

Korora nest box designs

Introduction

Little penguins/Korora readily use artificial nest boxes for breeding, moulting, and loafing. Over the years several different designs and modifications have been developed, and here we present them with some comments about the advantages and disadvantages to enable the selection of the most appropriate nest box for your area.

General comments

Tanalised wood is the most long-lasting material because nest boxes with the treated wood have been deployed for decades in various penguin colonies without having to be replaced due to rot. Some concerns have been raised that the treated wood could in some way harm the penguins. There is no evidence for this. You can find out a more detailed analysis of this topic [here](#)

Thicker wood is better. It is sturdier and will last longer. The disadvantage here is that it is more expensive, and it is more difficult to assemble the box, and therefore more difficult for children. If nest box building is a learning exercise for younger children, then tanalised plywood can be used. The children usually enjoy decorating the boxes as well, e.g., naming the box, signing their own names, drawing pictures on them etc.

Burying the nest boxes is not necessary for the penguins. However, nest boxes placed in public places should be camouflaged under vegetation or half buried and covered in litter or rocks to make them inconspicuous to the public so that unwanted attention is avoided.

When first placing nest boxes, it is important to have a good idea where the penguins are and what tracks they are using. Placing nest boxes within a meter or so off such tracks with easy access for the penguins allows them to find it easier. It's important to remember that the penguins must walk to their nest box, so hiding them in very dense vegetation makes it difficult for the penguins to find and use.

It's also important to consider erosion and possible waves in large swells. The boxes need to be placed well away from the danger of being washed away. If your penguin colony has a road nearby, never place a box on the landward side of the road. This invites the penguins to use a nest site that requires them to cross the road and puts them in danger of being run over.

Most nest boxes are accessed through the removable front half of the roof. In some circumstances the box placement (e.g., under a house or other structure, or bushes) could make accessing the nesting chamber difficult through the front half of the roof. In such a case, nailing shut the front half and make the back half removable for monitoring will facilitate access.

Oamaru design

The standard and most widely used nest box design was developed at Oamaru ([Houston, 1999](#)). It fits the whole penguin family (two adults and two chicks) comfortably and the entrance is wide enough for a pre-moult penguin to enter.



Figure 1: Oamaru nest box design deployed in penguin colonies at Pukekura in the open (left) and Wellington in vegetation (right)

Good points

1. The external tunnel prevents humans peeking in, a potentially stressful event for the penguins.
2. The front half of the nest box roof can be opened to examine the nest contents.
3. The penguins can easily be removed for micro-chipping and weighing.

Less good points

1. The lid can be removed by anyone causing disturbance by the public.
2. The penguins can easily be removed from the box by the public.
3. The thick wood makes this design difficult to assemble by children.
4. The tanalised, thick wood can be quite expensive.

Options

The lid can be nailed shut to prevent the public from accessing the nest site. However, this also prevents any monitoring of the box. Also, members of the public have been found to resort to lifting the whole box off the ground to access the penguins. This causes unacceptable stress to the penguins but can be prevented by using nailing stakes that are buried into the soil next to the box.

This design can also be used with tanalised plywood. It is thinner, easier to handle and therefore suitable for children to assemble. However, it will only last about five years, is prone to buckle with time. In the photo breathing holes were drilled into the front wall of the box. These are unlikely to be necessary in cooler climates but may reduce the temperature inside the box in warmer climates, especially if there no canopy overhead shading the box.



Figure 2: Oamaru nest box design built with tanalised plywood.

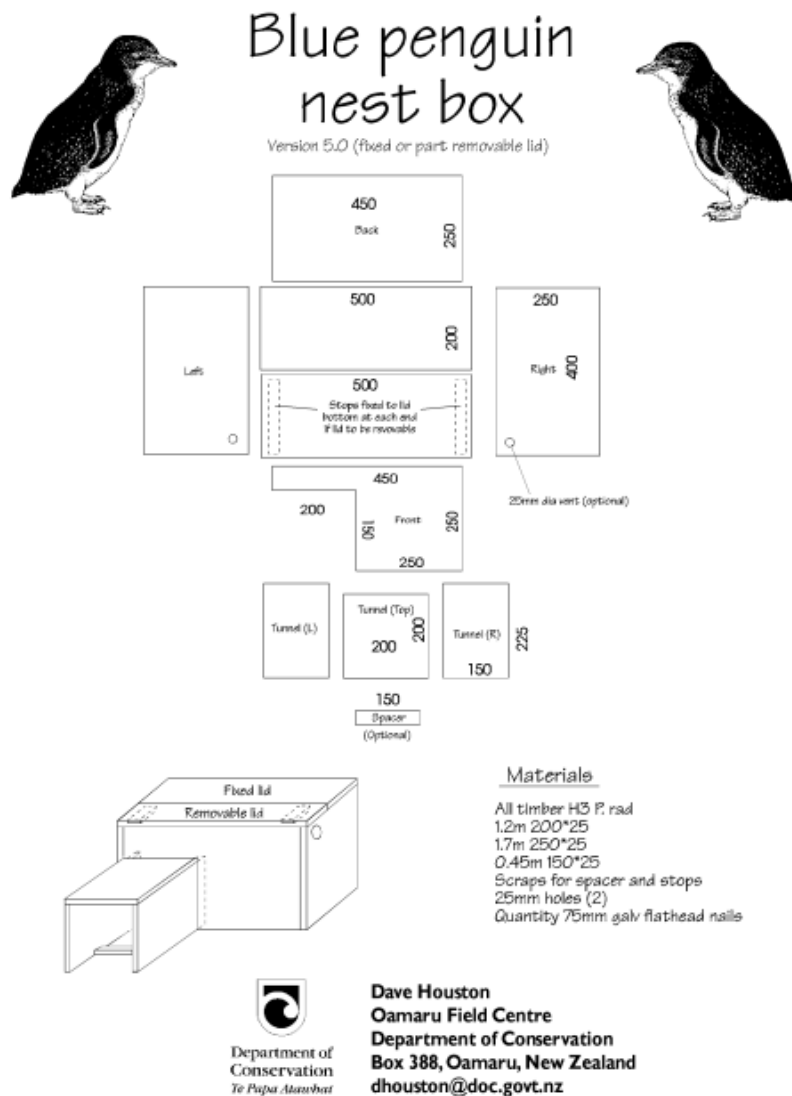
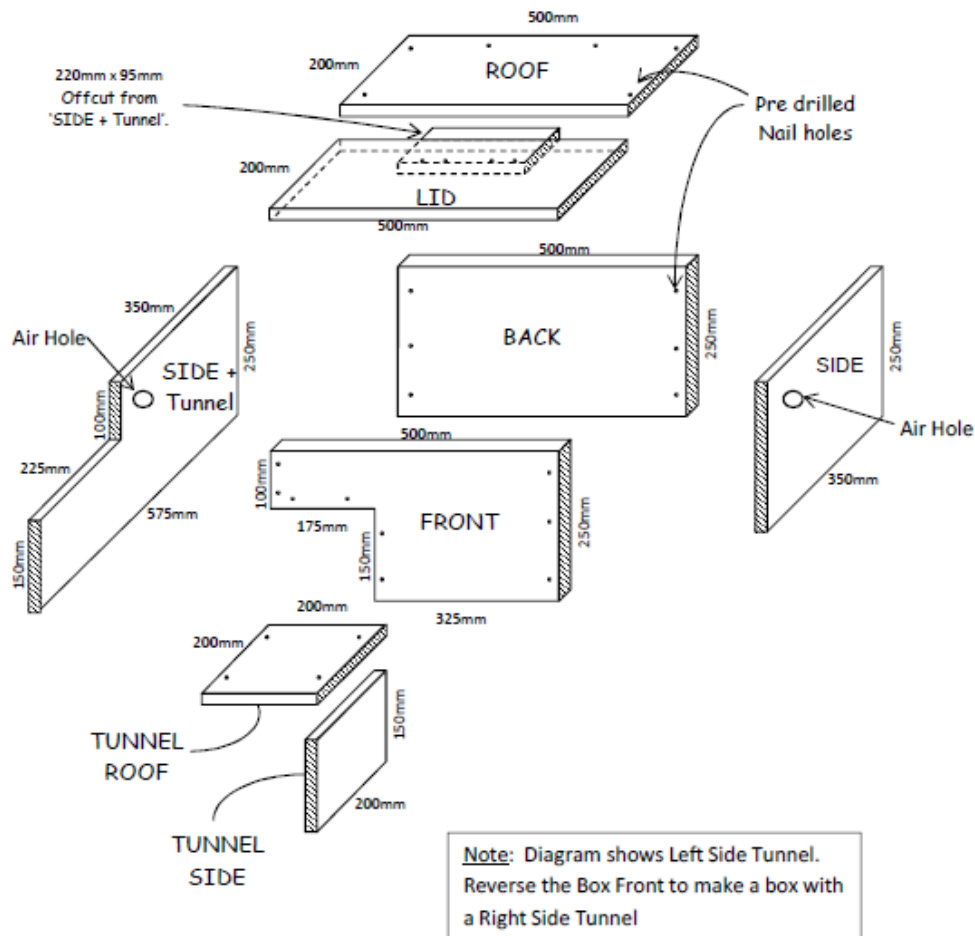


Figure 1. Nest box design

Figure 3: Dimensions of the Oamaru nest box design ([Houston 1999](#)).

Little Penguin Nest Box

Modified by Vince Waanders March 2011



ALL TIMBER: 25mm thickness. H3 Treated. Rough sawn. Pinus Radiata.	
ROOF	500mm x 200mm
LID	500mm x 200mm
FRONT	500mm x 250mm
BACK	500mm x 250mm
SIDE	350mm x 250mm
SIDE - Tunnel	575mm x 250mm
TUNNEL ROOF	200mm x 200mm
TUNNEL SIDE	200mm x 150mm

TIMBER REQUIREMENTS:		
	Timber for 1 Box:	Timber for 30 boxes:
250mm x 25mm	2025mm	60.75 meters
200mm x 25mm	1300mm	39.00 meters
150mm x 25mm	220mm	06.60 meters

Figure 4: Modification of Vince Waanders of Oamaru nest box design developed for the Matiu-Somes penguin colony ([click here for more info](#))