

## NILLUMBIK'S CONSERVATION CORRIDORS

NEST BOXES FOR PHASCOGALES: INSTALLATION AND MONITORING GUIDELINES



## Nest Boxes for Phascogales: Installation and monitoring guidelines

Nest boxes should ideally be installed in trees by a professional arborist who can ensure that the nest box is installed in a manner that does not affect the health of the tree. If you are installing the box yourself, please follow these guidelines:

- Nest boxes should be installed at a height of 3-4 metres above ground level. This will reduce the chances of predation by cats and goannas. The box needs to be accessible by a ladder and trees should be selected with this in mind.
- Fix the box to the tree using the roofing screw supplied and a battery-powered drill with the relevant sized bit. Alternatively, installation can be done by using the Habisure system (see Figure 1).

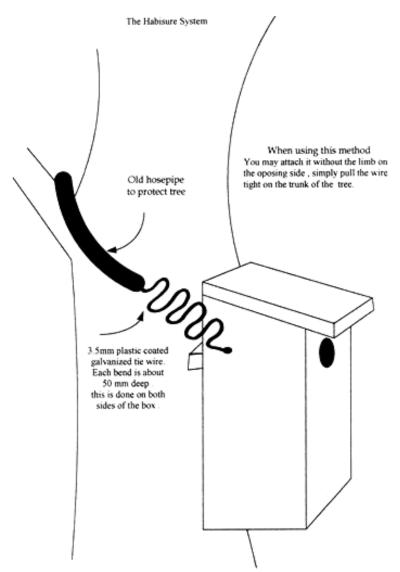
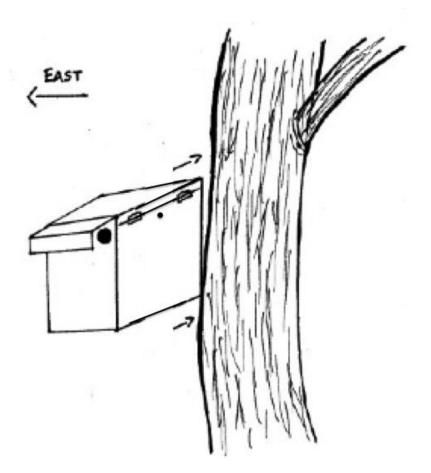


Figure 1: Example of the Habisure system of securing a nest box





**Figure 2:** Installation of the Phascogale nest box supplied by the St Andrews Men's Shed including the position of the nest box and entrance hole.

- It is very important to place the box so it faces east/south east/south to provide shelter from the sun and weather.
- For Phascogales the boxes should be placed in rough barked trees, where possible, rather than gum barked.
- Try to install them on larger trees, preferably with a diameter of at least 30 cm (12 inches) and a healthy canopy cover. However, do not place in trees that have existing hollows.
- Placing a nest box in the fork of a tree can help with support and allow access for the animal.
- Trees should be interlocking or have a canopy where the Phascogale can jump across to another tree (max distance 1m) so the animal does not have to traverse on the ground.
- At each site it is recommended that there should be three nest boxes and the distance between boxes should be no more than 5 m apart as this provides adequate boxes for Phascogales and Sugar Gliders otherwise the Sugar Glider will prevent the Phascogale from using the box.

- Nest boxes should be filled two thirds with nesting material consisting of dry shredded bark or similar.
- Bees can occupy some of the boxes. You can prevent this by fixing shag-pile carpet to the ceiling of the box which can make it difficult for bees to attach their honey comb.
- Nest boxes should be cleaned out every two years and new nesting material installed.
- Map the location of the nest box using a GPS. This will help with any record keeping or projects and will help you to find the box when you want to monitor it. Your Landcare group has access to a GPS that you can borrow.

## Monitoring of nest boxes:

It is preferable to use the most non-invasive method of studying an animal so as not to interfere with its behaviour and breeding success. Therefore if possible a pole mounted camera can be used to monitor nest boxes and if needed photograph inside the box.

If the use of a camera is not possible then best practice is:

- Always be safe and secure your ladder to the tree.
- Always work in pairs with one person holding onto the ladder.
- Place sock (or the like) in hole.
- Raise nest box lid and slide clear plastic plate over exposed lid (this prevents animals escaping and potentially being predated on).
- After observing contents of box, close lid and slide out plastic.
- Gently remove sock.
- Nest boxes can be checked yearly between January to late May. At other times, nest boxes may be checked for educational or communication purposes, but not during winter and spring to avoid disturbance to breeding.
- Observing the nest boxes at dusk is preferred

Alternatively you can monitor if the nest box is being used by doing the following:

- Head to the nest box approximately 10 minutes before sunset.
- Take a torch with you, but make sure to put **red cellophane** over the light which will act as a filter. This reduces any disturbance to the animal.



- Establish a sit and wait position within sight of the space between the nest box entrance and the host tree trunk (the entrance will be close to the tree trunk).
- The distance between your position and the box should be reduced according to your ability to keep still and quiet. You could be waiting up to 30 minutes. Very quiet and still observers can sit within 2m of the tree. However, larger groups of people will need to keep further away, up to 5m for example.
- You should be in place, quiet and still within 15 minutes of twilight (twilight times will generally lag sunset times by approximately 20 minutes). Local sunset times can be found readily on the internet such as <u>www.weatherzone.com.au/</u>
- Wait a minimum of 15 minutes past twilight to see if an animal emerges from the box.
- When movement is observed around the nest box opening, see if you can identify the animal in the natural light available by observing its shape and size (silhouettes are often great indicators of species).
- As a final measure, turn on your torch, but ensure you have red cellophane over the beam. Track the animal to identify distinguishing features. If an animal bolts for the canopy, try to resist the temptation to stand up and make a fuss (noise and movement will make these animals flighty).
- If you have time, turn your torch off and wait for another five minutes to see whether you can spy another individual exiting.

## **References:**

Lewis, M. Long term nest box study in the Bendigo area. Bendigo Field Naturalists Club

McMullan, B. 2012. *Nest Box Monitoring Field Guide*. Yellow Box Woodland Project Nest Box Program, Connecting Country.

