

Nest box for the Australian Owlet-nightjar

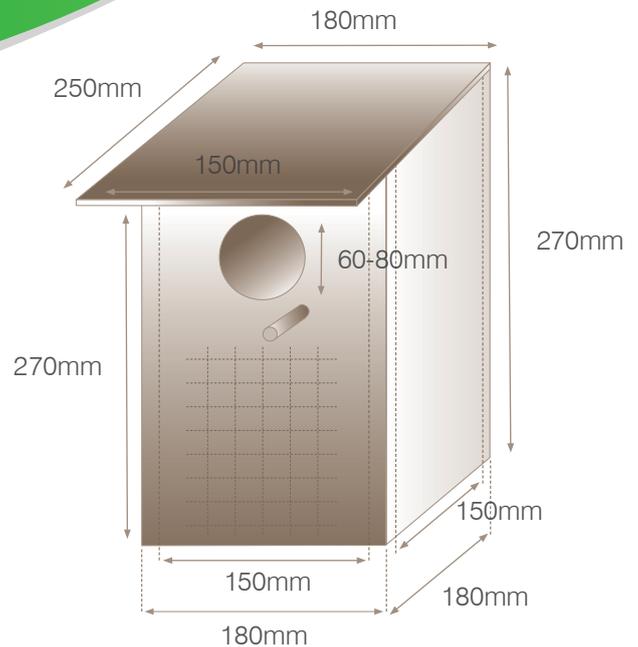
The Australian Owlet-nightjar is the smallest nocturnal bird found in Australia measuring just 23cm long. It has two different plumage colourations: rufous and the more common grey. In both forms the birds are paler below, and are faintly barred with black. Australian Owlet-nightjars mate for life and raise one clutch per season. Both sexes construct the nest on a bed of green leaves, incubate the eggs and care for the chicks. Breeding occurs from July to December, with 2 to 5 eggs being laid and incubated for 28 days. Fledging occurs after 28 days.



Photo by Akos Lumnitzner

Habitat Information

The preferred habitat is almost any tree-studded area with suitable hollows. In urban areas they will be more likely to be found in areas with remnant bush nearby. Pairs set up a territory they occupy year-round and during the day they roost in hollow branches and tree trunks. However, it is important to remember that installing a nest box will be most successful if you provide habitat and food in your garden that is suitable for the bird. Owlet-nightjars feed at night on a variety of insects, especially grasshoppers, beetles and ants. Therefore to attract Owlet-nightjars to your garden, try planting a variety of insect-attracting native shrubs.

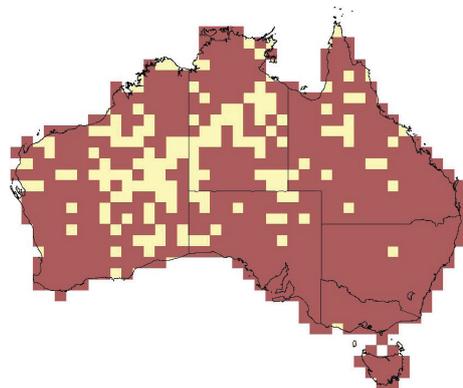


Shapes needed (based on 15mm thick timber)

- Front and Back: 2 x rectangles 270mm x 180mm
- Sides: 2 x rectangles 270mm x 150mm
- Base: 1 x square 150mm x 150mm
- Top: 1 x rectangle 180mm x 250mm

Special Notes

Australian Owlet-nightjars will use nest boxes as daytime roost sites all year round – so don't just leave the box in place for the breeding season. Unless you see an introduced bird moving into the nest box, resist the urge to lift the lid and look inside. If you disturb the birds then they may abandon their nest. Only open the lid to remove unwanted invaders.



Distribution of the Australian Owlet-nightjar

Materials Needed

- Timber at least 15mm thick (for adequate insulation). If you use thicker timber, please adjust the dimensions of the nest box appropriately. It is best to use untreated recycled wood, such as off-cuts or plywood, or plantation-grown wood, rather than using unsustainably harvested timber. Never take hollow limbs or branches from the wild. (Note: if using plywood, use glue and nails to assemble your box)
- 5mm timber dowel for a perch (note: this is an optional addition)
- Wood glue (something odourless)
- Galvanised screws
- Stainless steel piano hinge (x 2)
- Hook latch and eye
- Wire mesh
- Metal staples
- For wire attachment (method 1): wire or vinyl-covered clothesline (ensure you have enough to fit snugly around the tree) and a piece of garden hose
- For mounting strip attachment (method 2): A piece of timber 470mm long and 90mm wide, plus 100mm galvanised screws

Tools Needed

- Hole drill bit (for 60-80mm hole) and power drill
- Saw
- Hammer
- Screwdriver
- Stapler
- Non-toxic paint or sealant
- Safety glasses and dust mask
- Coarse sandpaper (or a rasp)
- Linseed oil
- Ladder

Construction

1. Cut out shapes

- Wearing safety glasses and a dust mask, use the saw to cut out all of the required shapes for the box.
- Label each panel with pencil (on the inside) so that you can keep track of each part.
- Paint the outside and edges of each panel with non-toxic paint or sealant. Leave the inside face of each panel raw.

2. Add features to the panels

- Front panel: use your hole drill bit to cut a hole 60-80mm in diameter. The hole should be in the middle of the panel, a couple of cm from the top.
- Front panel: staple a ladder made of wire mesh to the inside of the panel. This will allow the young birds to climb out of the box. Ensure there are no sharp edges.
- Front panel (optional): to fix a perch to the front of the nest box, drill a 5mm hole through the panel approximately 70mm below the nest box opening. Place wood glue in this hole and then insert the 5mm timber dowel from the outside of the panel until it is flush with the inside. Allow to dry.
- Back panel (for attachment method 1 only): drill 2 small holes evenly spaced and approximately 1/3rd of the distance from the top of the panel. Feed the wire or vinyl covered clothesline through both holes from the inside of the back panel.
- Back panel (for attachment method 2 only): Place the mounting strip along the middle of the back panel (running top to bottom). Secure to the box with screws from the inside. Pre-drill a hole at the top and bottom of the mounting strip.
- Bottom panel: drill 5 small holes into the bottom panel for drainage.

3. Put the box together

- Glue the side panels to the outside edges of the bottom panel and secure with screws. Use at least 3 screws per

panel face for the entire box. Repeat for the front and back panels.

- Use the piano hinges to attach the top panel to the back panel (fit one on either side of the backing. This will allow you to lift the lid to inspect the nest box.
- Fit a hook latch and eye to stop the lid from blowing open in a strong wind.

4. Final touches

- Ensure there are no protruding screws or staples.
- Use coarse sandpaper or a rasp to rough up the front panel of the box so that the birds can grip.
- Treat the outside of the box with linseed oil to help it last.

Installation

Ideally boxes should be installed on large, mature trees, close to or on the main trunk. Install the box as high as possible to prevent predation but low enough to be safely accessible for monitoring and maintenance.

For this species the ideal height for the box is 5 metres. Obviously many people will not possess the equipment necessary to be able to safely access these heights, and so we recommend that you place the box at the highest point you can comfortably access.

Choose a position for the nest box that:

- faces north or north-east and away from prevailing winds and night time lights
- has a limb on the opposite side of the trunk so the hose-covered wire will rest in the fork (for attachment method 1).

Ensure that you use appropriate safety measures when installing the box. Never use a ladder alone and use a pulley system to raise the box to the installation location

To limit cat and rat predation, try placing a smooth collar of metal or plastic around the base of the tree.

Attachment method 1:

Cut a length of garden hose that will fit almost the entire way around the tree. Cover one piece of the wire/clothesline at the back of the nest box with the garden hose, leaving a small piece of wire at the end uncovered and a short piece of wire/clothesline protruding from the other side of the box. Wrap the hose around the tree (sitting snugly and in a fork). Twist, tightly knot or otherwise secure the wire/clothesline (make sure it won't work loose). The garden hose will not cut into the tree but adjust each year as the tree grows.

Attachment method 2:

- Use the galvanised screws to secure the box to the tree through the predrilled holes at the top and bottom of the mounting strip.
- If you remove the nest box, be sure to also remove the screws.

Maintenance

Regularly observe your box to make sure that the intended species has not been driven from their nest by introduced birds, and always contact an apiarist if honeybees take over the nest. If introduced birds (like Common Mynas or Starlings) move in, remove their nesting material and any eggs. You may need to repeat this more than once. If they are persistent, cover the hole for a while.

Remember that trees grow in girth as well as height, and be sure to check the fixings on the box every year or two to adjust for growth.