

# How to ... build a nesting box

Many of our native animals rely on the natural hollows of old trees for nesting, shelter and hibernation. The clearing of Australia's original bushland has resulted in huge losses of these natural nesting hollows. In addition, the removal of dead trees and limbs for firewood has further contributed to the decline in suitable hollows. This has impacted many of our bird and mammal species, with numbers of most animals declining.

Nesting hollows can take up to 80+ years to form. So while we can plan to leave more trees for the future it still means that our birds and animals are struggling to find a home. It's important that we conserve existing hollows in living and dead trees.



So what can we do? We can mimic natural hollows by installing nesting boxes to provide homes for birds, bats and possums. By installing these important boxes you are creating more opportunities for native birds and animals to nest and breed. You'll also be giving them someplace else to live - apart from your roof.

For a nesting box to recreate habitat for possums, birds and bats, we need to understand the natural features of tree hollows. In the summer, hollows have their own natural air-conditioning, provided as live trees transpire. In winter it is also considerably warmer within a natural hollow compared to outdoor temperature.

There are also different types of boxes for different types of animals. Obviously some possums are bigger than some birds so will need a different size box. In addition, some animals and birds prefer a deep hollow while others prefer a longer, horizontal hollow.

## **Possum Boxes**

Most common species of possum readily use nest boxes, minimising the risk of one taking up residence in your roof. The smaller Common Ringtail Possum tends to make a leaf nest in the branches of trees, but will utilise hollows during the wetter periods of winter and spring. The larger Brushtail Possum seeks out a hollow to shelter by day, every morning before dawn.

## **Bird Boxes**

The size of your bird box and its entry hole will depend on the species you want to attract. Some birds – like rosellas, red-rumps and many parrots – prefer vertical nesting while others – like pardalotes, ducks and kookaburras – prefer horizontal hollows.

## **Bat Roosting Box**

Bats may use roosting boxes during the day and during the winter months when they hibernate. Bat boxes are designed with a landing pad at the bottom of the box so they can crawl up inside.

Have a look at our Nesting Box Size Guide to find out how big your nesting box needs to be.

For more information on how you can help our environment, or to make some suggestions of your own, please go to [www.coolaustralia.org](http://www.coolaustralia.org)

# Nesting box size guide

SPECIES	SIZE OF BASE	HEIGHT/DEPTH	SIZE OF ENTRY (diameter)	VERTICAL OR HORIZONTAL PLACEMENT	HEIGHT IN TREE (metres)	NESTING SEASON
Bat	70-100 x 150-240mm	200-250mm	15-20mm slit	Vertical		
Glossy Black-Cockatoo	300mm	870-100mm	160 x 200mm	Vertical		
Southern Boobook			150mm	Horizontal		
Brush-tail Possum	320mm	400mm	120-150mm	Vertical	4-8m	Autumn
Little Corella			150mm			
Long-billed Corella			150mm			
Australian Wood Duck	200mm	500mm	120mm	Vertical		
Pacific Black Duck	450 x 300mm		120mm	Horizontal		
Galah	200mm	650mm	120mm	Vertical	6m	Aug-Nov
Squirrel Glider			60mm			
Sugar Glider	250mm	300mm	50mm	Vertical	4-8m	Jun-Dec
Nankeen Kestrel	400mm	750mm	100mm	Vertical	5m	Aug-Nov
Sacred Kingfisher	130mm	600-900mm	75mm	Horizontal	5-10m	Sep-Mar
Kookaburra	300mm	500mm	>130mm	Horizontal	5-10m	Sep-Jan
Lorikeet	120mm	600mm	60mm	Horizontal	5m	Aug-Jan
Barn Owl	400mm	750mm	Open	Horizontal	5m	Aut-Spring
Australian Owllet-nightjar	100-150mm	300-350mm	60-80mm	Vertical	5m	Sep-Dec
Pardalote	120mm	400-500mm	30-45mm	Horizontal	5m	Jul-Jan
Red-rumped Parrot	100mm	600mm	75mm	Vertical or Horizontal	5m	Aug-Jan
Ringtail Possum	250mm	350mm	80mm	Vertical	4-8m	Apr-Nov
Rosella	120-150mm	>400mm	70-120mm	Vertical or Horizontal	5m	Sep-Jan
Crimson Rosella	150-200mm	350-800mm	75-100mm	Vertical or Horizontal	5-6m	Sep-Jan
Grey Shrike-thrush	150-200mm	200-300mm	150mm			
Welcome Swallow	130mm		Open	Horizontal		
Chestnut Teal	450 x 300mm		80-100mm			
Grey Teal	450 x 300mm		80-100mm			
Treecreeper	90-150mm	100-150mm	50-80mm	Vertical		
White-throated Treecreeper	75-100mm	300-400mm	50-70mm	Vertical	5m	Aug-Jan

Information from Birds Australia

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## How to construct your nesting box:

- The best material is 12mm plywood or untreated pine. These are reasonably hardy and not too expensive (try asking for cover sheets or seconds). The wood needs to be at least 10mm to provide some insulation. Do not use wood such as particle/chipboard that will start to fall apart after the first rains or koala fight!

- Use screws and wood-glue to hold the construction together. They will last longer and hold more weight than nails.

- The wood does not have to be smooth. Most animals not owned by Hollywood starlets are used to roughing it. However, a good coat of sealant and/or UV resistant paint on the exterior will help the box last for years longer. Be sure to seal the edges, as that is where water gets in and damages the box. Choose a colour that blends in with the surrounding bush (dark browns and greens work well, bright pink not so much).

- If you are making a box for possums, we suggest attaching some wire mesh (no sharp edges), on the inside AND outside of the box under the hole to help juveniles climb up to the exit. Alternatively, a small branch fastened flush to the outside of the box, under the entrance hole will give the possum something to grab onto while entering and exiting their home.

- Baffle: This is a screen that hides the entrance hole from view, and stops Mynas and Starlings from occupying the box because these birds don't trust air traffic control and will only choose hollows they can fly directly into (see Nesting Box Construction Guide for details).

- Don't let the animal near their new home until the paint smell has disappeared: animals that are high on fumes in your backyard are not what you want. If you are trying to attract a possum, you can put some fruit in the box (or a good looking female possum) but few good homes will remain empty for long if there are animals in the area.



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## More info about your nesting box:

If you haven't already, find out what bird and animal species are native to the area. This is an important step because nesting boxes come in different sizes to suit different animal species (download our 'Nesting Box Size Guide'). You can buy them ready made but we recommend building one of your own.



**Installing Nesting Boxes** - When installing a nest box remember to locate it high enough to avoid threats from dogs, cats, rats and foxes (4-8m), but still at a height where the box can be maintained. The box entrance needs to face away from the hot westerly sun, and also positioned to avoid the wettest winds. Fixing an artificial hollow under a leafy canopy will also provide natural shade.

**Maintaining Nesting Boxes** - It is important to remember that nesting boxes for all native species require some management. You will need convenient access to the box with a ladder and will need to remove the eggs and nestlings of introduced bird species (e.g. Common Starlings, Sparrows and Mynas) as well as destroying and removing feral Honeybees that may take up residence. You may need to monitor the nesting box so that you are aware of which creatures were using the box, so that you don't disturb any native species while carrying out maintenance.

**Complementary Planting** - Ensure that large remnant trees on your property are a lasting feature in your backyard, as they provide important hollows for our wildlife. Planting locally native, dense prickly shrubs as under-storey around trees with hollows can deter predators. Locally native flowers and native grasses that have fruits and berries are also important food sources not just for the animals using your nest boxes, but many other local species as well (download our "How to ... plant a native garden" fact sheet).

By considering the following principles (from [www.backyards4wildlife.com.au](http://www.backyards4wildlife.com.au)) when gardening, you can help contribute to a better local environment while at the same time conserving our local flora and fauna, creating important habitat, reducing your maintenance costs, and reducing the threat of invasive environmental weeds.



## The five principles:

1. USE LOCALLY NATIVE PLANTS.
2. USE PLANTS THAT ARE A RANGE OF HEIGHTS.
3. PROVIDE FLOWERS THROUGHOUT THE YEAR.
4. MANAGE YOUR PETS RESPONSIBLY.
5. MINIMISE CHEMICAL USE.

## Related fact sheet:

Nesting box construction guide  
How to ... plant a native garden

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