

BELLO BIO BLOG

NO 1

NEST BOXES FOR WILDLIFE



Tree Hollows

- Every creature needs a safe dry place and tree hollows are a valuable resource for many species.
- In Australia there are 300 vertebrate species that use tree hollows, including over half of the microbat species.
- Each hollow is unique. Size, shape, depth and other factors will determine how a hollow will be used and by what type of animal.
- Hollows can provide refuge during weather events, protection from predators and essential roosting and breeding sites.
- It is important to make sure existing natural hollows are protected and we support the regeneration of trees that will form wildlife homes in the future. Nest boxes will never fully replace a hollow.



Nest Boxes



Nest boxes can be a suitable addition to assist displaced wildlife after a natural disaster or habitat clearing.

A nest box must be designed carefully and specifically for each species, and its placement carefully considered. Dimensions, entrance size, construction materials, location and aspect are all important.

There are four steps to consider before installing a box.

Image: Nestbox for microbats

Bello Bio Blog No 1. Nest Boxes for Wildlife (cont)

Site Selection

- Always get permission from the landholder before putting the nest box up.
- Identify what hollow-using fauna occur in your area. Species can be identified by doing night time spotlighting, or online via the [Bionet atlas](#).
- Make sure there are other resources available at the site that your target species will need, such as fresh water, a reliable natural food source, and safe areas in which to forage, shelter and socialise.
- Is the site suitable for a nest box? Providing habitat for some species within urban development or adjacent to busy roads is not recommended.



Suitable locations for nest boxes include:

- areas of native vegetation, ideally connected to other areas of native vegetation
- areas with feed trees
- areas with minimal threats from traffic and domestic animals
- areas away from artificial light sources.

Box Design

- Make sure the construction method and design are suitable for your local weather conditions. Materials are important to provide insulation and minimise temperature variations.
- Nest box design varies between species. The main design elements influencing use include; entrance size, box volume, hollow depth below entrance and wall thickness.
- Many mammals form communal nests, therefore the internal dimensions if a box for these species must be large enough to accommodate multiple individuals.
- If invasive pest species, such as Common Mynas or bees are a risk, exclusion may be possible through appropriate designs.
- Rear entry boxes will exclude birds while still allowing gliders to use the box.
- Front entry boxes with baffles across the entrance can be effective in excluding Mynas.
- Carpet attached under the lid or an insecticidal cattle tag may exclude bees from taking up residence.



A range of suitable nest box designs can be found at:

https://www.ils.nsw.gov.au/_data/assets/pdf_file/0006/656610/GS-LLS-Wildlife-Nest-Box-10-2017-Accessible.pdf

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Installation of Boxes

- Boxes should be installed at a height of 3-4 meters. Installation can be very dangerous. Make sure installer is able to do this safely with the right equipment.
- Install in a tree species preferred by the target animal.
- Face the nest box away from prevailing winds if possible.
- Ensure the nest box is shaded during the heat of the day (11 am-3pm) to avoid overheating. Where canopy is sparse or after a bushfire, place the box on the eastern side of the tree to avoid afternoon sun.
- If the box is for a threatened species you may need a scientific license.
- Boxes should be attached to the tree using wire or chain inserted into a hose or similar object to protect the tree. Putting Kinks or bends in the wire will allow the wire to stretch as the tree grows. Boxes should not be attached to the tree using bolts or screws as this can damage the tree.

Maintenance and Monitoring

- The individual, community group or organisation installing the nest box has the responsibility to monitor and maintain the nest box over time.
- Monitoring nest boxes is important to ensure there are no problems that reduce their use such as damage to the box or tree and uptake by undesirable residents, and to record their use by wildlife,
- It is important to keep a record of where boxes are installed. This will help to direct the placement of boxes in the future based on suitability.
- Nest boxes can attract feral birds and bees or attract native predators.
- Monitoring methods:
 - Take a photo of animals in your nest box to record box use and identify animals.
 - Use binoculars from a distance to monitor usage
 - Observe boxes at twilight when nocturnal inhabitants are leaving boxes
 - Look for evidence left in or around boxes such as scats, food scraps or eggs.
 - Some gliders and possums will build leaf nests inside the boxes which provide evidence of past usage.



Be patient. It may take some time for the boxes to be used.

Council may support the use of suitable nest boxes on public reserves when the form part part of a community group's approved educational or environmental restoration program.

Council also has recording sheets for nest box installation and monitoring. For further information, Contact Councils River and Biodiversity Officer on 6655 7300