BARN OWLS

and Rural Planning Applications

"What needs to happen"

A Guide for Planners

Barn Owls are a specially *PROTECTED SPECIES*
Wildlife and Countryside Act (1981) Schedule One
Countryside and Rights of Way Act (2000)

PLANNING AUTHORITIES are required to consider biodiversity conservation:
Natural Environment and Rural Communities (NERC) Act (2006)
The Habitats Directive (EC directive 92/43/EEC)
Environmental Impact Assessment (85/337/EEC as amended by directive 97/11/EC)
Strategic Environmental Assessment (2001/42/EEC)
The Environment Act (1995)

…and follow planning policy:
Planning Policy Statement 1: Sustainable Development (2005)
Planning Policy Statement 9: Biodiversity and Geological Conservation (DCLG 2005)
ODPM Circular 06/2005 (Defra Circular 01/2005)
ODPM (March 2006) Planning for Biodiversity and Geological Conservation

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Barn Owls and Rural Planning Applications: "What needs to happen"- A Guide for Planners

YOUR OPTIONS

In discharging their duties under the NERC Act (2006) Local Planning Authorities (LPAs) must consider Biodiversity Conservation (in this case - Barn Owls)…
justification
...and there are two ways of using this guide:

Option 1

TAKE FOUR SIMPLE STEPS

Choose this option if you want to understand what to do and why. Once you get used to it you'll find that the four-step approach is fairly quick. The knowledge acquired will also enable you to give appropriate advice.

Click here for option 1

Option 2

JUST ANSWER QUESTIONS

Choose this option if you just want to know what to do.

Click here for Option 2 - Pre-application version

Click here for Option 2 - Post-registration version

OPTION 1

When considering a planning application that involves the alteration or loss of a building or tree that a Barn Owl could enter

minimum entrance hole size = 70mm x 70mm or a 70mm slot

All you need to do is...

take four simple steps

Step 1 understand two simple concepts: *Continuity* and *Permanence*

Step 2 make sure you have the necessary information

Step 3 decide what needs to happen at the site

Step 4 attach the right planning conditions

OPTION 1 - STEP 1

Understand two simple concepts:

Continuity means making sure that before, during and after the development, there is always at least one place on-site where the owls can hide, roost and nest.

Permanence means incorporating an ideal nesting place into a development in such a way that it will remain available for Barn Owls to use for at least a hundred years.

Continuity

Barn Owls are incredibly faithful to the roost/nest sites they use and birds that are forced to abandon their homes due to disturbance or site loss (even temporarily) are less likely to survive. The aim should always be to keep the birds on-site whilst the development takes place. The birds won't want to leave and the aim is to enable them to stay whilst the development takes place.

- Birds that have somewhere to hide can tolerate a remarkable amount of noise and nearby development activity.
- A well-designed nestbox is ideal.
- **A deep nestbox should be erected somewhere on-site (within c.200 metres) at least 30 days before works begin and this alternative provision must remain available to the birds until at least 30 days after permanent provision has been made within the development.**
- **Experience shows that the** required sequence of events **must be made clear** (for example in the wording of a planning condition).

Permanence

Many old buildings and veteran trees have been available for Barn Owls to use for at least a hundred years and some are 'traditional' nest sites (continuously occupied by successive generations of Barn Owls for longer than anyone can remember). Where sites are being developed, **it is essential that a new permanent nesting place is provided inside one of the developed buildings**. Basically, the site has probably been available to Barn Owls for at least a hundred years and the aim is to ensure that it remains available for at least another hundred years.

- Where Barn Owls have been lost from an area and years later new individuals arrive, the sites they select are usually the same sites that birds used previously.
- All sites that used to have Barn Owls should be maintained for future re-occupation. Thus, **even if there is no evidence of current occupation, permanent provision should still be made.** justification.

REPLACING AN OLD BUILDING OR VETERAN TREE WITH AN OUTDOOR NESTBOX THAT WILL ONLY LAST ABOUT 15 YEARS IS SIMPLY NOT ADEQUATE.

OPTION 1 - STEP 2

Make sure you have the necessary information:

Pre-application stage

Firstly, ensure that the applicant understands the need for a wildlife survey and that permanent provision for Barn Owls will probably need to be made if the development goes ahead. The easiest way to proceed is to provide the applicant with a copy of the Applicants Hand-out and a copy of Making Provision for Barn Owls.

The wildlife survey should be carried out by a suitably qualified person and must include a thorough search for evidence of Barn Owls and ideally the survey report will contain recommendations for protection and enhancement. Barn Owl status at the site can change from one day to the next and nesting has been recorded in every month of the year. Check that the survey has been carried out within the past 2 months. If not, you should require the applicant to have a new survey done. justification

Surveys must include physical searches for material evidence. All site neighbours should be interviewed and all local wildlife recording groups contacted. The survey report must state whether or not:

- the site is a *potential roost site* or a *potential roost and nest site*.
- evidence of Barn Owls was found and exactly where within the development site.
- the site has only been used for roosting or has been used for both roosting and nesting. Signs of occupation **must** be categorised as current, recent *(less than two years ago)*, or old *(more than two years ago*).

It's vitally important to know if any evidence of nesting was found because nesting birds have additional legal protection and LPAs have a legal duty to bring this to the applicants' attention. If the survey report does not provide enough information, please see survey gaps, inadequacies and the precautionary approach

Once the status of Barn Owls at the site is known, it is easy to know what measures the application should contain and/or which planning conditions need to be attached - refer to Step 3.
Even if there is no evidence of current occupation the site may still be considered as a resource that is available for Barn Owls to use and it may have been used historically. As such, it is perfectly justifiable for the LPA to require that permanent provision for Barn Owls be made within the development. It should also be noted that at some occupied sites very little evidence of occupation is actually found - absence of evidence is not always evidence of absence.

Post-registration stage

If you think the application takes full account of the needs of Barn Owls, please check the following points:

▪ **CONTINUITY**

Does the application set out a sequence of events which will allow Barn Owls to continuously occupy the site whilst the development takes place? For example, will alternative provision be made within 200 metres and at least 30 days before works commence? Will this provision meet the essential design requirements? Will this provision remain available until at least 30 days after permanent provision has been made? details of how alternative provision should be made

▪ **PERMANENCE**

Does the application show exactly where and how permanent provision for Barn Owls will be incorporated **inside** one of the buildings? Will this provision meet the essential design requirements? Replacing an old building or veteran tree with an outdoor nestbox that will only last about 15 years is simply not adequate. details of how permanent provision should be made

If you register the application without being 100% certain that the application takes full account of the need for *continuity* and *permanence* and meets all the *essential design requirements* it is important to attach the right planning conditions, see Step 3.

THERE'S NO SUCH WORD AS CAN'T

- If the applicant claims that it's not possible or practical to make provision (put a Barn Owl nest space) inside one of the developed buildings click here.
- If the applicant claims there is already adequate provision for Barn Owls click here.

OPTION 1 - STEP 3

Decide what needs to happen next…

In some cases, planning conditions will need to be attached and the table below shows which ones may be used. The precise wording of these conditions is provided on the next page. Because nesting has been recorded in every month of the year (and development may not start for up to three years), up-to-date surveys are essential in order to avoid an offence being committed. It is reasonable to attach a condition requiring a further survey to be carried out just before the development commences. justification.

EXCEPTIONS

- within 1km of a dual carriageway, motorway or similar, provision for Barn Owls should not be made (why?)
- urban areas are generally unsuitable for Barn Owls but rural villages may be occupied
- uplands often lack sufficient foraging habitat. It may or may not be worth making provision for owls over 300 metres above sea level and applications should be assessed on a site-by-site basis

Barn Owl occupation status	**Conditions to be attached to the planning consent**			
	Condition 1 Maintain (or allow for) continuity of occupation	Condition 2 An immediately pre-development survey will be needed	Condition 3 Restrict the timing of when works can commence	Condition 4 Ensure site is permanently available to Barn Owls in the future
No evidence of Barn Owls found but the site is or was a potential roost or nest site	**No**	**Yes**	**No**	**Yes**
Old roost site: evidence of roosting found but no sign within the last 2 years. No evidence of nesting, past or present	**No**	**Yes**	**No**	**Yes**
Recent roost site: evidence of roosting within the past 2 years but no evidence of nesting past or present	**Yes**	**Yes**	**No**	**Yes**
Current pair roosting: evidence of two Barn Owls roosting within the past month but no evidence of nesting, past or present	**Yes**	**Yes**	**Yes**	**Yes**
Nest site: evidence that Barn Owls are currently nesting or have nested at some time in the past **OR inadequate survey**	**Yes**	**Yes**	**Yes**	**Yes**

OPTION 1 - STEP 4

Attach the right planning conditions

(these can be copied and pasted from below)

Condition 1 – alternative provision
A Barn Owl roosting/nesting box shall be provided for Barn Owls within 200 metres of the development to which this consent applies at least 30 days before any part of the site used by Barn Owls is altered in any way. This provision should be made at the earliest possible stage, not subjected to direct disturbance and remain in place until at least 30 days after permanent provision has been made, in accordance with the guidance attached (Making Provision for Barn Owls) and in accordance with details that shall have first been submitted to, and approved in writing by, the Local Planning Authority.

Reason: to secure the long-term protection of the species by maintaining continuity of occupation (by providing temporary additional roosting/nesting places on-site). further justification

Condition 2 – immediately pre-development re-survey
No building and construction work shall be commenced unless evidence has been provided to the Local Planning Authority that no birds are nesting (at the development site to which this consent applies) immediately prior to work commencing.

Reason: to ensure that nesting Barn Owls are not disturbed by development works and to enable the Local Authority to fulfil its obligation under Section 25 (1) of the Wildlife & Countryside Act (1981). further justification

Condition 3 – timing restriction
Development works to which this consent applies must not commence between 1st March and 31st August, or at any time while Barn Owls are nesting and until temporary alternative provision has been made in accordance with details that shall have first been submitted to, and approved in writing by, the Local Planning Authority.

Reason: to secure the long-term protection of the species. further justification

Condition 4 – permanent provision within buildings
A permanent accessible nesting space for Barn Owls shall be provided within one or more of the developed buildings to which this consent applies, and thereafter maintained, in accordance with details that shall have first been submitted to, and approved in writing by, the Local Planning Authority, and in line with guidance attached (Making Provision for Barn Owls).

Reason: to secure the long-term protection of the species. further justification

Wording for a Section 106 Agreement concerning habitat mitigation

Information Note - mitigating against habitat loss
Where a development includes the loss of rough grassland, the Local Authority can seek to enter into a Section 106 Agreement under which, upon completion of the development *"an equivalent area of rough grassland to that which will be lost be created, and thereafter maintained, to a sward height of 20-30cm and with a litter layer 7-10cm deep."* habitat creation and management

OPTION 2

PRE-APPLICATION VERSION

Q1. Is the proposed development a site that borders or is within the countryside, or within a small rural village?

YES = Go to Q2.

NO = ADVISE APPLICANT NO ACTION NEEDED FOR BARN OWLS

Q2. Is the site within 1km of a motorway, dual-carriageway or similar (if in doubt please seek advice info@barnowltrust.org.uk)

YES = ADVISE APPLICANT NO ACTION NEEDED FOR BARN OWLS (unless Barn Owl evidence already reported in which case please seek advice info@barnowltrust.org.uk)

NO = Go to Q3.

Q3. Are any of the existing or proposed buildings more than 3m high?

YES = Go to Q4.

NO = ADVISE APPLICANT NO ACTION NEEDED FOR BARN OWLS (unless Barn Owl evidence already reported, in which case go to Q4.)

Q4. Has the site been surveyed for Barn Owls within the last 2 months?

YES = Go to Q5.

NO = ADVISE APPLICANT TO COMMISSION AN UP-TO-DATE WILDLIFE SURVEY BY A suitably qualified person

Q5. Was every part of the site searched?

YES = Go to Q6.

NO = (Precautionary approach). Request improved survey or ADVISE APPLICANT TO;
► SUBMIT DETAILS OF ALTERNATIVE PROVISION AND PERMANENT PROVISION IN LINE WITH GUIDANCE ATTACHED (MAKING PROVISION FOR BARN OWLS), and
► STATE THEIR INTENTION TO AVOID WORKS COMMENCING BETWEEN MARCH AND AUGUST INCLUSIVE, and
► COMMISSION AN IMMEDIATELY PRE-DEVELOPMENT SURVEY (if more than 2 months has elapsed since the previous survey)

(justification)

OPTION 2 cont.

PRE-APPLICATION VERSION cont.

Q6. Does the survey report clearly specify whether or not evidence of Barn Owls was found (including anecdotal reports), the timescale of Barn Owl occupation and whether the site has been used for nesting or only roosting?

YES = Go to Q7.

NO = (Precautionary approach). **Request improved survey** or ADVISE APPLICANT TO;
► SUBMIT DETAILS OF ALTERNATIVE PROVISION AND PERMANENT PROVISION IN LINE WITH GUIDANCE ATTACHED (MAKING PROVISION FOR BARN OWLS), and
► STATE THEIR INTENTION TO AVOID WORKS COMMENCING BETWEEN MARCH AND AUGUST INCLUSIVE, and
► COMMISSION AN IMMEDIATELY PRE-DEVELOPMENT SURVEY (if more than 2 months has elapsed since the previous survey)

(justification)

Q7. Was any Barn Owl evidence found?

YES = Go to Q8.

NO = ADVISE APPLICANT TO;
► SUBMIT DETAILS OF PERMANENT PROVISION IN LINE WITH GUIDANCE ATTACHED (MAKING PROVISION FOR BARN OWLS), and
► COMMISSION AN IMMEDIATELY PRE-DEVELOPMENT SURVEY (if more than 2 months has elapsed since the previous survey)

(justification)

Note: Uplands often lack suitable foraging habitat. It may or may not be worth making provision for Barn Owls over 300m above sea level and applications should be assessed on a site-by-site basis. For further advice, contact info@barnowltrust.org.uk

Q8. Was there material/anecdotal evidence of past or current nesting, or any evidence of two birds roosting within the month preceding the survey or since.

YES = ADVISE APPLICANT TO;
► SUBMIT DETAILS OF ALTERNATIVE PROVISION AND PERMANENT PROVISION IN LINE WITH GUIDANCE ATTACHED (MAKING PROVISION FOR BARN OWLS), and
► STATE THEIR INTENTION TO AVOID WORKS COMMENCING BETWEEN MARCH AND AUGUST INCLUSIVE, and
► COMMISSION AN IMMEDIATELY PRE-DEVELOPMENT SURVEY (if more than 2 months has elapsed since the previous survey)

(justification)

NO = Go to Q9.

OPTION 2 cont.

PRE-APPLICATION VERSION cont.

Q9. Was there material/anecdotal evidence of roosting within the past 2 years?

YES = ADVISE APPLICANT TO;
► SUBMIT DETAILS OF ALTERNATIVE PROVISION AND PERMANENT PROVISION IN LINE WITH GUIDANCE ATTACHED (MAKING PROVISION FOR BARN OWLS), and
► COMMISSION AN IMMEDIATELY PRE-DEVELOPMENT SURVEY (if more than 2 months has elapsed since the previous survey)

(justification)

NO = Go to Q10.

Q10. Was there material/anecdotal evidence of roosting but more than 2 years ago?

YES = ADVISE APPLICANT TO;
► SUBMIT DETAILS OF PERMANENT PROVISION IN LINE WITH GUIDANCE ATTACHED (MAKING PROVISION FOR BARN OWLS), and
► COMMISSION AN IMMEDIATELY PRE-DEVELOPMENT SURVEY (if more than 2 months has elapsed since the previous survey)

(justification)

NO = ADVISE APPLICANT TO;
► SUBMIT DETAILS OF PERMANENT PROVISION IN LINE WITH GUIDANCE ATTACHED (MAKING PROVISION FOR BARN OWLS),

Information Note
Does the proposal include the loss of any areas of rough grassland (foraging habitat)?

YES = ADVISE APPLICANT OF THE NEED TO MITIGATE HABITAT LOSS AND YOUR INTENTION TO CONSIDER A SECTION 106 AGREEMENT

NO = NO FURTHER ACTION NEEDED FOR BARN OWLS

OPTION 2 cont.

POST-REGISTRATION VERSION

Q1. Is the proposed development a site that borders or is within the countryside, or within a small rural village?

YES = Go to Q2.

NO = NO ACTION NEEDED FOR BARN OWLS

Q2. Is the site within 1km of a motorway, dual-carriageway or similar (if in doubt please seek advice info@barnowltrust.org.uk)

YES = NO FURTHER ACTION NEEDED FOR BARN OWLS (unless Barn Owl evidence already reported in which case please seek advice info@barnowltrust.org.uk

NO = Go to Q3.

Q3. Are any of the existing or proposed buildings more than 3m high?

YES = Go to Q4.

NO = NO FURTHER ACTION NEEDED FOR BARN OWLS (unless Barn Owl evidence already reported, in which case go to Q4.)

Q4. Has the site been surveyed for Barn Owls within the last 2 months?

YES = Go to Q5.

NO = REQUEST THE APPLICANT TO COMMISSION AN UP-TO-DATE WILDLIFE SURVEY BY A suitably qualified person

Q5. Was every part of the site searched?

YES = Go to Q6.

NO = (Precautionary approach). Request improved survey or ATTACH PLANNING CONDITION 1, CONDITION 2, CONDITION 3 AND CONDITION 4 unless the application already includes these measures

(justification)

OPTION 2 cont.

POST-REGISTRATION VERSION cont.

Q6. Does the survey report clearly specify whether or not evidence of Barn Owls was found (including anecdotal reports), the timescale of Barn Owl occupation and whether the site has been used for nesting or only roosting?

YES = Go to Q7.

NO = (Precautionary approach). Request improved survey or ATTACH PLANNING CONDITION 1, CONDITION 2, CONDITION 3 AND CONDITION 4 unless the application already includes these measures

(justification)

Q7. Was any Barn Owl evidence found?

YES = Go to Q8.

NO = ATTACH CONDITION 2 AND CONDITION 4 unless the application already includes these measures

(justification)

Note: Uplands often lack suitable foraging habitat. It may or may not be worth making provision for Barn Owls over 300m above sea level and applications should be assessed on a site-by-site basis. For further advice, contact info@barnowltrust.org.uk

Q8. Was there material/anecdotal evidence of past or current nesting, or any evidence of two birds roosting within the month preceding the survey or since.

YES = ATTACH PLANNING CONDITION 1, CONDITION 2, CONDITION 3 AND CONDITION 4 unless the application already includes these measures

(justification)

NO = Go to Q9.

Q9. Was there material/anecdotal evidence of roosting within the past 2 years?

YES = ATTACH CONDITION 1, CONDITION 2 AND CONDITION 4 unless the application already includes these measures

(justification)

NO = Go to Q10.

OPTION 2 cont.

POST-REGISTRATION VERSION cont.

Q10. Was there material/anecdotal evidence of roosting but more than 2 years ago?

YES = ATTACH CONDITION 2 AND CONDITION 4 unless the application already includes these measures

NO = ATTACH CONDITION 4 unless the application already includes these measures

(justification)

Information Note
Does the proposal include the loss of any areas of rough grassland (foraging habitat)?

YES = ADVISE APPLICANT OF THE NEED TO MITIGATE HABITAT LOSS AND YOUR INTENTION TO CONSIDER A SECTION 106 AGREEMENT

NO = NO FURTHER ACTION NEEDED FOR BARN OWLS

USEFUL RESPONSES

What if the applicant says there is nowhere to make temporary, alternative provision on site?

The creation of alternative provision is an essential aspect of the mitigation process. If a planning decision that would result in significant harm to biodiversity cannot be adequately mitigated against or compensated for, permission should be refused [justification]. Alternative provision can always be made. See Making Provision for Barn Owls.

What if the applicant says it's not possible or practical to make permanent provision INSIDE one of the developed buildings?

Barn Owls will use any type of rural building (domestic, industrial, agricultural etc.) and on-site provision can be made in any building provided that the entrance hole is at least 3 metres above ground level, big enough, visible and leads into a nest chamber of adequate size.
Typically, in a range of barn conversions the provision is made in the tallest one and in new-build housing the provision may be in a house or a garage block overlooking open countryside. Although the alternative provision can be more temporary, the permanent provision should be in a building that is expected to last at least 100 years and not in an unconverted agricultural building, on the outside of a building, in a tree, or on a pole.
See essential design requirements

- The access hole can either be made through the roof or through a wall [pictures].
- Where there is no residual loft space the nest chamber can be wholly or partly contained within the wall and/or can be built into the room as a small feature.
- Where adequate insulation is used there are no condensation, noise, or health issues.
- Human access into the nest chamber will need to be incorporated but there is normally no requirement for annual inspections and no onerous commitment for future owners.
- In new build, possible conflict with building regulation L1A *Conservation of Fuel and Power in New Dwellings* can be resolved by placing the membrane between the owl provision and the rest of the building.
- The majority of site owners relish the chance to live or work alongside these beautiful birds and resistance is very rare, particularly when the correct advice is given. Please email info@barnowltrust.org.uk for more information on any of these matters.

What if the applicant says there is already adequate provision for Barn Owls in the area?

If, within 200 metres of the proposed development, there are already two ideal places for Barn Owls to nest inside domestic or industrial buildings that are likely to last at least 100 years then there is no need for any further provision to be made. If the applicant says there is no need to make provision because the building containing resident owl(s) is not part of the current proposal, provision should still be made in the current development because the occupied sites are likely to be lost or developed in future.

What if the development results in the loss of suitable Barn Owl foraging habitat?

Food supply is obviously essential and within the owls' home range of 350-5,000 hectares they tend to concentrate on hunting over patches of rough tussocky grassland. Habitat loss should be mitigated against, or compensated for, by entering into Section 106 Agreements to ensure that there is no net loss of foraging habitat.
justification for requiring a Section 106 Agreement

JUSTIFICATION

Why it needs to happen!

Relevant duties of Local Planning Authorities
Under **Section 25 (1)** of the **Wildlife & Countryside Act (1981)** local authorities have a duty to take such steps as they consider expedient to bring to the attention of the public the provisions of Part I of the Wildlife & Countryside Act, which includes measures to conserve protected species. The **Natural Environment and Rural Communities Act (2006)** places a Statutory Biodiversity Duty on public authorities *"to take such measures as they consider expedient for the purposes of conserving biodiversity"*, including restoring or enhancing a population or habitat. As well as statutory obligations, there are numerous policy documents from central government requiring LPAs to take full account of biodiversity and best practice guides to follow. Planning policy and guidance justification documents.

Justification for attaching Condition 1 (alternative provision)
Barn Owls demonstrate an incredibly high degree of site fidelity. However, research has shown that the loss of a main roost or nest site can result in the abandonment of other nearby sites; the so-called 'knock-on effect'. Adequate mitigation against or compensation for the temporary loss of a site during works, which may result in its permanent abandonment, must include measures to maintain continuity of occupation if the welfare of the protected species is to be fully taken into account. For full details of the statutory and policy justification, see 2, 5, 7, 10, 11, 12, 17, 21, 23, 28, 29.

Justification for attaching Condition 2 (immediately pre-development survey)
Planning guidance states that ecological surveys should be provided before planning consent is granted and that the need for surveys should only be covered under planning conditions in 'exceptional circumstances' (ODPM Circular 06/2005, Biodiversity and Geological Conservation - Statutory Obligations and their Impact within the Planning System). However, Barn Owl status can change on a day-to-day basis, the species has been recorded nesting in every month of the year, and the development may not start for up to three years after consent. These constitute 'exceptional circumstances' and an immediately pre-development survey is essential. Attaching Condition 2 also enables local authorities to fulfil one of their obligations under Section 25 (1) of the Wildlife and Countryside Act (1981). For full details of the statutory and policy justification, see 1, 7, 8, 9, 21.

Justification for attaching Condition 3 (timing restriction)
Barn Owls are afforded special protection from disturbance whilst nesting under Schedule 1 of the Wildlife and Countryside Act (1981) as amended under the Countryside and Rights of Way Act (2000). As c. 75% of nesting cycles fall between March and August inclusive, this period should be regarded as the main breeding season for Barn Owls and a restriction on the commencement of works during this period applied. Although it can be argued that attaching such a condition duplicates legislation, it is common practice for LPAs to attach such a condition and this enables local authorities to fulfil one of their obligations under Section 25 (1) of the Wildlife and Countryside Act (1981). For full details of the statutory and policy justification, see 7, 9.

Justification for attaching Condition 4 (permanent provision within)
Barn Owls are dependent upon the availability of nest and roost sites and population recovery can only occur where potential sites remain available to them. The presence of a protected species is a material consideration and planning consent should be refused if adequate provision cannot be made. Even where there is no evidence of occupation, permanent provision should be made. Local authorities have a statutory duty not only to protect species but also to help restore or enhance populations and habitats. For full details of the statutory and policy justification, see 2, 3, 4, 5, 6, 7, 10, 11, 12, 15, 17, 18, 20, 21, 23, 28.

Justification for attaching an information note about the loss of foraging habitat (Section 106 Agreement)
Barn Owls are dependent upon the availability of prey-rich foraging areas and, to a large extent, population size and population recovery are determined by food supply. Local authorities have a statutory duty not only to protect species but also to help restore or enhance populations and habitats. Section 106 of the Town and Country Planning Act 1990 (as amended by Section 12(1) of the 1991 Planning and Compensation Act) provides the specific legislative framework for planning obligations. Circular 05/2005 Planning Obligations provides detailed guidance for the use of planning obligations in dealing with the direct impacts of proposed development. For full details of your statutory and policy justification, see 2, 3, 5, 6, 7, 10, 11, 12, 13, 14, 15, 16, 17, 18, 19, 20, 23, 28, 29.

JUSTIFICATION cont.

Legal protection

Part 1 of the Wildlife and Countryside Act (1981)

(1) Subject to the provisions of this Part, if any person intentionally (or recklessly as amended by the CRoW Act, 2000)
(a) kills, injures or takes any wild bird;
(b) takes, damages or destroys the nest of any wild bird while that nest is in use or being built; or
(c) takes or destroys an egg of any wild bird.
he shall be guilty of an offence.

(5) Subject to the provisions of this Part, if any person intentionally-
(a) disturbs any wild bird included in Schedule 1 while it is building a nest or is at, on or near a nest containing eggs or young; or
(b) disturbs dependent young of such a bird,
he shall be guilty of an offence and liable to a special penalty.

Countryside and Rights of Way (CRoW) Act (2000)

Part III Nature conservation and wildlife protection

74 Conservation of biological diversity
(1) It is the duty of—
(a) any Minister of the Crown (within the meaning of the Ministers of the [1975 c. 26.] Crown Act 1975),
(b) any Government department, and
(c) the National Assembly for Wales,
in carrying out his or its functions, to have regard, so far as is consistent with the proper exercise of those functions, to the purpose of conserving biological diversity in accordance with the Convention.

SCHEDULE 12 AMENDMENTS RELATING TO PART I OF WILDLIFE AND COUNTRYSIDE ACT 1981

1. In section 1(5) of the 1981 Act (offence of intentional disturbance of wild birds) after "intentionally" there is inserted "or recklessly".

The Natural Environment and Rural Communities Act (2006)

PART 3, (40): Duty to conserve biodiversity
(1) Every public authority must, in exercising its functions, have regard, so far as is consistent with the proper exercise of those functions, to the purpose of conserving biodiversity.

(3) Conserving biodiversity includes, in relation to a living organism or type of habitat, restoring or enhancing a population or habitat.

JUSTIFICATION cont.

Planning policy and guidance justification documents

ODPM (08/2005), Planning Policy Statement 9: Biodiversity and Geological Conservation

[1] *"Development plan policies and planning decisions should be based upon up-to-date information about the environmental characteristics of their areas. These characteristics should include the relevant biodiversity and geological resources of the area. In reviewing environmental characteristics local authorities should assess the potential to sustain and enhance those resources"*, Key Principle 1 (i), p. 3

[2] *"Plan policies and planning decisions should aim to maintain, and enhance, restore or add to biodiversity and geological conservation interests. In taking decisions, local planning authorities should ensure that appropriate weight is attached to designated sites of international, national and local importance; protected species; and to biodiversity and geological interests within the wider environment"*, Key Principle 1 (ii), p. 3

[3] *"Plan policies on the form and location of development should take a strategic approach to the conservation, enhancement and restoration of biodiversity and geology, and recognise contributions that sites, areas and features, both individually and in combination, make to conserving these resources"*, Key Principle 1 (iii), p. 3

[4] *"Plan policies should promote opportunities for the incorporation of beneficial biodiversity and geological features within the design of development"*, Key Principle 1 (iv), p. 3

[5] *"The aim of planning decisions should be to prevent harm to biodiversity and geological conservation interests. Where a planning decision would result in significant harm to biodiversity and geological interests which cannot be prevented or adequately mitigated against, appropriate compensation measures should be sought. If that significant harm cannot be prevented, adequately mitigated against, or compensated for, then planning permission should be refused"*, Key Principle 1 (vi), p. 3

[6] *"Development proposals provide many opportunities for building-in beneficial biodiversity or geological features as part of good design. When considering proposals, local planning authorities should maximise such opportunities in and around developments, using planning obligations where appropriate",* 14. Biodiversity within Developments, p. 7

ODPM Circular 06/2005 (Defra Circular 01/2005) Biodiversity and Geological Conservation – statutory obligations and their impact within the planning system

[7] *"The presence of a protected species is a material consideration when a planning authority is considering a development proposal that, if carried out, would be likely to result in harm to the species or its habitat. Local authorities should consult English Nature* (now Natural England) *before granting planning permission. They should consider attaching appropriate planning conditions or entering into planning obligations under which the developer would take steps to secure the long-term protection of the species"*, Part IV Conservation of Species Protected by Law, A Introduction, 98., p. 33

[8] *"It is essential that the presence or otherwise of protected species, and the extent that they may be affected by the proposed development, is established before the planning permission is granted, . . . The need to ensure ecological surveys are carried out should therefore only be left to coverage under planning conditions in exceptional circumstances, with the result that the surveys are carried out after planning permission has been granted. However, bearing in mind the delay and cost that may be involved, developers should not be required to undertake surveys for protected species unless there is a reasonable likelihood of the species being present and affected by the development. Where this is the case, the survey should be completed and any necessary measures to protect the species should be in place, through conditions and/or planning obligations, before the permission is granted"*, Part IV Conservation of Species Protected by Law, A Introduction, 99., p. 33

JUSTIFICATION cont.

ODPM Circular 06/2005 (Defra Circular 01/2005) Biodiversity and Geological Conservation – statutory obligations and their impact within the planning system (cont.)

[9] *"Part 1 of the Wildlife and Countryside Act 1981 sets out the protection that is afforded to all wild birds, and certain wild animals and plants. Section 25 places a duty on all local authorities to do what they consider expedient to bring the provisions of the Act relating to protected species to the attention of the public. Local authorities are also empowered to institute proceedings against any person committing an offence under Part 1 of the Act within their area"*, Part IV Conservation of Species Protected by Law, C Protection afforded to species by the Wildlife and Countryside Act 1981, 118., p. 37

ODPM (March 2006) Planning for Biodiversity and Geological Conservation: A Guide to Good Practice

[10] *"The development control process is a critical stage in delivering the protection and enhancement of biodiversity and geological conservation required by PPS9. The following key examples of good practice can help better achieve these objectives:*
● Ensuring that planning applications are submitted with adequate information using early negotiation, published checklists, requiring ecological surveys and appropriate consultation.
● Securing necessary measures to protect, enhance, mitigate and compensate through planning conditions and obligations.
● Identifying ways to build biodiversity and geological conservation into the design of new development", 5, Development Control, Good Practice Summary, p. 44

[11] *"Where harm cannot be avoided then appropriate mitigation may be a means of reducing any adverse impacts. Mitigation could comprise measures carried out on or outside the development site in order to reduce adverse effects on nature conservation interests on the site itself or on adjacent or other land potentially affected"*, 5, Avoiding, Mitigating and Compensating for Harm, 5.28, p. 54

The Royal Town Planning Institute 1999, Planning for Biodiversity: a good practice guide

[12] *"In dealing with cases that may involve protected species it is important to ensure that an expert survey is undertaken and specialist advice is obtained, either from the applicant (through consultants) or from the statutory agencies or local nature conservation organisations, many of which have valuable local knowledge and experience of the species. In most cases harm could be overcome by modifications to the proposals or by the use of conditions or agreements related to any permission granted. However, it should be born in mind that mobile species frequently range beyond designated sites or sites where they are known to breed, roost, rest or hibernate. They may be equally dependent upon more extensive foraging, hunting or feeding areas (for example, barn owls and greater horseshoe bats)"*, Protected Species, p. 40

ODPM (2005), *Planning Policy Statement 1: Delivering Sustainable Development*

[13] *"The Government set out four aims for sustainable development in its 1999 strategy (A Better Quality of Life – A Strategy for Sustainable Development for the UK – CM 4345, May 1999. The strategy is currently subject to review.)"*

These are:
- effective protection of the environment" 4. The Government's Objectives for the Planning System (p.2)

"Planning should facilitate and promote sustainable and inclusive patterns of urban and rural development by: – protecting and enhancing the natural and historic environment, the quality and character of the countryside, and existing communities" 5. The Government's Objectives for the Planning System (p.2)

JUSTIFICATION cont.

ODPM (2005), *Planning Policy Statement 1: Delivering Sustainable Development cont.*

[14] *"The Government is committed to protecting and enhancing the quality of the natural and historic environment, in both rural and urban areas. Planning policies should seek to protect and enhance the quality, character and amenity value of the countryside and urban areas as a whole. A high level of protection should be given to most valued townscapes and landscapes, wildlife habitats and natural resources. Those with national and international designations should receive the highest level of protection"* 17. Protection and Enhancement of the Environment (p. 7)

[15] *"The condition of our surroundings has a direct impact on the quality of life and the conservation and improvement of the natural and built environment brings social and economic benefit for local communities. Planning should seek to maintain and improve the local environment and help to mitigate the effects of declining environmental quality through positive policies on issues such as design, conservation and the provision of public space"* 18. Protection and Enhancement of the Environment (p. 7)

[16] *"Plan policies and planning decisions should be based on:*

– up-to-date information on the environmental characteristics of the area;

– the potential impacts, positive as well as negative, on the environment of development proposals (whether direct, indirect, cumulative, long-term or short-term) [For certain projects there is also a requirement to comply with the provision of Directive 85/337/EC on the assessment of the effects of certain public and private projects on the environment]; and,

– recognition of the limits of the environment to accept further development without irreversible damage.

[17] *"Planning authorities should seek to enhance the environment as part of development proposals. Significant adverse impacts on the environment should be avoided and alternative options which might reduce or eliminate those impacts pursued. Where adverse impacts are unavoidable, planning authorities and developers should consider possible mitigation measures. Where adequate mitigation measures are not possible, compensatory measures may be appropriate. In line with the UK sustainable development strategy, environmental costs should fall on those who impose them – the 'polluter pays' principle"* 19. Protection and Enhancement of the Environment (p. 7)

[18] *"Development plan policies should take account of environmental issues such as:*

– the protection of the wider countryside and the impact of development on landscape quality; the conservation and enhancement of wildlife species and habitats and the promotion of biodiversity; the need to improve the built and natural environment in and around urban areas and rural settlements, including the provision of good quality open space; the conservation of soil quality; and the preservation and enhancement of built and archaeological heritage" 20. Protection and Enhancement of the Environment (p. 7)

[19] "– consider the direct and indirect impacts on the natural environment " Design (p.15)

JUSTIFICATION cont.

Guidance for Public Authorities on Implementing the Biodiversity Duty, Defra (2006)

[20] ***"Introducing the Biodiversity Duty for Public Authorities***
8. Conserving biodiversity includes restoring and enhancing species populations and habitats, as well as protecting them"

[21] ***"Policies, Strategies and Biodiversity***
12. A useful systematic approach is to avoid any negative effects on biodiversity in the first instance, then to seek to reduce or mitigate such impacts, then to incorporate opportunities for biodiversity enhancement into public policy wherever possible"

[22] ***"Planning, Infrastructure and Development***
18. National planning policy on biodiversity conservation is the primary reference point for those developing or appraising development plans or projects.
20. A good evidence base is essential to public authorities when planning development projects.
21. Effective monitoring is key to ensuring measures put in place to conserve biodiversity are successful"

[23] ***"Implementing the Duty – Implications for Public Authorities and their Staff***
25. In demonstrating that it has implemented its Duty to have regard to the conservation of biodiversity, a public authority is likely to be able to show that it has:
1. Identified and taken opportunities to integrate biodiversity considerations into all relevant service areas and functions, and ensured that biodiversity is protected and enhanced in line with current statutory obligations;
2. Raised awareness of staff and managers with regard to biodiversity issues"

[24] *"27. Having regard to the conservation of biodiversity in their activities has implications for the awareness, knowledge and skills of public authority staff. These needs can be met by raising general awareness, using available guidance, integrating biodiversity into staff training, seeking advice from colleagues and external bodies, and, where necessary, providing specific training"*

[25] ***"4. Planning, Infrastructure and Development***
4.3.1 England
Planning Policy Statement 9 (PPS9): Biodiversity and Geological Conservation (ODPM 2005) is the key national planning policy for biodiversity in England. It sets out the principles that regional planning bodies and local planning authorities should follow to ensure that biodiversity is considered fully in the development of planning policy and determining planning applications"

[26] ***"4.3.2 Wales***
Planning Policy Wales, (Welsh Assembly Government 2002) *sets the land use planning policies for Wales and should be taken into account by all local planning authorities in Wales.*
Chapter 5 of Planning Policy Wales highlights the requirements for local planning authorities to address natural heritage at an early stage of Unitary Development Plan (UDP) preparation and in the development control process"

[27] ***"4.5 Engaging With the Local Planning Authority***
In order to avoid delays upon submission of planning applications, public authorities are encouraged to consult local authorities to ensure that adequate information on biodiversity is submitted with planning applications and all legal requirements are met. This may involve a requirement for ecological surveys to be undertaken. Public authorities should ensure that they are aware of any relevant information or requirements, such as biodiversity checklists, held by the local authority before submitting an application"

[28] ***"4.7 Seeking Biodiversity Enhancement***
It is important that public authorities seek not only to protect important habitats and species, but actively seek opportunities to enhance biodiversity through development proposals, where appropriate. Incorporating enhancement opportunities into projects may help applicants to achieve planning permission"

[29] *"Planning conditions and obligations, to be agreed with the local planning authority, can incorporate appropriate measures to securing conservation opportunities both on and off development sites"*

JUSTIFICATION cont.

Evidence for Barn Owl decline and the damaging effects of site loss

Barn Owl population decline

Evidence of Barn Owl decline in Britain, which probably started in the mid 1800s, is well-documented [1]. Between 1932 and 1985 the loss was estimated at 69% [2, 3]. However, this figure is not considered as being "satisfactory quantitative information" [4] and the evidence of decline is unable to "stand up to critical scrutiny" [5]. More recently, the first reliable population estimates were produced following a three-year scientifically based survey: Project Barn Owl. Overall, the estimate for the period 1995-97 was c. 3,500 to 4,000 pairs with confidence intervals of c. ± 30% [6].

Using previously published data [7] it can be estimated that in Britain the Barn Owl is now five times less common than the more familiar Tawny Owl *Strix aluco*. Anecdotal evidence suggests that, historically, Barn Owls were resident on most farms, whereas today evidence of occupation is generally found on less than one in fifty farms (personal observation).

In recognition of the species' vulnerable status the Barn Owl is listed on: Schedule One of the Wildlife and Countryside Act 1981; Birds of Conservation Concern - Amber List (RSPB *et al.* 2002); and Species of European Conservation Concern [8, 9].

Loss of nest and roost sites

- Barn Owls prefer roost and nest sites that afford shelter from the elements and dryness is important [5]
- Evidence suggests that the loss of suitable rural buildings and large dry tree cavities has been a limiting factor in some areas [5, 10]
- Even in local areas where (apparently suitable) potential nest/roost sites are abundant, the loss of an occupied site has been shown to have a negative effect on local Barn Owl distribution [11]
- The provision of nest boxes has been shown to increase numbers in some areas [12, 13]
- The loss of suitable roost and nest sites has caused local Barn Owl declines and a lack of suitable sites may still limit Barn Owl abundance in some areas

Barn Conversion Research Project Report (Barn Owl Trust)

"Barn Owls are very much creatures of habit and show an incredible degree of nest site fidelity [5, 15], such that breeding sites are often termed 'traditional' and may be consistently occupied by successive generations of barn owls for 100 years or more" [3]

"The loss of a single occupied site was shown to have a marked effect upon the resident birds which generally abandoned not only the lost site but also other nearby sites . . . Where provision for barn owls was incorporated into the converted site no reduction in barn owl activity occurred" [11, 14]

MORE INFORMATION

Publications

Guidance for Public Authorities on Implementing the Biodiversity Duty, DEFRA, (2006)

Natural Environment and Rural Communities Act (2006)

ODPM (08/2005), Planning Policy Statement 9: Biodiversity and Geological Conservation

ODPM Circular 06/2005 (Defra Circular 01/2005) Biodiversity and Geological Conservation

ODPM (March 2006) Planning for Biodiversity and Geological Conservation: A Guide to Good Practice

Ramsden, D. and Twiggs, M., (2009), Making Provision for Barn Owls; a Guide for Planners, Applicants and Developers, Barn Owl Trust, Ashburton

The Royal Town Planning Institute 1999, Planning for Biodiversity: a good practice guide

Please note that the previously published guide ***Barn Owls on Site: a guide for developers and planners****, [English Nature, (2002), ISBN 1 85716 6108] has now been superseded by the guidance attached* Making Provision for Barn Owls *but still contains some useful information on identifying and interpreting signs of Barn Owl occupation*

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Toms, M. P., Crick, H. P. Q. and Shawyer, C. R. (2001). The Status of Breeding Barn Owls *Tyto alba* in the United Kingdom 1995-97. *Bird Study*, 48 (1): 23-37.

Tucker, G. M. and Heath, M. F. (1994). *Birds In Europe: Their Conservation Status (Bird Life Conservation Series No.3)*. Cambridge: Birdlife International

Websites

Barn Owl Trust at; http://www.barnowltrust.org.uk/

PPS9 at; http://www.communities.gov.uk/publications/planningandbuilding/pps9

PPS9 Good Practice Guide at;
http://www.communities.gov.uk/publications/planningandbuilding/planningbiodiversity

The Natural Environment and Rural Communities Act (2006);
http://www.opsi.gov.uk/acts/acts2006/ukpga_20060016_en_1

ODPM, Circular 06/2005 (Defra Circular 01/2005) Biodiversity and Geological Conservation
http://www.communities.gov.uk/documents/planningandbuilding/pdf/147570.pdf

Training

Barn Owl Ecology, Surveys and Signs (BOESS), The Barn Owl Trust. A one-day training course designed for ecological consultants but equally useful for anyone involved in Barn Owls and planning.
http://www.barnowltrust.org.uk/infopage.html?Id=96

SITE SURVEY INFO.

Survey gaps, inadequacies and the precautionary approach

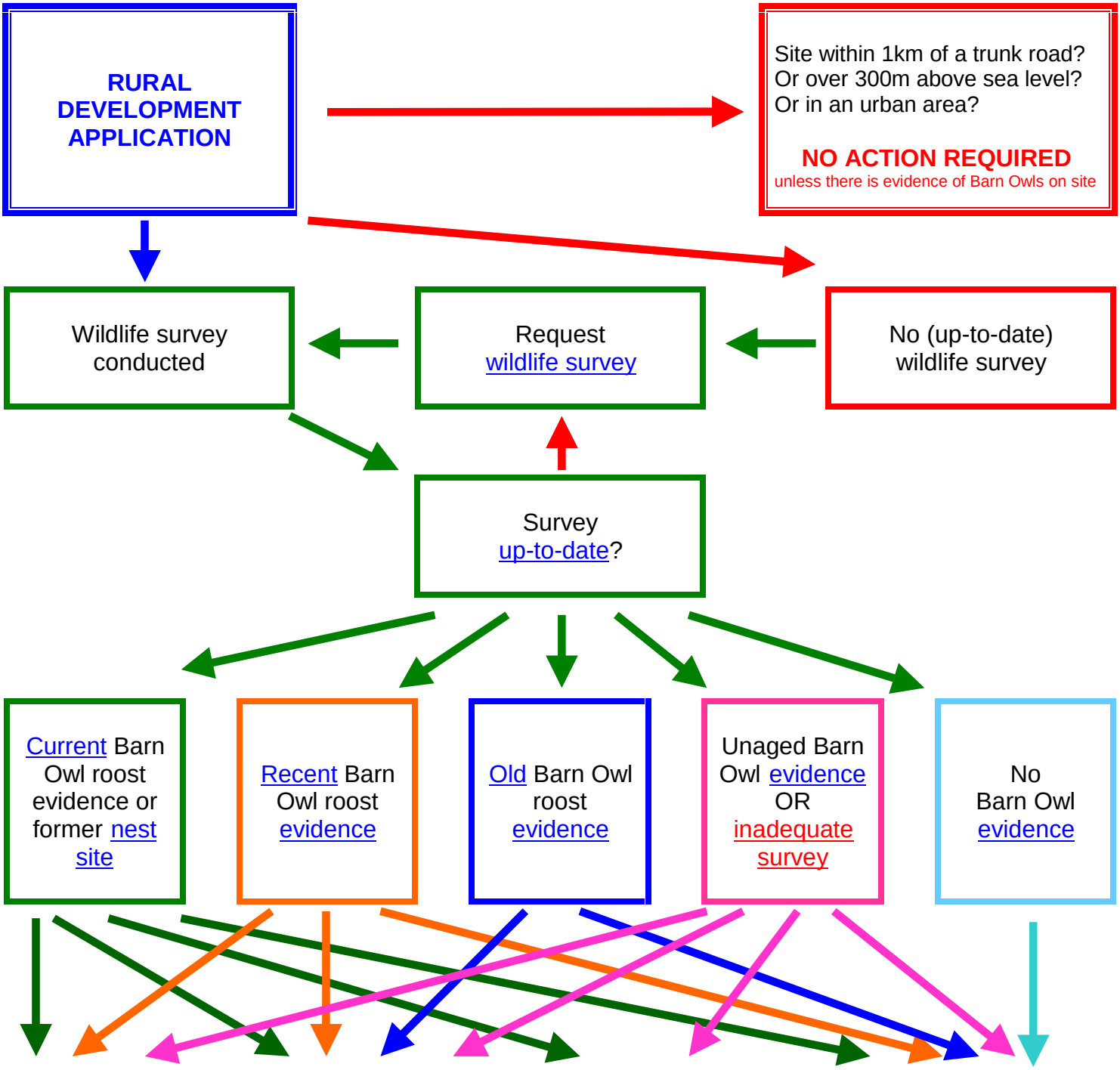
Searches of old buildings are quite often incomplete and in such cases the survey report cannot possibly prove the absence of Barn Owls. Often it is the highest part of a building that has not been searched and this is often where the Barn Owls would have nested (or may even be currently nesting). Huge veteran trees that are full of holes pose a similar problem.

Interviewing all site neighbours (to record sightings etc.) and contacting all local wildlife recording groups is an important aspect of Barn Owl survey work that is often overlooked. However, a lack of reported sightings is not evidence of absence.

PPS 9 clearly states that "*planning decisions should be based upon up-to-date information"* and Government Circular 2005 states *"It is essential that the presence or otherwise of protected species, and the extent to which they may be affected by the proposed development, is established before the planning permission is granted"*

In the case of incomplete surveys, or lack of information concerning the species on-site status, (and where a better survey cannot be done), you must take a precautionary approach and assume that Barn Owls are present and nesting.

FLOWCHART



Check whether the proposal includes the loss of good foraging habitat (rough grassland). Mitigation may be secured by entering into a Section 106 Agreement

TERMINOLOGY

Glossary/definitions

Food begging calls Barn Owls make a variety of noises but the two most noticeable ones are the adult shriek or screech and the food begging calls of young in the nest. This is a repeated **hissing** or **snoring** noise "pshhh pshhh pshhh pshhh..." and is a strong indication of nesting. A similar noise is also made by the adult female and can be an indication of courtship behaviour and, consequently, that nesting will potentially take place. Listen to owl calls

Current occupation means that one or more owls are present now or there is a current pattern of regular or occasional roosting at the site in question. Fresh (black) pellets will usually be evident (unless they are in an unsearchable position, someone has removed them, or they have been trampled beyond recognition). See pellets.

Egg (shell) Barn Owl eggs are a *matt* white colour, oval in shape and approximately 42mm x 31mm and weigh 16-20g. Usually four to seven eggs are laid in April-May, although eggs can be laid at any time and abandoned eggs can remain for many months. Hatched or abandoned eggs are usually discoloured. To the untrained eye, Stock Dove eggs look similar but are slightly smaller and have a more glossy appearance. The absence of egg shell does not mean that Barn Owls never nest in the site.

Evidence (of occupation) can take the form of nest debris, pellets, faeces (also known as **'droppings' 'lime'** or **'whitewash'**) or feathers, as well as records of visual observations and sounds such as food begging calls.

Faeces Also known as **'droppings' 'lime'** or **'whitewash'** can be quite obvious as vertical lines down roosting sites such as roof beams, down both interior and exterior walls around cavities or flat surfaces and on the floor below such areas. The absence of droppings does not necessarily mean that Barn Owls never use the site.

Feathers Barn Owls have distinctively coloured plumage and in some cases the correct identification of feathers is the main evidence of occupation. Adult Barn Owls moult most of their flight feathers from mid-summer onwards so the presence of these feathers at a site tends to indicate summer occupation and potential nesting. The absence of feathers does not necessarily mean the Barn Owls never use the site.

Hissing See begging calls

Lime See faeces

Nest (debris) No conventional nesting material is used. A nest debris is composed of owl pellets that have become compacted by the birds' movements within the nest. With experience and training it is possible to age a nest debris fairly accurately based on its appearance and texture and to determine a minimum number of times that nesting has occurred based of the depth of the debris.

Nest sites Nesting is defined by the presence of an egg or egg shell, nestlings, nestling fluff, nest debris, adults seen carrying food back to the site, reports of more than 2 birds seen together, Barn Owl sounds such as food begging calls.

TERMINOLOGY cont.

Nesting (period) From a legal standpoint, 'nesting' is defined as from the beginning of nest building until the last dependent young has stopped returning to the nest. As Barn Owls don't actually 'build' a nest, legal protection against disturbance effectively starts just before the first egg is laid. Some pairs breed early in the year, some breed late and some breed two or even three times a year. Therefore the potential 'nesting period' could be said to mean the entire year. The main nesting period is March-August inclusive.

Nestling The term given to young Barn Owls when in the nest, from the time they hatch to the time they start fledging (starting to fly) at roughly 8 weeks old.

Nestling fluff Owlets hatch naked and develop a fine white covering known as the *neoptile* down, which is replaced at two to three weeks of age by the *mesoptile* down. Both types are different from adult body feathers in that they do not have a 'quill' or feather shaft and with experience and training these can be identified. The presence of nestling fluff indicates that nesting has occurred within very close proximity.

Occasional roost Where an exhaustive search of a site has revealed fewer than 10 pellets of similar age (and other material evidence is unlikely to have been removed), the site could be said to be an 'occasional' roost.

Old evidence For the purposes of this guide - 'old' means more than 2 years old.

Pellets A typical Barn Owl pellet is a thumb-sized lump of hair and bone (the indigestible parts of the diet). Pellets are regurgitated at regular intervals and are black, moist and shiny when fresh, becoming greyer as they age.

Recent evidence For the purposes of this guide - 'recent' means less than 2 years old. Beyond this age most pellets will have disintegrated.

Regular roost For the purposes of this guide - a 'regular' roost is one with ten or more pellets of similar age.

Snoring See food begging calls

Stock Dove A species that readily uses Barn Owl nest boxes but only ever lays 2 eggs, which are roughly the same size and shape as Barn Owl eggs, but are *glossy* white as opposed to matt white. Sometimes thin sticks or straw may be used as nesting material. With training and experience it is easy to differentiate between Stock Dove and Barn Owl nests.

Suitable foraging habitat Barn Owls prey on small mammals, in particular though not exclusively the Short-tailed Vole, also known as the Field Vole. Field Vole habitat is rough grassland, specifically with a litter layer or thatch at its base. Rough grassland is often found in sites awaiting development as well as agricultural situations such as lightly grazed fields and ungrazed field margins.

APPENDIX 1

Barn Owls and Rural Planning Applications

Applicants' Handout

- A Pre-application Guide

Ramsden, D. and Twiggs, M. (2009). *Barn Owls and Rural Planning Applications. Applicants' Handout - A Pre-application Guide*. Barn Owl Trust: Ashburton

Funded and supported by Natural England, Peterborough.

APPLICANTS' HANDOUT

Applicants' Checklist

What to do prior to submission of your planning application	Tick ✓
Commission an up-to-date wildlife survey by a suitably qualified person	
Understand the required sequence of events	
Refer to the page Decide what needs to happen next... which will tell you what needs to happen based on the survey results	
State your intention in writing (to your Local Planning Authority) to have a follow-up survey conducted immediately before works commence if you don't intend to start straight away (this is because the species status can change at any time and the development may not start for up to three years)	
Read Making Provision for Barn Owls – a Guide for Planners, Applicants and Developers	
Supply details in writing on how, when and where you intend to create the alternative provision for Barn Owls (if appropriate). (This means erecting one or more nestboxes so that Barn Owls that are resident or arrive during the development have somewhere to hide/roost/nest on site)	
Supply details in writing (to your LPA) describing the on-site protection measures you intend to implement (around the alternative provision etc.) so as to avoid birds being disturbed (if appropriate)	
State your intention not to commence works between March and August inclusive (if appropriate)	
Supply details in writing (to your LPA) describing exactly how, when and where you intend to make the permanent provision for Barn Owls (inside one of the developed buildings)	

APPLICANTS' HANDOUT cont.

Decide what needs to happen next…

The results of your wildlife survey should identify Barn Owl status at the site. The table below shows what needs to happen based on these results. Because nesting has been recorded in every month of the year (and development may not start for three years), up-to-date surveys are essential. Please note that anyone who intentionally or recklessly disturbs breeding Barn Owls or their dependent young may be liable to a fine of £5000 and/or 6 months imprisonment.

EXCEPTIONS

- within 1km of a dual carriageway or motorway or similar, provision for Barn Owls is not normally made (why). If in doubt please seek advice info@barnowltrust.org.uk
- urban areas are generally unsuitable for Barn Owls but rural villages may be occupied.
- uplands often lack sufficient foraging habitat. It may or may not be worth making provision for owls over 300 metres above sea level and applications should be assessed on a site-by-site basis.

Barn Owl occupation status	Action required			
	Alternative provision Erect a nestbox nearby before any works commence	Re-survey Have Barn Owl status checked immediately before works commence	Timing Don't start works between March and August inclusive	Permanent provision Create provision in the completed development
No evidence of Barn Owls found but the site is or was a potential roost or nest site	**No**	**Yes**	**No**	**Yes**
Old roost site: evidence of roosting found but no sign within the last 2 years. No evidence of nesting, past or present	**No**	**Yes**	**No**	**Yes**
Recent roost site: evidence of roosting within the past 2 years but no evidence of nesting past or present	**Yes**	**Yes**	**No**	**Yes**
Current pair roosting: evidence of two Barn Owls roosting within the past month but no evidence of nesting, past or present	**Yes**	**Yes**	**Yes**	**Yes**
Nest site: evidence that Barn Owls are currently nesting or have nested at some time in the past **OR inadequate survey**	**Yes**	**Yes**	**Yes**	**Yes**

APPLICANTS' HANDOUT cont.

Ecological surveys: what is a "suitably qualified person"?

In order to undertake surveys that could result in disturbance to breeding birds, a licence is required. Most pre-development ecological surveys are carried out by independent Ecological Consultants appointed by the applicant. However, not all ecologists have the required levels of relevant skill and knowledge. At a recent conference of the Institute of Ecologists and Environmental Managers (IEEM) only half of those present said they could confidently identify the Barn Owl when faced with a picture showing three owl species. However, since 2005 many ecologists from across the UK have attended specific training in Barn Owl ecology, surveys and signs (see below) and suitably trained surveyors can usually be found.

Anyone with the right skills can carry out a survey. At the very least, surveyors should be able to ascertain whether or not a site is suitable for Barn Owls to roost or nest, determine the species status at the site and whether or not there have been Barn Owls present within the past two years (or more than two years ago).

Surveyors should be able to:

- Assess whether any building or tree is (or is not) a potential (suitable) Barn Owl roost or nest place.
- Assess the probability that evidence of Barn Owl occupation has been lost or covered.
- Identify owl faeces.
- Identify Barn Owl feathers and differentiate between small adult body feathers and nestling fluff.
- Identify Barn Owl eggs and egg shell and determine whether unhatched eggs are less than or more than one year old.
- Identify Barn Owl pellets and age pellets as follows - fresh to one month old, one month to one year old, one to two years old, older than two years.
- Identify Barn Owl nest debris and age as follows - recent to one year old, one to two years old, older than two years.
- Identify Barn Owl calls (hissing and snoring calls from adults and owlets) and interpret reports of calling.
- Record and evaluate anecdotal reports of Barn Owl occupation by lay-people.
- Recognise suitable foraging habitat for Barn Owls.

Survey gaps, inadequacies and the precautionary approach

Barn Owls can get through gaps as small as 70mm and signs of occupation are not always obvious. Searches of old buildings are quite often incomplete and in such cases the survey report cannot possibly prove the absence of Barn Owls. Often it is the highest part of a building that has not been searched and this is often where the Barn Owls would have nested (or may even be currently nesting). Huge veteran trees that are full of holes pose a similar problem.

Interviewing all site neighbours (to record sightings etc.) and contacting all local wildlife recording groups is an important aspect of Barn Owl survey work that is often overlooked. However, a lack of reported sightings is not evidence of absence.

PPS 9 clearly states that "*planning decisions should be based upon up-to-date information"* and Government Circular 2005 states *"It is essential that the presence or otherwise of protected species, and the extent to which they may be affected by the proposed development, is established before the planning permission is granted."*

In the case of incomplete surveys, or lack of information concerning the species on-site status, (and where a better survey cannot be done), you should take a precautionary approach and assume that Barn Owls are present and nesting.

APPLICANTS' HANDOUT cont.

Required sequence of events

Barn Owls are incredibly faithful to the roost/nest sites they use and birds that have somewhere to hide can tolerate a remarkable amount of noise and nearby development activity. The aim should always be to keep the birds on-site whilst the development takes place. This is the main reason why alternative provision should be made - it temporarily provides an alternative place for owls to hide/roost/nest. The alternative provision must remain in place until after permanent provision has been made (inside one of the developed buildings). See Making Provision for Barn Owls.

The sequence of events is:
- initially, the part of the site used by Barn Owls is left undisturbed.
- planning consent is given and any pre-development submissions are made and agreed by the Case Officer.
- alternative provision is made as early as possible and at least 30 days before the development starts.
- a no-go area is established which protects the alternative provision from direct disturbance.
- the development commences and permanent provision is made as early as possible in one of the tallest buildings.
- the development finishes, its new use commences (residential/industrial etc.) but the permanent provision (the owls' new roost/nest space) is not subjected to direct disturbance (not inspected).
- the alternative provision remains in place until at least 30 days after the permanent provision becomes available.

On-site protection during development

Barn Owls are shy, unobtrusive birds, which generally prefer to hide away in dark, dry, elevated spaces. In the wild they will utilise almost any space that affords them this level of privacy and are most often found in rural buildings or holes in trees. As well as these typical site-types, they have also been recorded in ventilation shafts in industrial units, crevices in quarries, bell towers and a variety of other places too. Contrary to popular opinion, they can become accustomed to regular noise and activity provided that they have an ideal hiding place on-site. Well-designed nest boxes can provide perfect places for Barn Owls to hide and roost (as well as nest). Birds that are well hidden are much less likely to be flushed from a site when a potentially disturbing thing starts to happen. Birds that remain on-site then become accustomed to the noise and learn to ignore it. Generally speaking, the birds will continue to use the site *provided that there is not a significant change in either the level of noise and/or proximity of development activity.*

Unexpected disturbance caused by development works can have a potentially catastrophic effect on resident birds particularly if there are no undisturbed hiding places left on-site. In addition, birds that have only recently occupied a site are much more likely to abandon the site if they are disturbed. Birds that have already had to move to nearby alternative provision are potentially more sensitive to disturbance, so should be treated with the utmost care. Birds that abandon their nesting site, or one of their main roost sites, will often abandon other sites at the same time; the so-called 'knock-on' effect. Evidence for Barn Owl decline and the damaging effects of site loss.

Breeding Barn Owls are protected against disturbance NEAR the nest as well as AT the nest. Therefore, if Barn Owls are present very close to a development site, all reasonable measures should be taken to ensure that no disturbance is caused. This is particularly important during the breeding season to ensure that no offence is committed under the relevant wildlife legislation legal protection.

Recommended measures for protecting Barn Owls during works:
- inform all staff of the presence of the protected species and keep them updated with respect to the range and extent of any exclusion zones in place.
- inform all staff of the relevant legislation and the penalties imposed on those responsible for intentional or reckless disturbance.
- erect signage and fencing if necessary.

APPENDIX 2

Making Provision for Barn Owls

A Guide for Planners, Applicants and Developers

Barn Owls are a specially *PROTECTED SPECIES*

- ❑ Wildlife and Countryside Act (1981) Schedule One
- ❑ Countryside and Rights of Way Act (2000)

PLANNING AUTHORITIES are required to consider biodiversity conservation:

- ❑ Natural Environment and Rural Communities (NERC) Act (2006)
- ❑ The Habitats Directive (EC directive 92/43/EEC)
- ❑ Environmental Impact Assessment (85/337/EEC as amended by directive 97/11/EC)
- ❑ Strategic Environmental Assessment (2001/42/EEC)
- ❑ The Environment Act (1995)

...and follow planning policy:

- ❑ Planning Policy Statement 1: Sustainable Development (2005)
- ❑ Planning Policy Statement 9: Biodiversity and Geological Conservation (DCLG 2005)
- ❑ ODPM Circular 06/2005 (Defra Circular 01/2005)
- ❑ ODPM (March 2006) Planning for Biodiversity and Geological Conservation

Ramsden, D. and Twiggs, M. (2009). *Making provision for Barn Owls - a Guide for Planners Applicants and Developers*. Barn Owl Trust: Ashburton

Funded and supported by Natural England, Peterborough.

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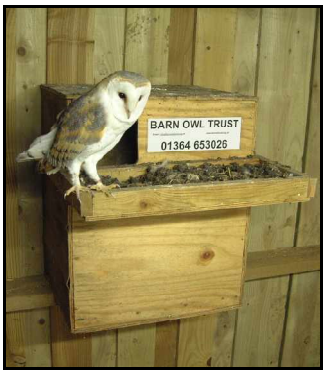
INTRODUCTION - ***alternative provision*** and ***permanent provision***

In the context of rural planning applications and developments (for example, barn conversions) there are two distinct types of provision used in conjunction: *Alternative Provision* and *Permanent Provision*. Providing the *alternative provision*, helps to ensure that resident Barn Owls stay on-site until the *permanent* provision is made. Where no Barn Owls are resident the aim is to ensure that the site is continuously available for birds to return to the site or for new birds to occupy it.

Alternative provision



Alternative provision provides a temporary hiding/roosting/nesting place for birds on-site whilst the development takes place. It usually consists of one or more nest boxes erected inside outbuildings, in trees, or (if neither suitable outbuildings nor trees are available) a nestbox on a pole. Alternative provision should always be made at the earliest opportunity, at least 30 days before works commence and within 200 metres of the main potential nest/roost place at the development site. The alternative provision must be maintained until at least 30 days after permanent provision becomes available within the development. It is imperative that no works commence until at least 30 days after alternative provision has been made. These thirty-day periods are the absolute minimum - the longer the better.

Permanent provision

Permanent provision means creating (or leaving) a small entrance hole into the top part of one of the developed buildings so that owls can enter, roost and nest for many years to come. Providing that this is done properly there are no health, nuisance, or significant cost issues. Most potential roost/nest sites (such as old barns or veteran tree holes) have been available for Barn Owls to use for at least a hundred years and replacing these with outdoor nestboxes that will only last about 15 years is simply not adequate. Permanent provision must be placed inside one of the developed buildings in order for it to last a substantial length of time.

Why do it?

Barn Owls are amazing to watch and much admired. In spite of this, they have become very rare and as a consequence have special legal protection. Their survival depends upon people providing and maintaining roost/nest sites and on sympathetic land management. The conservation of biodiversity, including protected species, is a Key Principal of the planning system and Planning Authorities are required to ensure that planning decisions do not cause significant harm. As well as *maintaining* biodiversity, Planning Policy dictates that the planning system should identify opportunities for *enhancing* biodiversity at development sites. By making provision for Barn Owls you are not only complying with policy, or abiding by a specific planning condition, you are maintaining a potential nesting place and one day, because of your vital contribution, the site may once again be graced by these most beautiful birds.

Second only to the Robin, the Barn Owl is Britain's most popular bird species. Furthermore, with only 3,500 to 4,000 pairs of Barn Owls in the British Isles at the last census, a property with resident Barn Owls is a very special selling point.

PLEASE NOTE
Under normal circumstances, provision for Barn Owls should not be made within 1km of a motorway, dual-carriageway, or similar (if in doubt please seek advice info@barnowltrust.org.uk)

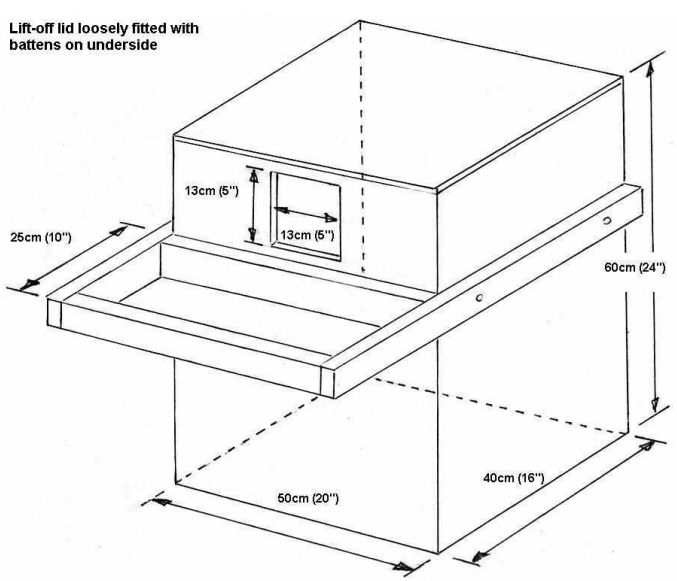
ALTERNATIVE PROVISION
BOXES IN BUILDINGS

How to make and erect a Barn Owl nestbox suitable for a barn or other building

Background

Nestboxes can be of great benefit, especially in areas where there is plenty of food available but a shortage of suitable nesting or roosting sites. When you are considering an area for nestboxes remember that the Barn Owl is not a woodland species but a bird of open country, most of which is farmland. See Optimum habitat in Britain

Many old barns and almost all modern farm buildings are far from ideal for Barn Owls as they lack suitable cavities for the birds to nest in. Barn Owls like to roost out of sight of humans and are much less inclined to be flushed from a building if they have a box to hide in. In fact, it is amazing how much disturbance Barn Owls will tolerate at sites with a suitable nestbox. Almost any tall rural building can become an ideal roosting and nesting site when a nestbox is provided.



Indoor nestboxes can be constructed from 9mm ($^3/_8$") softwood ply with 50mm x 25mm (2" x 1") batten along all the edges on the inside. Please avoid using hardwood ply unless it is stamped 'FSC Approved'.

As a cheaper alternative, a tea-chest can be simply adapted by cutting an entrance hole, fixing on an exercise platform and adding a removable lid. In this case, do ensure the foil lining and any sharp nails or strips of metal which may injure the owls are removed.

The platform on the front gives more air space for the young owls to exercise their wings before their first flight. The removable lid is essential as occupied boxes do need to be cleared out occasionally.

The internal depth of the box is important as it reduces the chances of a nestling Barn Owl falling from the box and dying as a result of neglect or predation. Therefore, it is important that the box depth is maintained by clearing out the box once it has more than about 3 inches of nest debris. If Jackdaws use the box it must be cleaned out every year (wear gloves and a dust mask). Boxes only used by breeding Barn Owls will need clearing out every two or three years, ideally in November or December.

NOTE that it is illegal to disturb wild Barn Owls whilst they are breeding. It is not even permitted for the provider of the nestbox or the site owner to inspect the nest unless they have a current licence to do so. Legal protection

When siting your indoor nestbox, remember:

1. Fix it as high up as possible. However, remember that fully enclosed modern barns with little ventilation can become very hot in fine weather - in this type of building the box should be placed below the apex but at least 3 metres (10ft) above ground level. Bear in mind that you also need to place the box to allow removal of the lid.

2. Position the box so that an owl entering the building through the most likely opening will see the entrance hole and have an easy flight path to it.

3. If possible, position box so that emerging nestlings can walk onto beams or other flat surfaces.

4. Consider your own safety (for which you are responsible). Try to position the box where it can be easily and safely inspected at a later date.

5. The box must be in a completely dry position.

6. Avoid placing boxes within 1km (half a mile) of a motorway, dual-carriageway, or similar (if in doubt please seek advice info@barnowltrust.org.uk)

7. Avoid buildings subject to irregular loud disturbance.

There is no need to line the nestbox. Eggs are usually laid on top of the birds' own pellet debris which is a wonderfully absorbent material - much better than anything you might provide.

Permanent access into the building for the owls is obviously essential. If there is no existing access for owls you can create access using the following guidelines:

1. Make the entrance hole about 12cm (5") wide x 25cm (10") high (minimum 4" x 4").

2. Make the hole as high up the wall as possible and at least 3 metres (10') above ground level.

3. Position the hole so that it is likely to be noticed by a passing bird. Don't face it towards a close tree or other tall building which will obscure it.

Safety

When erecting your nestbox please have due regard for Health and Safety.

Positioning requirements - for Barn Owl nestboxes in buildings

● Boxes should be erected at a height of not less than 3 metres above ground level.

● The building chosen should have an owl access hole at high level and no less than 100x100mm, ideally 125mm wide x 250mm high.

● The box should be positioned so that it will remain completely dry.

● The box should be positioned so its hole can be easily seen by a bird entering the building.

● Provision for Barn Owls should not be made within 1km of a motorway, dual-carriageway or similar (if in doubt please seek advice info@barnowltrust.org.uk)

Essential design requirements - for Barn Owl nestboxes in buildings

● Entrance hole: minimum size 100mm x 100mm, optimum size 125mm x 125mm, maximum size 150mm x 150mm.

● Floor area of nest chamber: absolute minimum 0.16m^2. Good size range 0.2 to 0.4m^2.

● Depth from bottom of entrance hole to nest must be not less than 460mm.

● There must be an exercise/landing platform below the entrance hole that allows climbing/jumping young birds to get from the platform onto the roof of the box and (ideally) onto other nearby perching places. The platform must have a generous raised edge suitable for Barn Owls to grip easily.

● Human access for easy clearing-out of nest debris is essential.

● Measures aimed at reducing the chances of entry by other species (such as Jackdaws) are to be encouraged, provided that they do not significantly reduce the box's suitability for Barn Owls.

● Should be substantially constructed yet light enough to permit safe erection using basic equipment. Normal indoor-box weight range is 10-15kg. Total weight should not exceed 18kg and an indoor-box under 8kg is probably not substantial enough.

● Should not be constructed from tropical hardwood unless the timber is certified as sustainably grown.

ALTERNATIVE PROVISION cont.

You can view the construction of one of these boxes here.

You can view more pictures of indoor nestboxes here.

ALTERNATIVE PROVISION cont.

BOXES IN TREES

How to make and erect a Barn Owl nestbox suitable for siting on a tree

Suitability of the area

The Barn Owl is not a woodland bird. It hunts mainly by flying over areas of rough grassland, ditches, hedgerows, young tree plantations etc. that support a high population of small mammals. In areas with an abundance of food but a shortage of suitable sites, nestboxes can be of great benefit. They should always be placed in areas with some good Barn Owl habitat or they are unlikely to be used. For further information, see Optimum habitat in Britain.

Most nestboxes for Barn Owls are erected within buildings; see Getting the best nestbox for your site. However, where a suitable location for an indoor box is not available, outdoor nestboxes are often the next-best option.

Construction

The basic box should be built using rot-resistant or treated sheet material. The Barn Owl Trust uses 9 or 12mm tanalised ($^{3}/_{8}$"-$^{1}/_{2}$") softwood ply, 25 x 50mm (2" x 1") tanalised batten and 30mm (1¼ ") rust resistant screws. Please avoid using hardwood ply, unless it is stamped "FSC Approved". You may use any type of preservative on the box where tanalised ply is not available, but always follow the product instructions and always ensure the box is completely dry before erection. The dimensions are given as a guide, variations of + or - 10% are quite acceptable.

The front of the box should have an access panel to enable nest debris to be cleared out periodically. Under the Wildlife and Countryside Act 1981, it is an offence to disturb breeding Barn Owls so nestboxes should only be cleaned out between November and January. The top of the box should be covered with heavy duty roofing felt and a waterproof sealant in all the wood joints to increase weather protection (such as *Ever-Build Weather-Mate)*. If you need proof that this is necessary, try leaving your nestbox under a sprinkler for a few hours. Large drainage holes (20mm - ¾" - diameter) are also drilled in the floor of the box. The front, back and sides MUST overhang the floor of the box.

Selecting a suitable tree

Within 200 metres of the development you should look very carefully at all available large trees and select the most suitable one. Do not rush this. The success of your nestbox will depend partly on the size and shape of the tree, its position and the position of the box when erected. If there are no suitable trees, then a pole box may be the only remaining option.

An isolated tree overlooking an area of good habitat is ideal. Whenever possible, choose a tree with rough bark to enable owlets to climb back up to the box should they fall out. A tree on the outside of a copse is acceptable but avoid trees within woodland. Avoid siting your box within 1km (½ mile) of a dual-carriageway, motorway or similar (if in doubt please seek advice info@barnowltrust.org.uk). If possible, choose a deciduous tree or a Scots Pine. Often there is no choice, but do have a good look around. Time spent in reconnaissance is seldom wasted.

The ideal tree is old and very big. Pick a tree where the box will be visible below the crown (twigs/leaves) of the tree so that Barn Owls can see it and can fly in and out from various directions without having to negotiate small branches in the dark. Some old Oak trees, dead trees and Scots Pines are particularly accommodating in this respect. If ivy is growing on the tree, it may soon grow over the entrance hole of the box. Anything that makes the hole less visible will reduce the chances of the box being used.

ALTERNATIVE PROVISION cont.

Advantages of this design
The main advantage of the box described in this leaflet is that it's fairly difficult for the young to get out. This reduces the chances of them falling from the box before they can fly and dying as a result of neglect or predation. Another advantage of this style of box over some other designs, is that it provides an exercise area outside the box for the young and the flat roof allows the young to hop from the tray to the roof and then to the tree to exercise, and the reverse if they fall and need to climb back up. Many nestbox designs are impossible for the young to get back into unless they are already able to fly.

Siting the nestbox
Having found a suitable tree for your box, take your time in deciding where in the tree you are going to put it. Several factors need to be considered. The box must face open ground so that the entrance hole is obvious to a passing owl. Do not hide it behind the tree - if the hole cannot be seen the box is unlikely to be used. Try to avoid facing the entrance into the prevailing wind and rain. Generally this means avoiding the west or south-west. South-east is generally a good direction. If you know which way the birds are currently flying into the site you should take this into account and face the box towards the flight path.

Birds roosting low to the ground probably feel vulnerable and at higher levels birds can feel safer. Within reason, the higher the box is above ground level the more likely it is to be occupied. A height in the region of 4.5-7 metres (14'-24') may be achieved depending on the tree concerned. Boxes placed less than 3 metres above ground level are much less likely to be successful. It is a good idea to ensure that, when erected, the box is slightly lower at the front. This will help prevent rain water splashing in through the entrance hole.

Although young Barn Owls do not start to fly until eight weeks old, they begin to walk at only three weeks. There is often an age difference of two weeks between the oldest and the youngest owlet. As the oldest ones become more and more mobile they emerge from the nestbox to stretch, flap their wings and attempt short flights within the tree. It is at this stage that an owlet is most likely to fall to the ground. The chances of this can be reduced by positioning the box so that the owlet can jump easily from the tray or roof of the box into nearby branches. You should also position the box so that it can be inspected safely.

Erecting the box
Tanalised 50mm x 50mm (2"x 2") timber and galvanised nails can be used to secure the box; often this is the only practical option. Alternatively you can drill holes and use nylon bolts, or use ratchet straps.

A piece of tanalised timber 50mm x 50mm x 750mm (2" x 2" x 30") should be attached to the trunk of the tree, making sure that it is level and VERY secure. This should have 'hooks' made out of 25mm x 50mm (1"x 2") tanalised timber attached to each end. These should be approximately 75mm (3") long and the top 25mm (1") will protrude above the top of the ends of the 50mm x 50mm timber (see diagram). The purpose of this is to enable the box to be placed so that it is held in place by the hooks, allowing the person erecting the box to have both hands free whilst attaching it.

A second piece of 50mm x 50mm tanalised timber should be attached firmly to the back of the box approximately 200mm (8") from the top (see diagram). Screw from the inside of the box through to the timber. This joint will take all the weight of the box so it needs to be very secure. The piece that is attached to the box will rest on the piece that is attached to the tree. Holes should be drilled to enable the two pieces to be nailed or screwed together when the box is in position. Bear in mind that it will be difficult to get at some parts of the timber to hammer or screw once the box is in position so drill the holes close to each end.

Clearing out your Nestbox
The internal depth of the box is important as it reduces the chances of a nestling Barn Owl falling from the box and dying as a result of neglect or predation. Therefore, it is important that the box depth is maintained by clearing out the box once it has more than about 3 inches of nest debris. If Jackdaws use the box it must be cleaned out every year (wear gloves and a dust mask). Boxes only used by breeding Barn Owls will need clearing out every two or three years.

ALTERNATIVE PROVISION cont.

Safety
When erecting your nestbox please have due regard for Health and Safety.

Positioning requirements - for Barn Owl nestboxes in trees

● Barn Owls are NOT woodland birds and will not usually enter dense woodland. The chosen tree should be isolated or on the very edge of a wood or copse facing open ground.

● Boxes should be erected at a height of not less than 3 metres above ground level. The box should be positioned so the hole can be seen easily by a Barn Owl flying past (not hidden by branches, twigs or leaves).

● Provision for Barn Owls should not be made within 1km of a motorway, dual-carriageway or similar (if in doubt please seek advice info@barnowltrust.org.uk)

Essential design requirements - for Barn Owl nestboxes in trees

● Entrance hole: minimum size 100mm x 100mm, optimum size 100mm x 125mm, maximum size 150mm x 150mm.

● Floor area of nest chamber: absolute minimum 0.16m^2. Good size range 0.2 to 0.4m^2.

● Depth from bottom of entrance hole to nest must be not less than 460mm.

● There must be an exercise/landing platform below the entrance hole that allows climbing/jumping young birds to get from the box into the tree and vice versa. The platform must have a generous raised edge suitable for Barn Owls to grip easily and it should be positioned, and have sufficient shelter and drainage, to prevent rainwater being deflected into the box entrance.

● Interior must remain dry during prolonged heavy rain coming from any direction. All sides should overhang the floor and the floor should have adequate drainage. The installation of a (drier) false floor can be an advantage.

● There must always be sufficient height difference between the nest and the external platform so as to prevent the accumulation of a continuous (internal/external) layer of pellet debris allowing rainwater to soak through the debris to the inside thereby chilling the nest contents.

● Roof should be covered in thick roofing felt guaranteed for not less than 10 years or an equally long-lasting material. Very steeply sloping roofs may not need covering but any apex join must be permanently waterproofed.

● Human access for easy clearing-out of nest debris is essential.

● Timber liable to decay within 20 years must be treated with long-lasting preservative: either pressure treated (CCA) or surface treated including all edges of all component parts.

● All screws/nails and any metal fittings used should be rust proof.

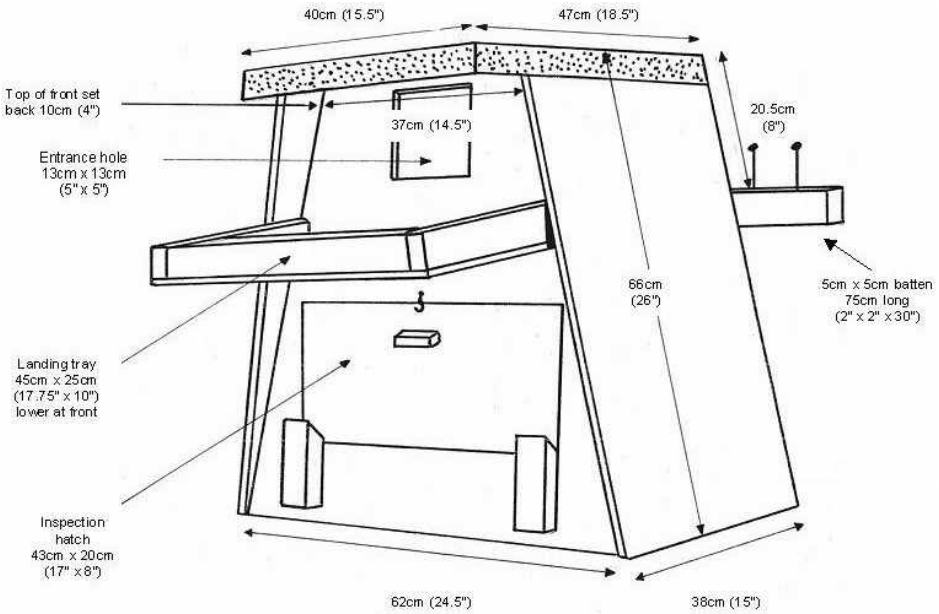
● Measures aimed at reducing the chances of entry by other species (such as Jackdaws) are to be encouraged provided that they do not significantly reduce the box's suitability for Barn Owls.

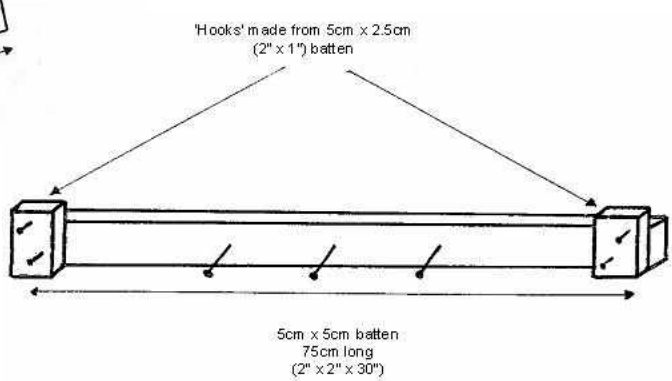
● Should be substantially constructed yet light enough to permit safe erection using basic equipment. Normal tree-box weight range is 13-18kg. Total weight should not exceed 25kg and a tree box under 10kg is probably not substantial enough.

● Should not be constructed from tropical hardwood unless the timber is certified as sustainably grown (FSC approved).

ALTERNATIVE PROVISION cont.

TREE BOX DESIGN





You can view the construction of a tree box here.

You can view a tree box being erected here.

ALTERNATIVE PROVISION cont.

BOXES ON POLES

An outdoor Barn Owl nestbox suitable for erection on a large pole

Nestboxes in buildings are generally the best option, followed by nestboxes in trees. Pole boxes are usually only erected where these options are not available, see Getting the best nestbox for your site. Nestboxes should never be erected on operational telegraph/electricity poles and erecting your own telegraph pole is expensive. Building and erecting a pole nestbox is a lot of work so before deciding to proceed make sure there is no alternative.

Suitability of the area
The Barn Owl is not a woodland bird. In the UK, Barn Owls hunt mainly by flying over areas of rough grassland, ditch sides, young tree plantations etc. that support a high population of small mammals. See Optimum habitat in Britain. At development sites pole boxes are used as temporary alternative provision where there are no suitable buildings or trees within 200 metres of the development site.

Selecting a suitable pole
A pole box is big and heavy and cannot be adequately supported by a thin or flexible pole. A good pole will not only support the box for many years but will also be strong enough to take the weight of someone climbing a ladder leaned against it during inspection or clearing out. Most proper telegraph or electricity poles are suitable and just need to be cut to the right length.

You should be aiming for an erection height over 4 metres above ground level using a substantial pole of not less than 150mm diameter and 6 metres long (1.5m underground and 4.5m in height). In areas where climbing nest-predators are a problem position the pole away from buildings or trees and wrap a 1.5m section of the pole with thin aluminium or other very slippery material.

Pole-box construction
The basic box should be built using exterior grade rot-resistant or CCA-treated sheet material. The Barn Owl Trust uses 12mm tanalised ($^1/_2$") softwood ply, 25 x 50mm (2" x 1") tanalised batten and 30mm (1¼ ") rust resistant screws. There's also a small amount of 50 x 50mm timber and a piece of 18mm ply used in this design. Please avoid using hardwood ply, unless it is stamped "FSC Approved".

You may use any type of wood preservative on the box where tanalised (CCA-treated) ply is not available. The preservative should be applied to all component parts before the box is assembled so that all the edges are properly treated. Make sure the treated wood is dry before you assemble the box. During construction a waterproof sealant (such as *Ever-Build Weather-Mate*) should be applied to all the wood joints to increase weather protection. If you need proof that this is necessary, try leaving your box under a sprinkler for a few hours and then look inside it. Although tanalised timber is very rot-proof it's not very waterproof so the roof sheets should also be treated with Creosote or some other water-resistant preservative. The apex should be covered with a strip of aluminium or copper. The front, back and sides **MUST** overhang the floor of the box and as an extra precaution a large drainage hole (20mm - ¾" - diameter) should be drilled in each corner of the floor of the box.

All the dimensions are given as a guide and variations of + or - 10% are quite acceptable. The box must have a large access panel to enable nest debris to be cleared out periodically.

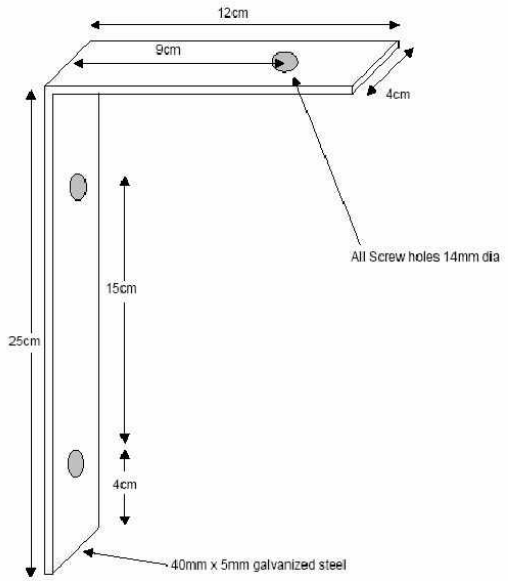
ALTERNATIVE PROVISION cont.

Siting the pole-box
Time spent in reconnaissance is seldom wasted. Please avoid siting your box within 1km (½ mile) of a dual-carriageway, motorway or similar (if in doubt please seek advice info@barnowltrust.org.uk). Nestboxes placed in a patch or strip of good (rough grassland) habitat are likely to be discovered more quickly as are boxes placed at existing roost sites. However, neither of these factors is essential.

The box should face open ground so that the main entrance hole is obvious to a passing owl. Do not hide it between big trees or tall buildings – if an entrance cannot be seen easily the box is less likely to be discovered. Try to avoid facing the box towards prevailing wind and rain. Generally this means avoiding the west or south-west (with the ridge of the roof lying north-south or northwest-southeast). If you know which way the birds are currently flying into the site you should take this into account and face the box towards the flight path.

The box will need to be cleaned out in future so think about where the ladder could stand and position the box so that this can be done safely.

POLE-BOX BRACKET DIMENSIONS



Erecting the box
By far the simplest and safest option is to attach the box to the pole before the pole is erected. If the pole has already been erected you may consider the use of tower scaffolding or a "cherry-picker" hydraulic platform. It is possible to erect a pole-box (on a pole that is already up) without using any machinery. However, a pole-box is heavy and awkward to lift by hand and the use of ladders is potentially dangerous. The Barn Owl Trust has placed pole-boxes onto previously-erected poles on numerous occasions with a team of three people using three ladders but a detailed description of the method is beyond the scope of this leaflet. Heavy duty galvanised steel brackets, coach bolts and coach screws are used to secure the box to the pole.

The most important thing when erecting the box is your own safety (for which you are responsible), the safety of your helpers and the safety of anyone going up to the box in future years. Make sure you carry out a detailed assessment of the risks associated with whatever method you choose and do not attempt to erect a pole-box when working alone!

Each half of the exercise platform should be slid onto the box after erection and retained by screwing through the two outer battens. To facilitate this, the box has ladder rests on both sides as well as below the inspection hatch.

Important advantages of this pole-box design
The nestbox described in this leaflet is very deep which makes it almost impossible for the young to emerge prematurely. This reduces the chances of nestlings falling from the box and dying as a result of neglect or predation. By the time a young Barn Owl is big and strong enough to get out of the box it will soon be fully fledged. The design also provides emerging young with a very generous exercise platform enabling them to do lots of wing-flapping before their first flight. They can even get onto the roof of the box and safely back inside before they are able to fly.

The combination of box depth and safe exercise area means that when a young owl leaves the box for the first time it stands a very good chance of being able to fly up and get back inside. This period of returning to the box is important for their survival. Boxes with low entrance holes allow young to leave the box before they are big or strong enough to fly back up again. Young on the ground are generally ignored by the adults and either starve or are predated. Whereas young emerging from a tree-mounted nestbox stand some chance of being able to climb back up, a pole box does not allow the same possibility.

This design has other important features, see How to choose the best nestbox design

ALTERNATIVE PROVISION cont.

Clearing out the box
Where a polebox is erected as temporary alternative provision at a development site (for perhaps a year) clearing out the box is unlikely to become an issue. However, if the box remains in place for more than one nesting season it may. As the box fills up with nest debris its effective depth is reduced and so it gradually becomes less safe for emerging young. After four or five broods of young have been produced (normally after about four years) the nest debris should be removed. Boxes used by Jackdaws will fill rapidly with sticks and should be cleared out yearly. When clearing out nest debris it is advisable to wear gloves and a dust mask. It's usually best to clear out nestboxes in November, December or January (but please try to avoid flushing birds out during severe weather conditions). Under the Wildlife and Countryside Act 1981, it is an offence to disturb breeding Barn Owls.

Safety
When erecting your nestbox please have due regard for Health and Safety.

Positioning requirements - for Barn Owl nestboxes on poles

● Pole boxes should be erected at a height of not less than 4 metres above ground level.

● A substantial pole is needed - not less that 150mm diameter (normally 6m long with 1.5m underground and 4.5m in height). Never erect a box on a pole in use (with overhead wires attached).

● Barn Owls are NOT woodland birds and will not usually enter dense woodland. The pole should be isolated, sited in open ground and ideally in an area of rough tussocky grassland.
● Provision for Barn Owls should not be made within 1km of a motorway, dual-carriageway, or similar (if in doubt please seek advice info@barnowltrust.org.uk)

ALTERNATIVE PROVISION cont.

Essential design requirements - for Barn Owl nestboxes on poles

● Entrance hole: minimum size 100mm x 100mm, optimum size 100mm x 125mm, maximum size 150mm x 150mm.

● Floor area of nest chamber: absolute minimum 0.2m^2. Good size range 0.3 to 0.4m^2.

● Depth from bottom of entrance hole to nest must be not less than 460 mm.

● There must be an external platform below the entrance hole that allows ample room for an entire brood of young birds to exercise and await food deliveries; thus the danger of young birds falling (before fledging) must be minimised. External platform size should be approximately 0.125m^2 or larger.

● The platform must have a generous raised edge suitable for Barn Owls to grip easily and it should be positioned, and have sufficient shelter and drainage, to prevent rainwater being deflected into the box entrance.

● Interior must remain dry during prolonged heavy rain coming from any direction.

● All sides should overhang the floor and the floor should have adequate drainage. The installation of a (drier) false floor can be an advantage.

● There should always be sufficient height difference between the nest and the external platform so as to prevent the accumulation of a continuous (internal/external) layer of pellet debris allowing rainwater to soak through the debris to the inside thereby chilling the nest contents.

● Roof should be covered in thick roofing felt guaranteed for not less than 10 years applied by heat or adhesive (not nailed or pierced in any way). Very steeply sloping roofs may not need covering but any apex join must be permanently waterproofed.

● A flat or slightly sloping roof that provides additional exercise space for the young is advantageous.

● Human access for easy clearing-out of nest debris is essential.

● Timber liable to decay within 20 years must be treated with long-lasting preservative: either pressure treated (CCA) or surface treated including all edges of all component parts.

● All screws/nails and any metal fittings used should be rust proof.

● Should be substantially constructed yet light enough to permit safe erection using normal lifting equipment. Normal pole-box weight range is 18-30kg. Any pole box under 13kg is probably not substantial enough.

● Should not be constructed from tropical hardwood unless the timber is certified as sustainably grown (FSC Approved).

● Within the box, a separate entrance hole into a small compartment so as to provide a secluded roosting space for an adult owl can be advantageous. (However, it should be designed so as to minimise the chances of this inferior cavity being used for nesting by Barn Owls).

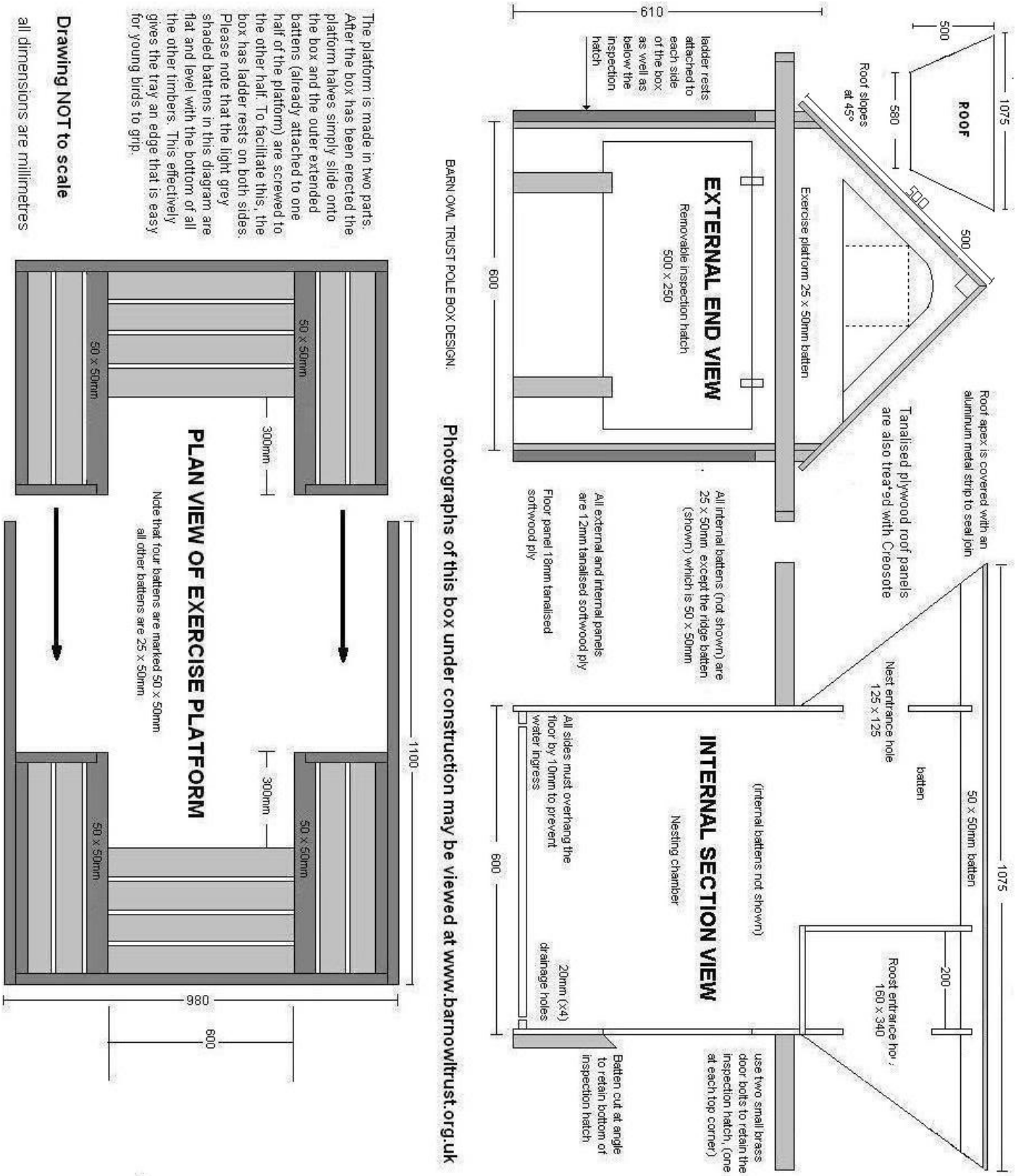
● Measures aimed at reducing the chances of entry by other species (such as Jackdaws) are to be encouraged provided that they do not significantly reduce the box's suitability for Barn Owls.

You can view the construction of a polebox here.

You can view a polebox bring erected here.

ALTERNATIVE PROVISION cont.

POLEBOX DESIGN



BARN OWL TRUST POLE BOX DESIGN.

Photographs of this box under construction may be viewed at www.barnowltrust.org.uk

The platform is made in two parts. After the box has been erected the platform halves simply slide onto the box and the outer extended battens (already attached to one half of the platform) are screwed to the other half. To facilitate this, the box has ladder rests on both sides. Please note that the light grey shaded battens in this diagram are flat and level with the bottom of all the other timbers. This effectively gives the tray an edge that is easy for young birds to grip.

Drawing NOT to scale

all dimensions are millimetres

PERMANENT PROVISION

How to make permanent provision for Barn Owls in a barn conversion or other development

Background

The loss of traditional agricultural buildings through unsympathetic conversion into dwellings has frequently resulted in the loss of roosting and nesting sites, many of which were available to Barn Owls for hundreds of years. Far from being the worst-case scenario, re-development can be a potential lifeline, safeguarding the site for future generations. Experience shows that Barn Owls can continue to use sites during the development phase and adapt to radical alterations, provided that their needs are catered for.

Barn Owls have lived alongside man for thousands of years and some old farmhouses have had owls in the attic for countless generations. Although they are rather shy, Barn Owls will readily occupy dwellings, or any other type of building, provided they can enter and hide unseen. The range of site-types they will use includes: churches and chapels, barns, houses, modern farm buildings, industrial units, ruins, hollows in trees, rock crevices and occasionally even mine shafts. For many years Barn Owls were actively encouraged into buildings, evidence of which can still occasionally be seen in the form of owl windows, usually in the gable ends of traditional agricultural buildings.

Not every building or tree is suitable and some basic requirements must be met. Obviously the birds must be able to get in and will sometimes use surprisingly small entrance holes. They must be able to perch out of sight somewhere that is always dry and for nesting they need an adequately-sized dry ledge or cavity. The vast majority of holes, perches and nests used by Barn Owls are more than three metres above ground level and low-level opportunities are generally ignored.

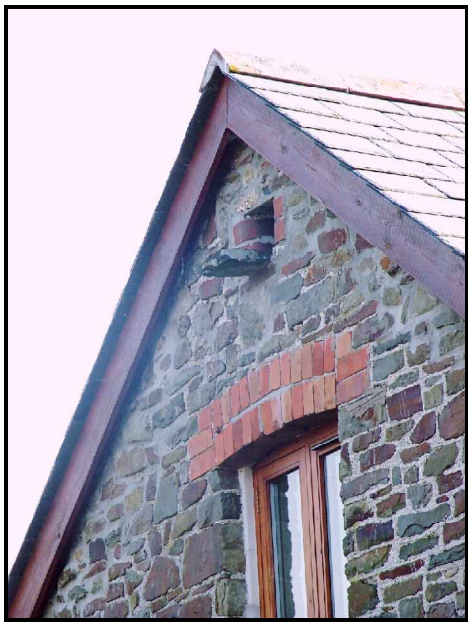
PLEASE NOTE: provision for Barn Owls should not normally be made within 1km of a motorway, dual-carriageway, or similar (if in doubt please seek advice info@barnowltrust.org.uk)

The importance of making a space for owls INSIDE one of the developed buildings

You may think that the best way to provide a long-term nesting place is to fix a wooden nestbox on the outside of one of the buildings or perhaps on a nearby tree. However, an outdoor nestbox will, at best, last about fifteen years so cannot be considered as permanent provision. You cannot be certain that such boxes will ever be replaced. Most traditional barns have been available for Barn Owls to use for hundreds of years. Making permanent provision means making sure the site continues to be available for at least another hundred years and this is why it really needs to be inside a permanent structure. However, there are lots of different ways in which permanent provision can be made and provided that the owls' needs are taken into account, you can choose exactly where and how you do it within your development.

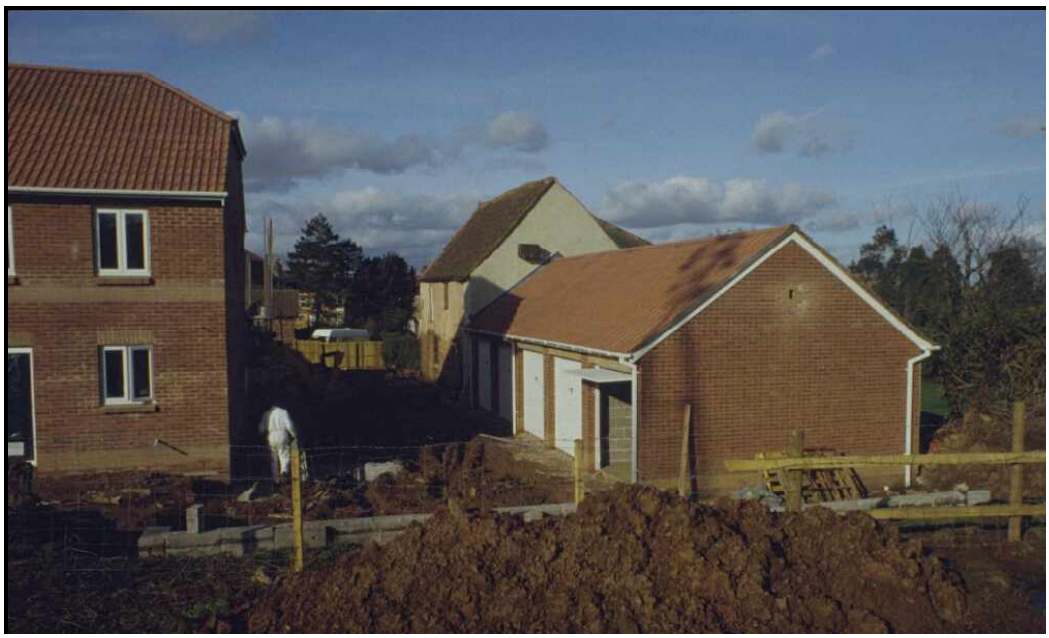
PERMANENT PROVISION cont.

Deciding on the best way to do it
First of all, check your wildlife survey report. If you employed an ecological consultant he/she should have recommended where permanent provision is made within the development. You may wish to take further advice or simply proceed once you've read the "essential requirements" and "positioning" information below.



In a single-building development it's simply a question of choosing the best place for the hole - the most suitable gable end, or part of the roof. In a group of buildings you should be choosing one of the tallest. However, provided that it is high enough (and meets the other requirements) the provision could be made in a new or redeveloped outbuilding such as a garage overlooking open countryside. Although most holes are incorporated into walls, owl holes have been successfully made through re-thatched roofs and through slate/tile roofs either by constructing a miniature dormer or fashioned in lead. The hole itself is quite small (see below) and the nesting space can be immediately inside the hole, you can create a tunnel that leads to the nesting space, or in the case of a large loft, the birds can fly from the entrance hole to a conventional indoor nestbox. If necessary, a tunnel or passageway can slope upwards to discourage the ingress of rainwater, or downwards, or turn horizontally. Where a nesting space is being built-in, you can make it any shape provided that it meets the "essential requirements" (see below).

If there is no residual loft space, then the box can be partly contained within the wall and the remainder incorporated into a room as an interesting feature. Provided that it is done properly there are no health, nuisance, or condensation problems. For viewing the owls, one-way glass and peep holes can be problematic. However, where a range of barns are converted for holiday accommodation, customers will often return year after year to watch the owls through a CCTV system or webcam. Please note that artificial lighting of nests or nest inspections have licence implications and the relevant Country Agency must be consulted.



PERMANENT PROVISION cont.

Positioning requirements - for permanent provision in barn conversions etc.

The owl hole should be at a height of not less than 3 metres above ground level and positioned so that it is easily noticed by a bird flying past over open ground (i.e. - not screened by other buildings or trees).

At sites with evidence of occupation by Barn Owls, the position of the owl hole and the proximity of the new nest-place should replicate (as far as possible) those already used by the bird(s). However, where birds may have been "forced" to use one of the lower buildings (because, for example, the larger buildings had no owl hole or no nest-ledge) the permanent provision should be made in one of the tallest buildings irrespective of which building birds are currently using.

Essential design requirements - for incorporating a nesting space (for Barn Owls) into barn conversions, other redeveloped buildings and new build

● Entrance hole: minimum size 100mm wide x 200mm high, optimum size 130mm W x 250mm H, maximum size 200mm W x 300mm H.

● Floor area of nest chamber: absolute minimum 0.4m^2, ideal size is 1m^2 (These dimensions are bigger than those for nestboxes because built-in provision usually lacks external exercise areas that would permit maximum wing stretching prior to fledging).

● Depth from bottom of entrance hole to floor of nesting area must be not less than 460mm.

● Interior must remain dry during prolonged heavy rain coming from any direction.

● Human access for easy clearing-out of nest debris is essential (probably once every 3-4 years or less).

● Measures aimed at reducing the chances of entry by other species (such as Jackdaws) are to be encouraged provided that they do not significantly reduce the box's suitability for Barn Owls.

● Should be substantially constructed and well-insulated against condensation and noise.

● Should not be constructed from tropical hardwood unless the timber is certified as sustainably grown (FSC).

● Hipped roofs, and pitched roofs where optimal siting of the access is through the roof rather than the wall/gable end, will require the use of a specially built miniature dormer or owl-hole 'tile'.

● Where the access is in a vertical structure such as a wall or gable end, there should be an external landing platform or perch below the entrance hole to facilitate the Barn Owls' arrival and departure.

● Owners of buildings with permanent provision in the roof space should also be aware of the following subjects: foraging habitat requirements, the need for clearing out debris so as to maintain internal depth, what to do if a young Barn Owl is found and human safety issues. See barnowltrust.org.uk