

Little Owl nest box design

With just over 100 records received per year, Little Owl nest monitoring is not nearly as popular as for other common owls, such as Tawny Owl (c.400 records per year) and Barn Owl (c.1,500 records per year). This is partly due to the fact that, with a few notable exceptions, efforts to erect Little Owl boxes meet with little success. However, Barn Owl conservationist, bird ringer and nest recorder Bob Sheppard may have found the solution.

Traditionally, Little Owls have not occupied nest boxes in great numbers in the UK. This has made monitoring the species quite difficult and so, in 1998, my father designed a box that fulfilled all the requirements I felt were necessary to attract them. The specification for the box was as follows:-

1. It had to be easy to make in quantity.
2. It had to have a dark nesting chamber.
3. The entrance hole had to be 70 mm.
4. There had to be a ducting system so that the owl felt it was entering a tunnel, similar to many tree nests I had found.
5. There had to be a large door which made access to the nest chamber for monitoring really easy.
6. The design had to prevent the young from falling out of the box prematurely.

The nest boxes were duly built and tested. The results were immediately encouraging and by 2008 my Little Owl nest box scheme had 32 breeding pairs, one of the most successful schemes for this species in Western Europe. Early monitoring indicates that this year there are likely to be 40 occupied boxes.

The boxes are mostly sited in old crew yards and isolated farm buildings, as the south and mid-Lincolnshire population seem to like these structures. It is most important that the boxes are placed in an open-fronted building—we have only two or three pairs in enclosed



Little Owls switch to provisioning earthworms whenever it rains. Photo by Bob Sheppard.

barns as Little Owls seem to shun dark places. The buildings they prefer often have breeding Barn Owls in the same complex. Only a few of our boxes are in trees.

Several features of the box design have made all the difference to their being occupied and to the ease of monitoring. Every box has a ring of Tippex painted around the entrance hole. If the box is occupied then the white ring will be discoloured; a fresh-looking hole means there is no need to waste time climbing a ladder and checking the box! From the entrance hole, there is a tunnel that runs to the back of the box, from where there is another hole that provides access to the nest chamber beneath. The effect of this tunnel is to make the nest chamber completely dark, which seems to be more attractive to the Little Owls. The nest chamber is covered in a layer of mini bark chips, as the owls don't generally nest on bare wood.

Some reference books suggest that Little Owls incubate from the first egg. My colleague who monitors the owls with me, Alan Ball, and I find that this is rarely true. The eggs would hatch asynchronously if that were the case, yet our chicks are usually uniform in size, except for an occasional runt. Furthermore, when monitoring early in the season, we often find part clutches of cold eggs with no adult present, though the nests are usually successful nonetheless. It appears that the females incubate after laying the penultimate egg, as is the case with Kestrels.

Little Owls are remarkable mothers. Of the birds we ring, the female Little Owl is the only one that will sit tight on the nest and allow us to pick her up to take measurements, such as wing length and weight. On placing her back on the nest, she will



Little Owls appear to like entering the nest box via a tunnel, with a resulting dark nest chamber. Photo by Bob Sheppard.

immediately settle and sit tight again. Occasionally, the male is in the box at the early stages of egg laying.

Our Little Owls don't travel very far, and the adults spend their whole life within the immediate area of their nest site. Many of our birds are old friends and we catch them every spring. This year we monitored a female on eggs that we first ringed as an adult in 2002 and have caught every year since in the same box; a consecutive run of eight years.

I have spent long periods of time photographing Little Owls at their nests, which has allowed me to observe their breeding habits closely. In South Lincolnshire, their prey is predominantly

invertebrates, particularly moths and beetles, but as soon as it rains, the birds switch to large earthworms. Rodents are unusual as prey. Last year, many broods failed at an early stage as there had been no rain, which suggests that earthworms are a staple part of the diet of chicks in our boxes.

All in all, Alan and I have been delighted with the success of our Little Owl boxes. I hope this article will stimulate other keen nest box builders to have a go. Needless to say, it is immensely rewarding to have this mercurial little bird nest in a box you've made and put up yourself.

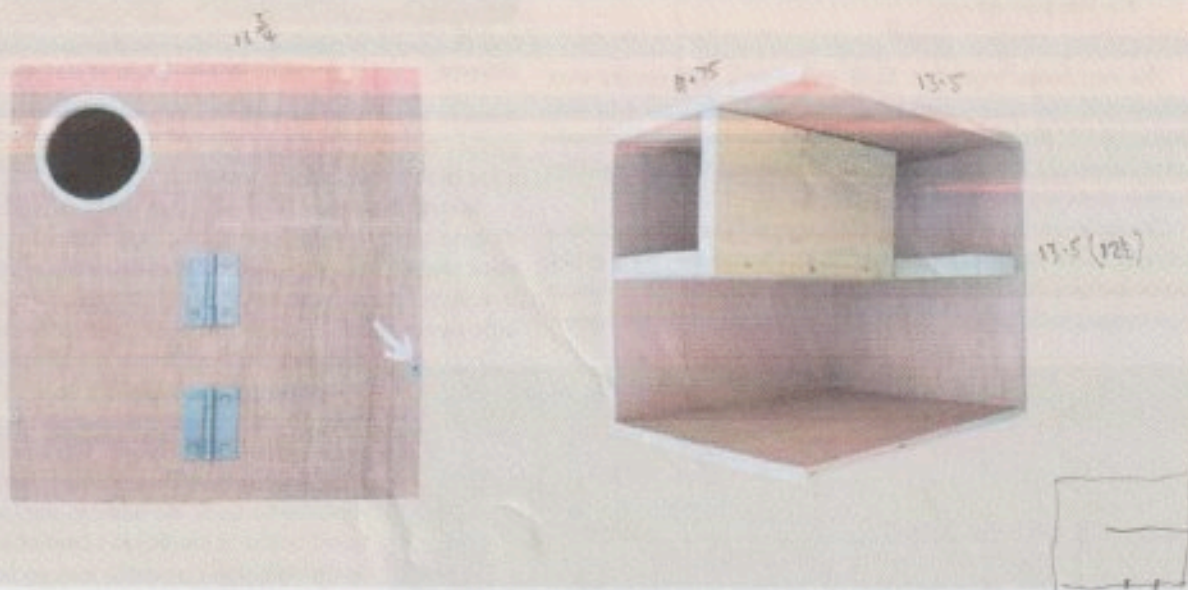
HOW TO BUILD A BOX

Four boxes can be made from a sheet of exterior plywood 8' (2438 mm) x 4' (1219 mm) by 0.5" (127 mm) thick. The front, back, base and roof are 11.75" (298 mm) high and 13.5" (343 mm) wide. The sides are 11.75" (298 mm) by 10.75" (273 mm). The door is 6.5" (165 mm) wide and 8" (203 mm) high.

The dimensions of the interior tunnel are not critical as long as they are somewhat wider than the 2.8" (70 mm) diameter entrance hole. My tunnels are 3.9" (100 mm) by 3.9" (100 mm) interior size. The gap at the end of the tunnel is 3.1" (80 mm) wide; this keeps the chamber nice and dark, which is the key to successful occupation.

I use about 25 screws, 1.75" (445 mm) long, to hold the box together. Each box costs about £8. If you are making lots of tree boxes then I would recommend using marine ply, which is far superior, though this increases the cost to £10 per box.

Two important features of the box design are a ring of Tippex around the box entrance (left below) and a tunnel leading from the entrance hole to the back of the box (right below).



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www.bto.org/goto/nrs.htm

Little Owl box based on Lincoln and other designs: 15.8.15

Modified to use 19mm marine ply.

Box to face SW screwed to a 24" x 4" x 19mm batten nailed to a tree.

Roof - 12.25" x 19" including 4" projection.

Bottom - 12.25" x 13.5"

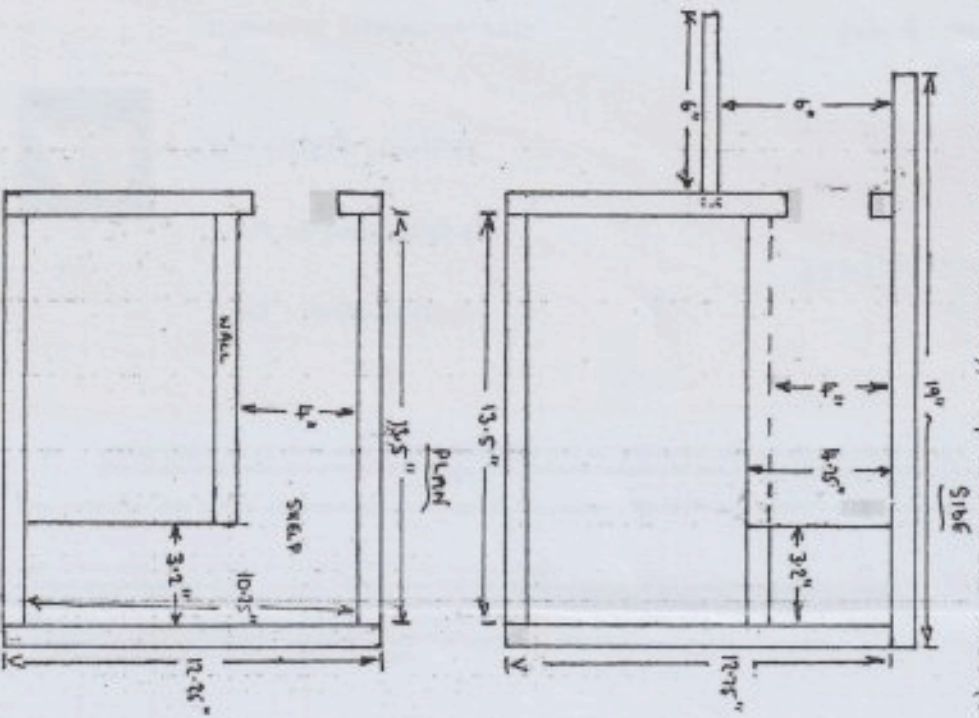
Front & Back - 12.25" x 12.75"

2 sides - 12" x 13.5"

Nails, screws, penny washers etc

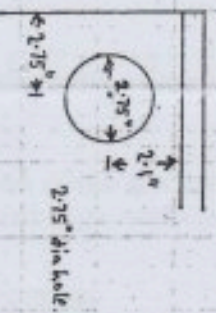
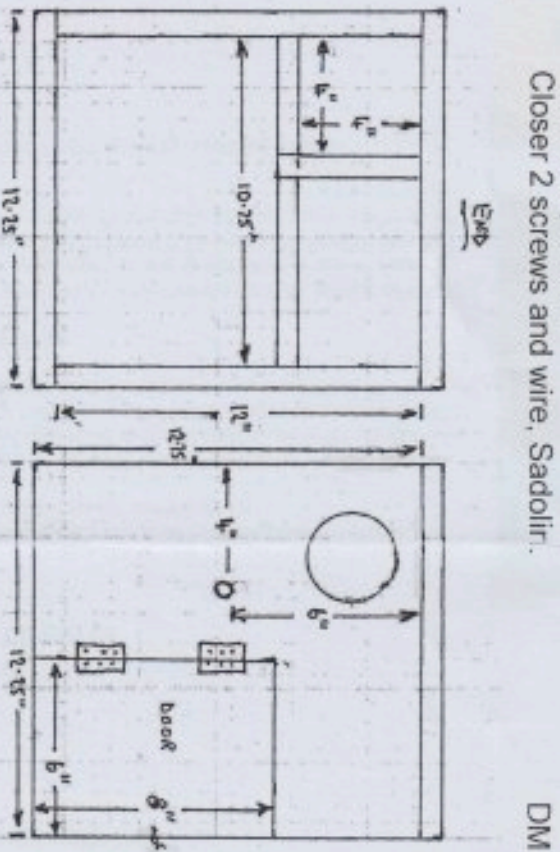
Note recommended: Front hole 2.75" (70mm)

Tunnel 4" x 4" 100mm, Gap at end 3.2" wide (80mm).



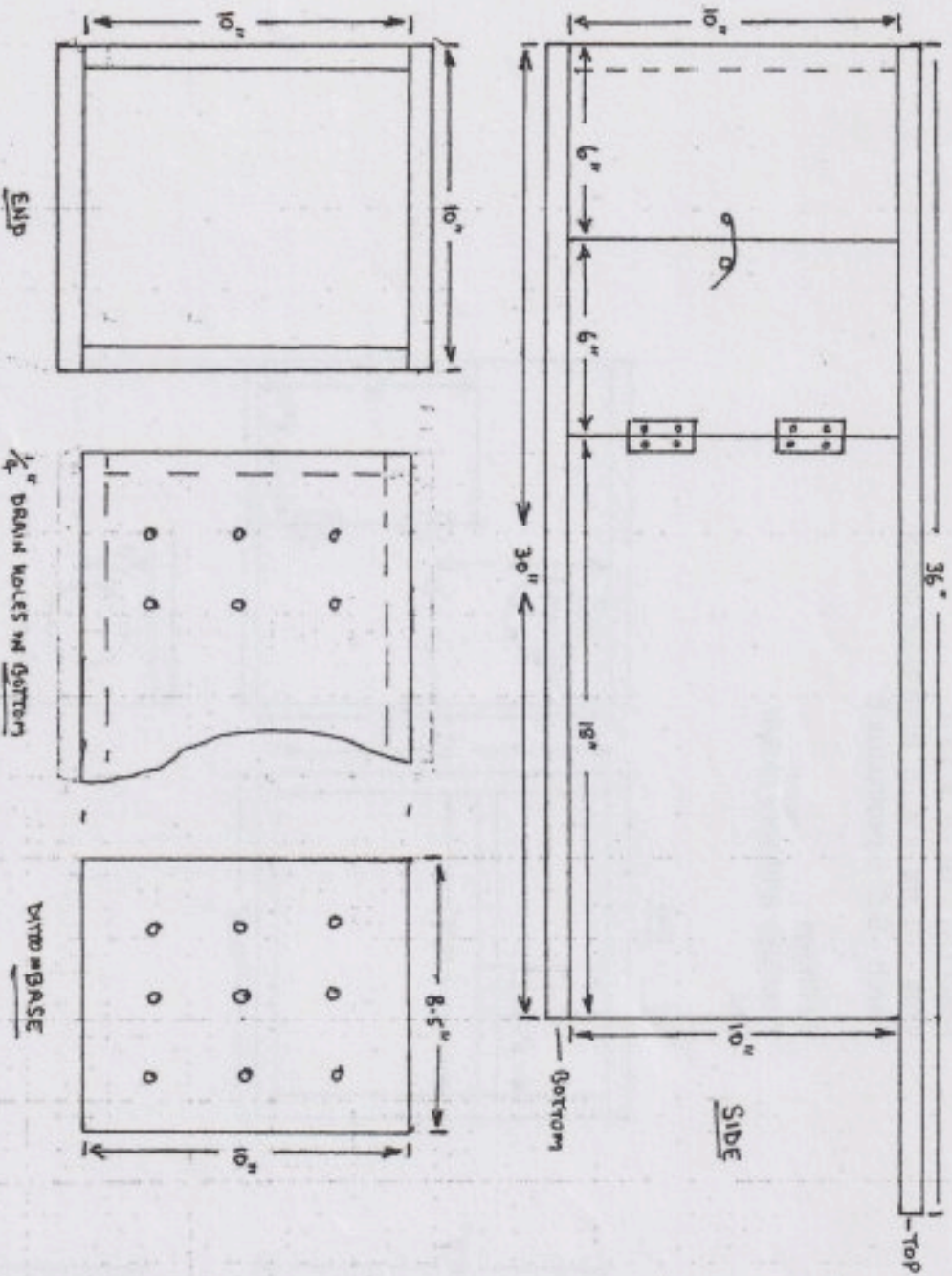
Shelf OA - 10.75" x 13.5"
 Wall - approx. 10.3" x 4.75" from shelf offset.
 Perch - 0.5" dia. x protrudes 6"
 2 Hinges

DM etc to provide:
 Closer 2 screws and wire, Sadolir.



Can we light proof the door?

Box screwed at 45 degrees to a 30" x 4" x 19mm batten nailed to a tree.



Roof - 10" x 36" including 6" projection.
 Bottom, 2 sides - 10" x 30"
 Base - 10" x 8.5"
 1 side cut for 6" door.

2 hinges, screws, nails, penny washers etc.

DM etc to provide:

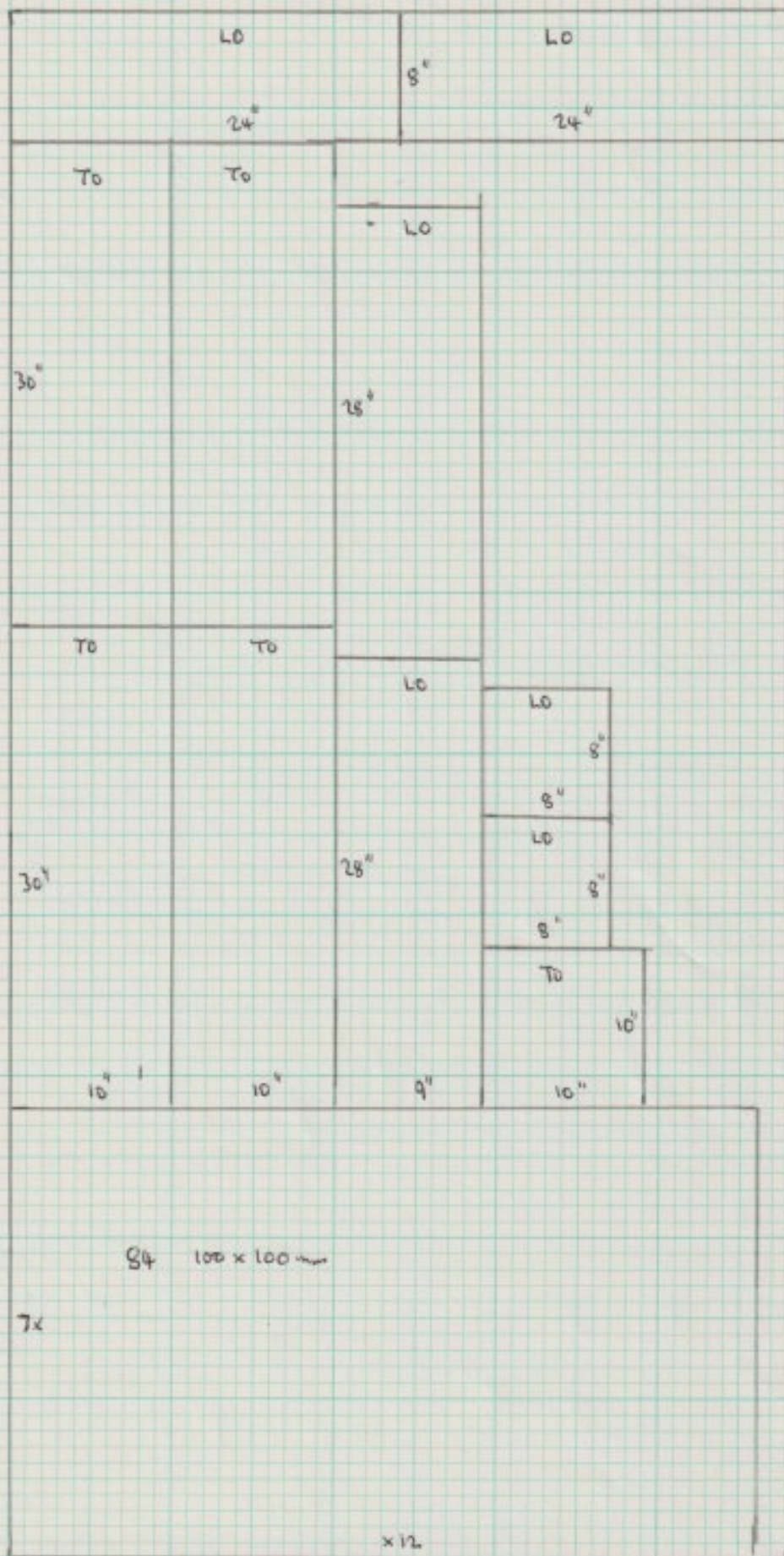
Perch - 3/4" x 24" hazel shoot -
 adjusted to reach branch fitted with straps to
 fix perch to underside of opening.

Closer 2 screws and wire.

Sadolin.

DM

25" MARINE PLY 4' x 8' (1,220 x 2440mm)



- 84 Name board back blocks
- 1 Towing Out box } slung beneath branches
- 1 Little Out box }

DM
17.7.15