

Pole-box Design

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



LEAFLET No 50

Reg. Charity No 299 835

This leaflet describes how to make a Barn Owl nestbox suitable for erection on a large telegraph pole. The information includes plans, dimensions, materials, safety advice and erection tips.

Please note:

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. 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. See *Nestboxes for use in Barns & Other Buildings* (leaflet no. 3) and *Nestboxes for use on Trees* (leaflet no. 2).

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. 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. See *Habitat Management* (leaflet no. 1)

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 (such as Beech Martens and Stone Martens in mainland Europe) 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 ($\frac{1}{2}$ ") softwood ply, 25 x 50mm (2" x 1") tanalised batten and 30mm ($\frac{1}{4}$ ") 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 - $\frac{3}{4}$ " - 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.

You can see a cutting plan and watch a slideshow of a pole-box being constructed on our website www.barnowltrust.org.uk

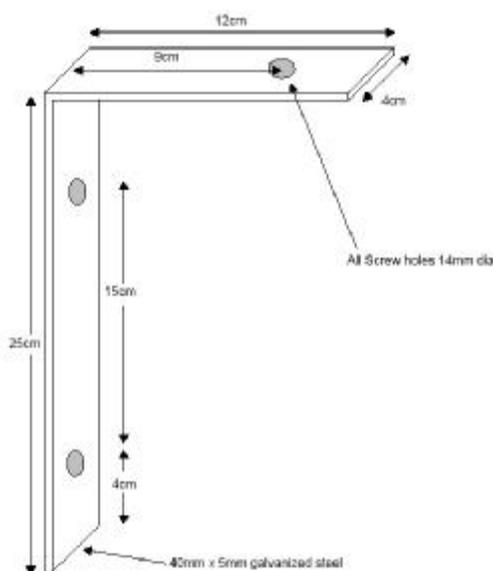
Siting the pole-box

Time spent in reconnaissance is seldom wasted. Please avoid siting your box within 1km ($\frac{1}{2}$ mile) of a dual-carriageway, motorway or similar modern road because of the high risk of road mortality. 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. Don't hide it between big trees or tall buildings – if an entrance can't 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. The ridge of the roof should lie north-south or northwest-southeast.

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's 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 and detailed criteria for the evaluation of Barn Owl nestbox designs may be found at:

www.barnowltrust.org.uk/infopage.html?id=231

Clearing out the box

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 every year. 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 tips

Before erecting your nestbox take time to consider the hazards you might face and what steps you could take to minimise the risks. Hazards might include: an injury at a remote location, falling from a ladder, injury from heavy lifting, dropping a nestbox onto another person, or poor positioning of a box resulting in additional hazards for anyone monitoring the box at a later date. The following are examples of precautions you should take to reduce the risks.

- 1 Don't work alone. If erecting a nestbox at an isolated site, let someone know where you are going and when you expect to be back before you set off. Carry a mobile phone if you have one.
- 2 Time spent in reconnaissance and preparation is seldom wasted. Never lift a box up into position until all preparatory work is complete. Double-check your measurements to confirm that the box will fit.
- 3 Ensure that any ladder you use is secure before climbing it. If possible tie it off at the top and bottom.
- 4 Avoid over-reaching - never attempt to carry out any task up a ladder if you cannot reach comfortably.
- 5 When planning how to position, support and fix a nestbox, try to create a situation where the box can rest in position without being held. This will allow you to have both hands free to fix it safely.

- 6 If carrying a nestbox up a ladder, ensure that it is kept low relative to your body (ideally not above waist height). This will keep your centre of gravity down. Try to keep the box in front of you or to the side - never hold a nestbox behind or above you.
- 7 You are responsible for your own safety - assess all the risks and be careful.

Please let us know when your box is occupied.

Good Luck!

© Barn Owl Trust 2008
latest edition 2010

The Barn Owl Trust is a registered charity dedicated to the conservation of the Barn Owl and its environment. You can become a **Friend of the Barn Owl Trust** and support our work by making a regular donation.

Friends receive our bi-annual magazine Feedback, our Annual Report and an enamel pin badge.

The Trust provides a wide range of free leaflets on Barn Owl related matters. For details of these and further information about the Trust and its work, please write including a large SAE to:

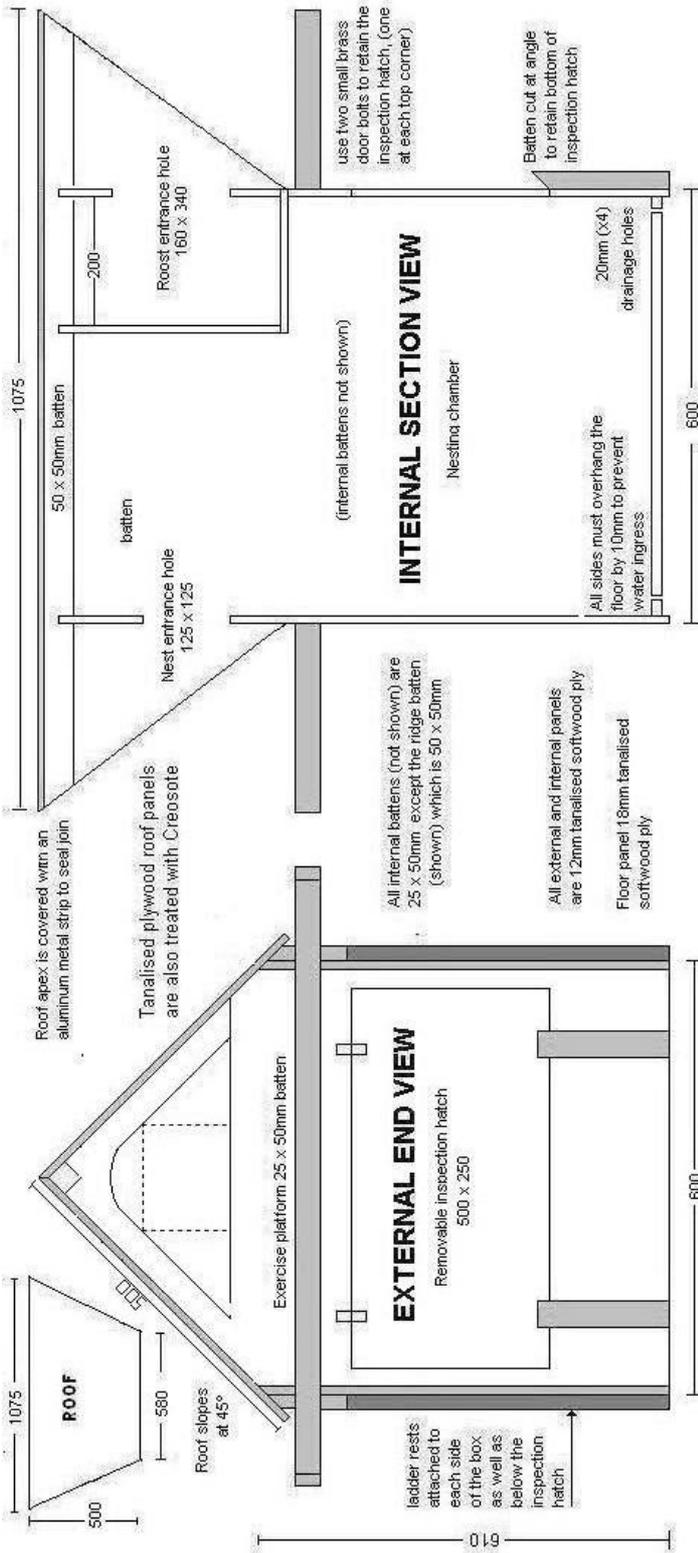
The Barn Owl Trust
Waterleat
Ashburton
Devon
TQ13 7HU

Tel: 01364 653026
Email: info@barnowltrust.org.uk
Web: www.barnowltrust.org.uk



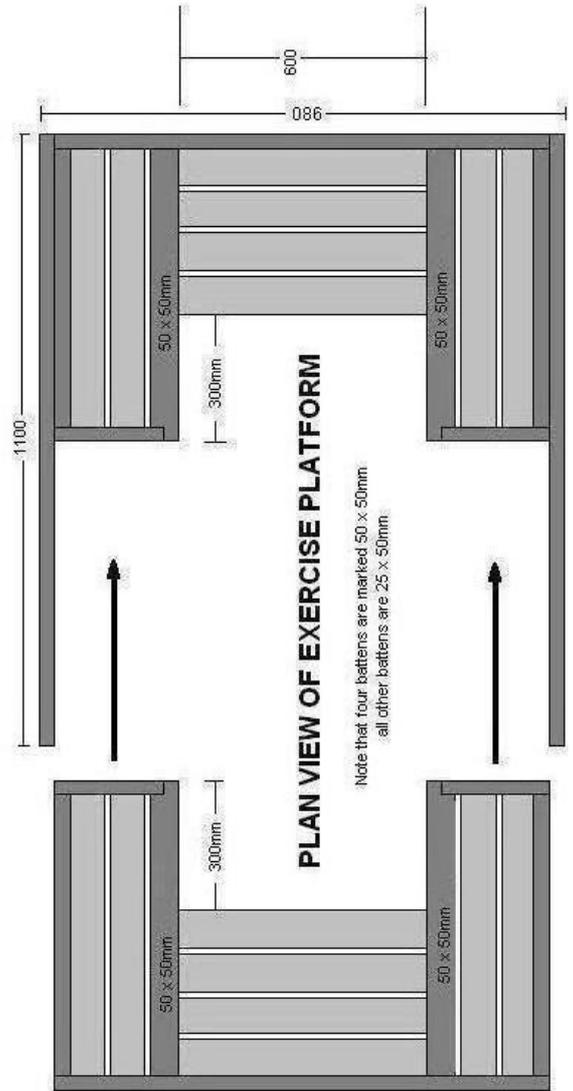


Leaflet No. 50—Pole-box design—an outdoor Barn Owl nestbox suitable for erection on a large pole



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

BARN OWL TRUST POLE BOX DESIGN



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

Restoring the Balance

We've lived side-by-side with Barn Owls for centuries. But in modern times wild Barn Owls have become increasingly rare - and the reasons are all man-made. The Barn Owl is a symbol of our relationship with the countryside: the decline of this beautiful bird reflects our attitude towards the environment. No species can prosper in isolation - not even human beings. All things are connected and if we lived in balance with nature then Barn Owls, and so much other wildlife, could thrive.

How you can help

You can help to conserve the Barn Owl by **Becoming a Friend** of the Trust and making an annual or monthly donation to support our work. If you are a UK tax payer and complete a simple **Gift Aid** declaration the Trust can reclaim the tax paid on your donation and significantly increase the value of your gift at no extra cost to you. Standing order and Gift Aid forms are provided below. Please consider paying by **Standing Order** as this greatly reduces our administration time and costs.

BECOMING A FRIEND

UK Friends: Individual £20; Family (same address) £25

Overseas Friends: Individual £25 (sterling); Family (same address) £30 (sterling)

Owlets: UK £20; Overseas £25. Owlets are Junior Friends. They receive a personal ID card, Feedback and goody bag. (If children are under 16, please state ages. One or more children from the same family at one address can be Owlets.)

Name(s) _____

Address _____ Postcode _____

Daytime telephone no _____ email address _____

I would like to become a Friend of the Trust and receive my Friend's pack - I enclose £ _____ * (see above)

I am pleased to enclose a donation of £ _____ *

*UK taxpayers please complete Gift Aid declaration below.

Sorry, donations of under £5 are not acknowledged without an SAE.

The contact details you submit on this form will be held by the Barn Owl Trust on a secure computer system and may be used by the Trust in pursuit of its aims. Please let us know if you object to this.

GIFT AID DECLARATION

If you are a UK tax payer completing this Gift Aid form will enable the Trust to reclaim the tax paid on your donation, thereby increasing the value of your gift at no extra cost to yourself.

Full name _____

Address _____ Postcode _____

I want the Barn Owl Trust to treat all donations I make on or after the date of this declaration as Gift Aid donations until I notify you otherwise

My signature _____ Date _____

Note: Please remember to tell us if you no longer pay an amount of income or capital gains tax equal to the tax we reclaim on your donations.

Please contact our office if you have any queries.

STANDING ORDER FORM

Name _____ Date _____

Address _____ Postcode _____

Please pay £ _____ on the first day of each **month*/year*** (* delete one) starting in the month of _____

and a like sum on the same date each **month*/year*** until further notice to the account of

the Barn Owl Trust (a/c no. 1027812) at Lloyds Bank (sort code 30-98-69) 31 Fore Street, Totnes, Devon TQ9 5HH

My signature _____ Account Number _____

To the manager _____ Bank _____

Bank Address _____ Postcode _____

THIS STANDING ORDER REPLACES ANY EXISTING STANDING ORDERS FROM THIS ACCOUNT TO THE BARN OWL TRUST

Please fill in and sign the appropriate parts of this form and post it to:

The Barn Owl Trust, Waterleat, Ashburton, Devon, TQ13 7HU

If you'd like to receive information by post, please tick the boxes below and enclose a large stamped addressed envelope:

- | | |
|---|---|
| <input type="checkbox"/> Sample of <i>Feedback</i> (our bi-annual newsletter) | <input type="checkbox"/> Fund-raising for the Barn Owl Trust |
| <input type="checkbox"/> Leaving a legacy to the Barn Owl Trust | <input type="checkbox"/> Barn Owl Trust publications (full details also on our website) |
| <input type="checkbox"/> Corporate sponsorship | <input type="checkbox"/> Barn Owl Trust sales goods (full details also on our website) |
| <input type="checkbox"/> Barn Owl adoption | <input type="checkbox"/> Consultancy/Site Assessment Service (full details also on our website) |
| (full details also on our website) | <input type="checkbox"/> Give As You Earn |