessly or through negligence.

#### Factors causing a decline in barn owls

Evidence suggests that the British barn owl population has declined by 70% since the 1930s, caused by a variety of factors. These include the loss of prey-rich habitat (rough pasture, field margins, woodland edges, plant-rich drainage ditches), loss of barns and attics through demolition and conversion and loss of veteran trees with suitable nesting holes. The loss of one roost site may precipitate the loss of a breeding pair entirely, so dependent are barn owls on the security of their roosts from year to year. Whether or not this occurs depends upon the availability of alternative breeding roosts and the proximity of suitable feeding habitat to these alternative sites. Throughout most of rural Britain there are potential roosting and breeding sites that are not used by barn owls and most old barns have long since lost their resident birds. This suggests that the availability of suitable feeding habitat is as important as roost availability.

Other factors causing their decline include road kills, drowning in water troughs, indirect poisoning by eating poisoned rodents and food shortages during periods of prolonged rainfall or snow.