Australian Native Hollow Using Species Lists

&

Nest Box Designs

Compiled by Alice McGlashan
Facebook: https://www.facebook.com/groups/nestboxtales/
Website: www.nestboxtales.com
Sharing stories and knowledge about nest boxes to encourage everyone to improve habitat for wildlife.

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Background

2019-20 bushfires, native vegetation clearing past & present

Studies across Australia have found that fire tends to reduce the number of hollows in an ecosystem for the short to medium term (0-50+ years). The hotter and more damaging the fire, the greater the loss of tree hollows. Consider an old, large, wizened, partially dead tree with many small to large sized hollows, being somewhat of an apartment block for hollow using wildlife. Trees such as these do not tend to survive very destructive bushfires, such as those that have occurred during this bushfire season (summer 2019-20)

These same studies have found that hollow using species don't initially return to badly burnt areas, and when they do, the numbers are extremely low compared to before the fire. By comparison, non-hollow using species generally bounce back relatively quickly and in a few years are similar in numbers to those pre-fire. This provides an indication that it is likely to be the lack of hollows, rather than food sources and habitat other than tree hollows, that are the limiting factor for the return of hollow using species to recently burnt areas.

Aside: the studies to date have been on smaller patch burns or areas that are dwarfed in size by the vast expanses of forests burnt, particularly in the Eastern states of Australia during the bushfire season of 2019-20.

There are a large number of Australian native animals, particularly birds and mammals that need to use tree hollows for shelter, or to breed. There are about 114 bird species, and about 83 mammal species that require tree hollows either for shelter and or to breed. There are also many different lizard, snake, and frog species that also use tree hollows both in trees and on the ground.

Without tree hollows, those birds that only use hollows to nest, simply won't breed. Bird and mammal species that need tree hollows to sleep by day or night such as gliders, owls, and many possum species, risk being taken by predators, succumbing to the cold during the winter months, or perishing in search of a tree hollow in someone else's territory.

We can give any hollow using bushfire survivors, and future residents of the ecosystems scorched in this season's expansive bushfires a helping hand, by adding artificial hollows for them to use.

I have collated the information in this booklet from the following organisations and resources:

Birdlife Australia:
https://birdlife.org.au/images/uploads/education_sheets/INFO-Nestbox-technical.pdf

Birds in Backyards:
http://www.birdsinbackyards.net/Nest-Box-Plans

Nest Boxes for Wildlife (Book)
By Allan and Stacey Franks

A bit about me

I completed a Bachelor Degree of Geomatic Engineering and Science (geology) quite a few years ago now, and worked as a Geologist and GIS Analyst during my first career.

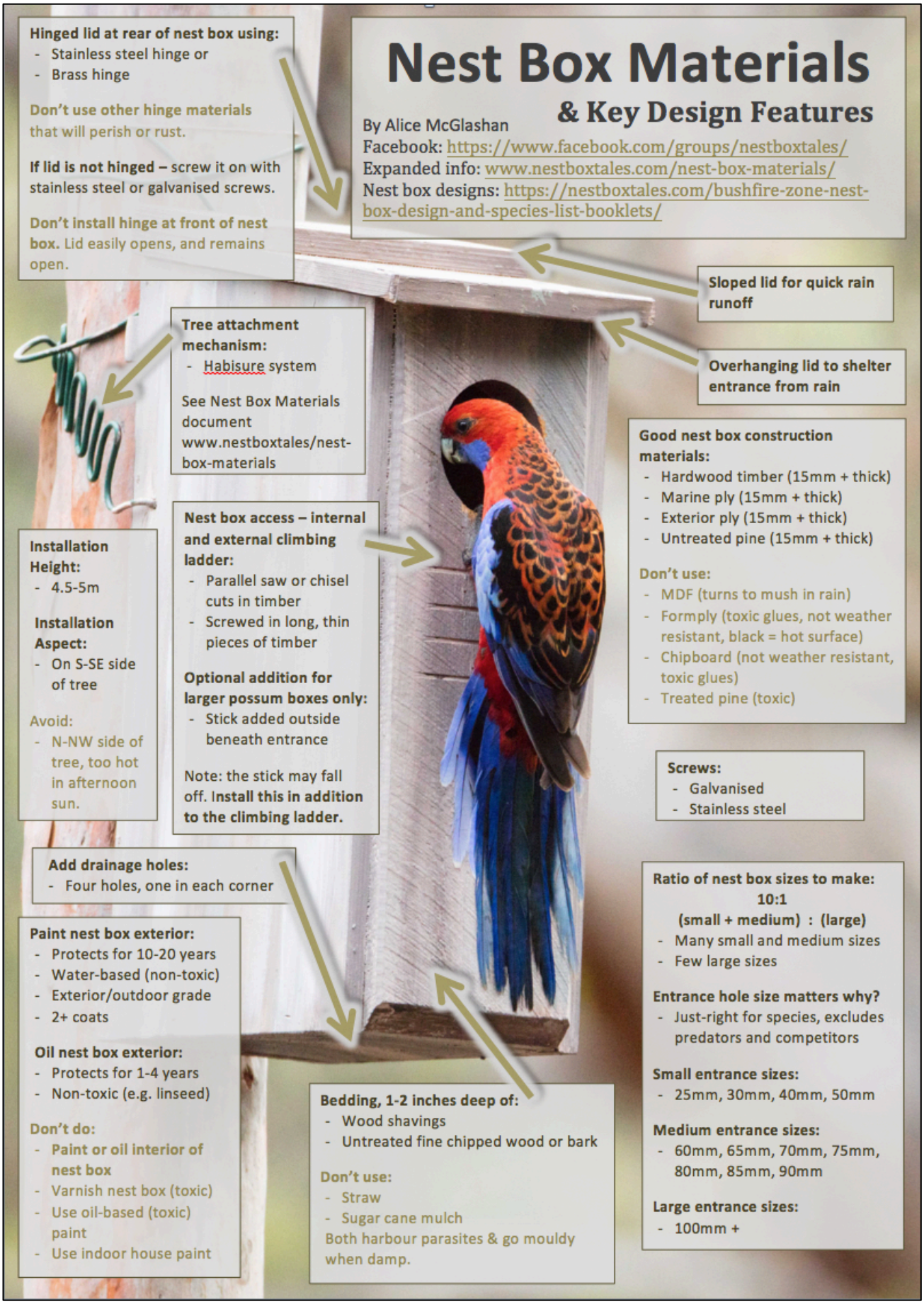
More recently I returned to university, completing a Graduate Diploma of Psychology, also a Master of Environmental Science and Law, specialising in ecosystem and wildlife management, biodiversity law, water law, and climate change law.

I have enjoyed exploring wilderness areas since a very young age, bird watching, frog spotting, and observing the complex interactions within Australia's diverse ecosystems. I used all of my 7th year birthday money to purchase a Slater's Field Guide to Australian Birds.

More recently, I purchased a small regenerating bushland property near Canberra. In 2016, I installed a first batch of 15 nest boxes for all the known local native hollow using species on my property, with several of them becoming occupied almost immediately. However there were also a number of unexplained failures.

After discovering that many of my questions about nest box utilisation and predation of occupants and eggs could not be answered by existing published research, I have purchased an ever expanding collection of wildlife cameras, temperature recording Thermocrons, polycarbonate plastic for possum guards, arborist (tree climbing) equipment, and more nest boxes, to figure out the causes of nesting failures, and to test different strategies to increase the occupancy of nest boxes by species that were struggling to use them successfully.

I have since learnt a lot about improving the occupation rates and bird nesting success of nest boxes for the different local native species, with key considerations discovered to be the predator and competitor species, bedding preferences, installation height, and installation aspect to avoid the hot afternoon sun. Late last year I created the NestBoxTales website and Facebook group to share what I had learnt, and to encourage other people across Australia to install nest boxes for hollow using wildlife. Install, and they absolutely will come!


Nest Box Materials
& Key Design Features
By Alice McGlashan
Facebook: https://www.facebook.com/groups/nestboxtales/
Expanded info: www.nestboxtales.com/nest-box-materials/
Nest box designs: https://nestboxtales.com/bushfire-zone-nest-box-design-and-species-list-booklets/
Hinged lid at rear of nest box using:
- Stainless steel hinge or
- Brass hinge
Don't use other hinge materials that will perish or rust.
If lid is not hinged – screw it on with stainless steel or galvanised screws.
Don't install hinge at front of nest box. Lid easily opens, and remains open.
Sloped lid for quick rain runoff
Overhanging lid to shelter entrance from rain
Tree attachment mechanism:
- Habisure system
See Nest Box Materials document www.nestboxtales/nest-box-materials
Good nest box construction materials:
- Hardwood timber (15mm + thick)
- Marine ply (15mm + thick)
- Exterior ply (15mm + thick)
- Untreated pine (15mm + thick)
Don't use:
- MDF (turns to mush in rain)
- Formply (toxic glues, not weather resistant, black = hot surface)
- Chipboard (not weather resistant, toxic glues)
- Treated pine (toxic)
Nest box access – internal and external climbing ladder:
- Parallel saw or chisel cuts in timber
- Screwed in long, thin pieces of timber
Optional addition for larger possum boxes only:
- Stick added outside beneath entrance
Note: the stick may fall off. Install this in addition to the climbing ladder.
Installation Height:
- 4.5-5m
Installation Aspect:
- On S-SE side of tree
Avoid:
- N-NW side of tree, too hot in afternoon sun.
Screws:
- Galvanised
- Stainless steel
Add drainage holes:
- Four holes, one in each corner
Ratio of nest box sizes to make:
10:1
(small + medium) : (large)
- Many small and medium sizes
- Few large sizes
Entrance hole size matters why?
- Just-right for species, excludes predators and competitors
Small entrance sizes:
- 25mm, 30mm, 40mm, 50mm
Medium entrance sizes:
- 60mm, 65mm, 70mm, 75mm, 80mm, 85mm, 90mm
Large entrance sizes:
- 100mm +
Paint nest box exterior:
- Protects for 10-20 years
- Water-based (non-toxic)
- Exterior/outdoor grade
- 2+ coats
Oil nest box exterior:
- Protects for 1-4 years
- Non-toxic (e.g. linseed)
Don't do:
- Paint or oil interior of nest box
- Varnish nest box (toxic)
- Use oil-based (toxic) paint
- Use indoor house paint
Bedding, 1-2 inches deep of:
- Wood shavings
- Untreated fine chipped wood or bark
Don't use:
- Straw
- Sugar cane mulch
Both harbour parasites & go mouldy when damp.

Materials and Tools for Making Nest boxes

Tools and materials

- Untreated hardwood timber, marine ply or exterior ply.
- Stainless steel or galvanised screws.
- Stainless steel or brass hinge, and external hinge screws for the lid.
- Hole saw or jig saw for making entrance holes.
- Hand saw or power saw to cut the panels.
- Screwdriver or power drill (best to use screws, not nails).
- Ruler/tape measure.
- Pencil for marking out design.
- Sandpaper to smooth rough edges.
- One to two inches of sawdust or wood shavings (from untreated wood), or untreated fine wood or bark chip for bedding, to emulate a decaying hollow.
- Paint the nest box with at least two coats of a water-based (non-toxic) external quality paint to significantly increase the durability of the nest box. Choose a pale colour such as Flooded Gum (Dulux colour), to prevent overheating of occupants on hot sunny days.

Installing Nest Boxes

- Place the nest box away from human disturbance, busy roads, and driveways, and also out of reach of non-native predators such as cats, dogs and foxes.
- Install in a location that is protected from direct sunlight during hot summer afternoons (east to south-east side of tree).
- The installation height sweet spot is 4-5m. Most species will use nest boxes at this height range, and a tall ladder will enable easy installation and access for monitoring and maintenance.
- Installation within the cover of leafy branches is preferred by many species, but some species do prefer open aspects for easy access such as microbats.
- Tall ladder, ladder holder and person installing the nest box.

Monitoring and Maintaining Nest Boxes

Is the nest box being used at all?

- Is there evidence if use (droppings, chewed bark, eggshell fragments, middle depression in bedding (mammal bottom)?
- If not being used, why do you think this is?
- Is the location too busy (people, cars)? Is the nest box exposed to hot afternoon sun (too hot)? Is the location too exposed (to predators) for the target species? Are you just being a little impatient and it is yet to be discovered (2-6 months)?

Is the nest box being used by the target species (single, multiple)?

- If not, can you figure out why not?
- Is this something you can improve upon?

What went wrong, and why?

- Did something die inside
- Did the nest box get invaded by ants, bees, Indian Mynas, Starlings, or a non-target other native animal?
- What can be done to prevent this (several options depending on problem)?

Oops, the nest box broke or has a malfunction!

- Quick, let's fix it so animals can use it again.

Monitoring frequency

- What is your reason for monitoring – what questions are you seeking to answer? Curiosity is very valid a reason!
- Regular, bi-annual, annual monitoring
- During winter months (winter mammal use?)
- During nesting season – early/mid/late spring depending if cold or warm climate location, and nesting bird species (careful! don't show predators where the nest is). Eggs, yes, chicks successful, yes. Fledged successfully, yes. Yay!
- During hot summer months (summer mammal use, fatally hot for nesting birds?)

Hollow Using Native Animal Species Lists: Mammals and Birds

Included:

- Adelaide Hills
- Canberra and surrounding NSW Region
- Coffs Harbour Mountains to Coast
- East Gippsland
- Central Victoria
- High Country (Vic, NSW)
- Northern NSW & South East Qld
- Port Macquarie Mountains to Coast
- Sydney to Greater Blue Mountains WHA
- Toowoomba to Sunshine Coast

Based on requests so far…

Adelaide Hills Hollow Using Animal Species List

Mammals	Entrance diameter	Nest box height
Yellow-footed Antechinus	30mm	2-4m
Microbat (9 species)	30mm hole, 20mm slot	3-5m
Common Brushtail Possum	(SA) 125mm	4-8m
Ringtail Possum	(SA) 75mm	4-8m
Western Pygmy Possum	25mmm	

Birds	Entrance diameter	Nest box height
Southern Boobook	150mm	4-6m
Australian Nightjar	65mm	3-6m
Chestnut Teal	80-120mm	Near water 1-3m
Grey Teal	80-120mm	Near water 1-3m
Pacific Black Duck	120mm	Near water 1-3m
Wood Duck	120mm	5-6m
Australasian Shoveler	150mm	Near water 1-3m
Sacred Kingfisher	75mm	3-6m
Laughing Kookaburra	180mm arch	5-10m
Sulphur-crested Cockatoo	100mm	5-7m
Yellow-tailed Black Cockatoo	200mm	8-10m
Long-billed Corella	100mm	5-7m
Little Corella	100mm	5-7m
Galah	100mm	5-7m
Musk Lorikeet	25-30mm	
Purple-crowned Lorikeet	25-30mm	
Rainbow Lorikeet	60mm	5m
Elegant Parrot		
Red-rumped Parrot	50-60mm	5m
Adelaide Rosella (Crimson Rosella)	70	5-6m
Eastern Rosella	65mm	5-6m
Grey Shrike-thrush	100mm	3-6m
Spotted Pardalote	30mm tube	5m
Striated Pardalote	30mm tube	5m
Brown Treecreeper	50mm	3-5m
White-throated Treecreeper	50mm	3-5m
Tree Martin	30mm	2m +

Canberra and Surrounding NSW Region
Hollow Using Animal Species List

Mammals	Entrance diameter	Nest box height
Brown, Dusky Antechinus	30mm	2-4m
Eastern Pygmy-possum	25mm	5-8m
Yellow-bellied Glider	80mm	6-8m
Sugar Glider	50mm	4-8m
Squirrel Glider	50mm	4-8m
Greater Glider (tall, moist eucalypt forest)	See special nest box design	(SE side of tree) 15-30m
Feathertail Glider	30mm	2+m
Common Brushtail Possum	90-150mm	4-8m
Mountain Brushtail Possum	90-150mm	4-8m
Ringtail Possum	60-80mm	4-8m
Microbats	30mm hole, 20mm slot	3-5m

Birds	Entrance diameter	Nest box height
Southern Boobook Owl	150mm	5m
Powerful Owl	150mm	15m+
Masked Owl (tall, moist eucalypt forest)	150mm	4-6m
Sooty Owl (tall, moist eucalypt forest)	150mm	4-6m
Australian Owlet-nightjar	65mm	3-6m
Grey Teal	80-120mm	1.5m
Chestnut Teal	80-120mm	1.5m
Pacific Black Duck	120mm	3m
Wood Duck	120mm	5-6m
Pink-eared Duck	120mm	?
Australian Shelduck	120mm	?
Glossy Black-cockatoo	200mm	8-10m
Gang-gang Cockatoo	100-140mm	6m +
Yellow-tailed Black Cockatoo	200mm	8-10m
Sulphur-crested Cockatoo	150mm	5m +
Little Corella	100-150mm	6m
Long-billed Corella	150mm	
Galah	120-150mm	6m
Rainbow Lorikeet	60mm	5m
King Parrot	100-120mm protruding entrance	6m +
Superb Parrot	Contact Canberra researchers	5m+
Crimson Rosella	70-75mm	5-6m
Eastern Rosella	65-70mm	5-6m
Laughing Kookaburra	180mm arch	5-10m
Sacred Kingfisher	75mm	5-10m
Dollarbird	70mm	5m +
Red-browed Treecreeper	50mm	
Brown Treecreeper	50mm	3-5m
White-throated treecreeper	50mm	3-5m
Southern Whiteface	40-50mm	
Spotted Pardalote	30mm tube	5m
Striated Pardalote	30mm tube	5m
Grey Shrike Thrush	100mm	3-6m
Tree Martin	30mm	2m +

Coffs Harbour Coast to Mountains
Hollow Using Animal Species List

Mammals	Entrance diameter	Nest box height
Brown Antechinus	30mm	2-4m
Dusky Antechinus	30mm	2-4m
Yellow-footed Antechinus	30mm	2-4m
Greater Glider	90mm	(SE side of tree) 15-30m
Squirrel Glider	50mm	4-8m
Sugar Glider	50mm	4-8m
Yellow-bellied Glider	80mm	6-8m
Microbats	30mm hole, 20mm slot	3-5m
Brush-tailed Phascagale	50mm	3-6m
Mountain Brushtail Possum	90-150mm	4-8m
Common Brushtail Possum	90-150mm	4-8m
Ringtail Possum	60-80mm	4-8m
Eastern Pygmy Possum	25mmm	
Eastern Quoll		

Birds	Entrance diameter	Nest box height
Australian Owlet Nightjar	65mm	3-6m
Barn Owl	150mm	4-6m
Masked Owl	150mm	4-6m
Sooty Owl	150mm	4-6m
Australian Owlet-nightjar	65mm	3-6m
Grey Teal	80-120mm	Near water 1-3m
Pacific Black Duck	120mm	Near water 1-3m
Wood Duck	120mm	5-6m
Azure Kingfisher	75mm	3-6m
Forest Kingfisher	75mm	3-6m
Sacred Kingfisher	75mm	3-6m
Laughing Kookaburra	180mm arch	5-10m
Sulphur-crested Cockatoo	100mm	5-7m
Glossy Black Cockatoo	200mm	8-10m
Yellow-tailed Black Cockatoo	200mm	8-10m
Little Corella	100mm	5-7m
Long-billed Corella	100mm	5-7m
Galah	100mm	5-7m
Musk Lorikeet	25-30mm	
Little Lorikeet	25-30mm	
Rainbow Lorikeet	60mm	5m
Scaly-breasted Lorikeet	55mm	3-5m
King Parrot	Protruding entrance 100-120mm	6m +
Red-winged Parrot		
Red-rumped Parrot	50-60mm	5m
Crimson Rosella	70mm	5-6m
Eastern Rosella	65mm	5-6m
Striated Pardalote	30mm tube	5m
Red-browed Treecreeper	50mm	3-5m
Brown Treecreeper	50mm	3-5m
White-throated Treecreeper	50mm	3-5m
Tree Martin	30mm	2m +

East Gippsland Hollow Using Animal Species List

Mammals	Entrance diameter	Nest box height
Agile antechinus	30mm	2-4m
Brown Antechinus	30mm	2-4m
Dusky Antechinus	30mm	2-4m
Feathertail Glider	30mm	2m
Greater Glider (southern Subsp.)	130mm	(SE side of tree) 15-30m
Sugar Glider	50mm	4-8m
Yellow Bellied Glider	80mm	6-8m
Microbats	30mm hole, 20mm slot	3-5m
Mountain Brushtail Possum	90-150mm	4-8m
Common Brushtail Possum	90-150mm	4-8m
Ringtail Possum	60-80mm	4-8m
Eastern Pygmy-possum	25mmm	
Mountain Pygmy-possum	25mmm	
Spotted-tailed Quoll		

Birds	Entrance diameter	Nest box height
Southern Boobook	150mm	5m
Barking Owl	150mm	5m
Barn Owl	150mm	5m
Masked Owl	150mm	5m
Powerful Owl	150mm	15m
Sooty Owl	150mm	5m
Australian Owlet Nightjar	65mm	3-6m
Chestnut Teal	80-120mm	1.5m
Grey Teal	80-120mm	1.5m
Pacific Black Duck	120mm	3m
Wood Duck	120mm	5-6m
Azure Kingfisher	75mm	5-10m
Laughing Kookaburra	180mm arch	5-10m
Gang-gang Cockatoo	110-140mm	6m +
Glossy Black-cockatoo	200mm	8-10m
Sulphur-crested Cockatoo	150mm	5m +
Yellow-tailed Black Cockatoo	200mm	8-10m
Galah	120-150mm	6m
Little Lorikeet	25-30mm	6m +
King Parrot	100-120mm protruding entrance	6m +
Turquoise Parrot	80mm	0-3m
Crimson Rosella	70mm	5-6m
Eastern Rosella	65mm	5-6m
Spotted Pardalote	30mm tube	5m
Striated Pardalote	30mm tube	5m
Grey Shrike Thrush	100mm	3-6m
Brown Treecreeper (V)	50mm	3-5m
Red-Browed Tree Creeper	50mm	3-5m
White-throated Tree Creeper	50mm	3-5m

Central Victoria Hollow Using Animal Species List

Mammals	Entrance diameter	Nest box height
Agile antechinus	30mm	2-4m
Dusky Antechinus	30mm	2-4m
Feathertail Glider	30mm	2m
Greater Glider (southern Subsp.)	130mm	(SE side of tree) 15-30m
Sugar Glider	50mm	4-8m
Yellow Bellied Glider	80mm	6-8m
Microbats	30mm hole, 20mm slot	3-5m
Mountain Brushtail Possum	90-150mm	4-8m
Common Brushtail Possum	90-150mm	4-8m
Ringtail Possum	60-80mm	4-8m
Eastern Pygmy-possum	25mmm	

Birds	Entrance diameter	Nest box height
Southern Boobook	150mm	5m
Barking Owl	150mm	5m
Barn Owl	150mm	5m
Masked Owl	150mm	5m
Powerful Owl	150mm	15m
Sooty Owl	150mm	5m
Australian Owlet Nightjar	65mm	3-6m
Australasian Shoveler		
Australian Shelduck	120mm	3m
Australian Wood Duck	120mm	5-6m
Chestnut Teal	80-120mm	1.5m
Grey Teal	80-120mm	1.5m
Pacific Black Duck	120mm	3m
Pink-eared Duck		
Azure Kingfisher	75mm	5-10m
Sacred Kingfisher	75mm	5-10m
Laughing Kookaburra	180mm arch	5-10m
Gang-gang Cockatoo	110-140mm	6m +
Glossy Black-cockatoo	200mm	8-10m
Sulphur-crested Cockatoo	150mm	5m +
Yellow-tailed Black Cockatoo	200mm	8-10m
Little Corella	120-150mm	6m
Long-billed Corella	150mm	
Galah	120-150mm	6m
Little Lorikeet	25-30mm	6m +
Musk Lorikeet	25-30mm	6m +
Rainbow Lorikeet	60mm	5m
King Parrot	100-120mm protruding entrance	6m +
Turquoise Parrot	80mm	0-3m
Crimson Rosella	70mm	5-6m
Eastern Rosella	65mm	5-6m
Red-rumped Parrot	60mm	5m
Spotted Pardalote	30mm tube	5m
Striated Pardalote	30mm tube	5m
Grey Shrike Thrush	100mm	3-6m
Brown Treecreeper (V)	50mm	3-5m
Red-Browed Tree Creeper	50mm	3-5m
White-throated Tree Creeper	50mm	3-5m
Dollarbird	70mm	6-10m
Tree Martin	30mm	2m +

High Country (NSW, Vic)
Hollow Using Animal Species List

Mammals	Entrance diameter	Nest box height
Agile Antechinus	30mm	2-4m
Dusky Antechinus	30mm	2-4m
Feathertail Glider	30mm	2m
Greater Glider (southern subsp.)	130mm	(SE side of tree) 15-30m
Squirrel Glider	50mm	4-8m
Sugar Glider	50mm	4-8m
Yellow-bellied Glider	80mm	6-8m
Microbats (several species)	30mm hole, 20mm slot	3-5m
Common Brushtail Possum	90-150mm	4-8m
Mountain Brushtail Possum	90-150mm	4-8m
Leadbeater's Possum – old growth Mountain Ash, Alpine Ash		
Eastern Pygmy Possum	25mmm	
Mountain Pygmy Possum	25mmm	
Ringtail Possum	60-80mm	4-8m

Birds	Entrance diameter	Nest box height
Southern Boobook	150mm	5m
Powerful Owl	150mm	15m+
Australian Owlet Nightjar	65mm	3-6m
Australian Shelduck	120mm	3m
Pacific Black Duck	120mm	3m
Pink-eared Duck		
Wood Duck	120mm	5-6m
Chestnut Teal	80-120mm	1.5m
Grey Teal	80-120mm	1.5m
Red-backed Kingfisher	75mm	5-10m
Sacred Kingfisher	75mm	5-10m
Laughing Kookaburra	180mm arch	5-10m
Gang-gang Cockatoo	110-140mm	6m +
Glossy Black Cockatoo	200mm	8-10m
Sulphur-crested Cockatoo	150mm	5m +
Yellow-tailed Black Cockatoo	200mm	8-10m
Little Corella	120-150mm	6m
Long-billed Corella	150mm	
Galah	120-150mm	6m
King Parrot	100-120mm protruding entrance	6m +
Red-rumped Parrot	60mm	5m
Superb Parrot		
Crimson Rosella	70mm	5-6m
Eastern Rosella	65mm	5-6m
Spotted Pardalote	30mm tube	5m
Striated Pardalote	30mm tube	5m
Chestnut-rumped Thornbill		
Grey Shrike-Thrush	100mm	3-6m
Southern Whiteface		
Red-browed Treecreeper	50mm	3-5m
White-throated Treecreeper	50mm	3-5m
Dollarbird	70mm	6-10m
Tree Martin	30mm	2m +

Northern Rivers NSW & South East Qld
Hollow Using Animal Species List

Mammals	Entrance diameter	Nest box height
Brown Antechinus	30mm	2-4m
Dusky Antechinus	30mm	2-4m
Yellow-footed Antechinus	30mm	2-4m
Greater Glider	90mm	(SE side of tree) 15-30m
Squirrel Glider (V)	50mm	4-8m
Sugar Glider	50mm	4-8m
Yellow-bellied Glider (V)	80mm	6-8m
Microbats (V)	30mm hole, 20mm slot	3-5m
Brush-tailed Phascagale (V)	50mm	3-6m
Mountain Brushtail Possum	90-150mm	4-8m
Common Brushtail Possum	90-150mm	4-8m
Ringtail Possum	60-80mm	4-8m
Eastern Pygmy Possum (V)	25mmm	
Eastern Quoll (V)		

Birds	Entrance diameter	Nest box height
Barking Owl		5m
Barn Owl	150mm	4-6m
Masked Owl	150mm	4-6m
Powerful Owl	150mm	15m+
Sooty Owl	150mm	4-6m
Boobook Owl	150mm	4-6m
Australian Owlet-nightjar	65mm	3-6m
Chestnut Teal	80-120mm	Near water 1-3m
Grey Teal	80-120mm	Near water 1-3m
Pacific Black Duck	120mm	Near water 1-3m
Wood Duck	120mm	5-6m
Buff-breasted Paradise Kingfisher	50mm	3-6m
Forest Kingfisher	75mm	3-6m
Red-backed Kingfisher	75mm	3-6m
Azure Kingfisher	50mm	3-6m
Collared Kingfisher	50mm	3-6m
Little Kingfisher	50mm	3-6m
Sacred Kingfisher	75mm	3-6m
Blue-winged Kookaburra	180mm arch	5-10m
Laughing Kookaburra	180mm arch	5-10m
Sulphur-crested Cockatoo	100mm	5-7m
Gang-gang Cockatoo	110-140mm	6m +
Red-tailed Black Cockatoo	200mm	8-10m
Yellow-tailed Black Cockatoo	200mm	8-10m
Glossy Black Cockatoo	200mm	8-10m
Little Corella	100mm	5-7m
Long-billed Corella	100mm	5-7m
Galah	100mm	5-7m
Musk Lorikeet	25-30mm	5m
Little Lorikeet	25-30mm	5m
Rainbow Lorikeet	60mm	5m
Scaly-breasted Lorikeet	55mm	3-5m
Double-eyed Fig Parrot		
King Parrot	Protruding entrance 100-120mm	6m +
Red-winged Parrot		
Red-rumped Parrot	65mm	5m
Superb Parrot (V)		
Turquoise Parrot (V)	80mm	0-3m
Crimson Rosella	70mm	5-6m
Eastern Rosella	65mm	5-6m
Pale-headed Rosella	90mm	2-4m
White-browed Treecreeper	50mm	3-5m
Red-browed Treecreeper	50mm	3-5m
Brown Treecreeper	50mm	3-5m
Rufus Treecreeper	50mm	3-5m
White-throated treecreeper	50mm	3-5m
Dollarbird	70mm	6-10m
Spotted Pardalote	30mm tube	5m
Striated Pardalote	30mm tube	5m
Tree Martin	30mm	2m +

Port Macquarie Coast to Mountains
Hollow Using Animal Species List

Mammals	Entrance diameter	Nest box height
Brown Antechinus	30mm	2-4m
Dusky Antechinus	30mm	2-4m
Yellow-footed Antechinus	30mm	2-4m
Greater Glider	90mm	(SE side of tree) 15-30m
Squirrel Glider (V)	50mm	4-8m
Sugar Glider	50mm	4-8m
Yellow-bellied Glider (V)	80mm	6-8m
Microbats (V)	30mm hole, 20mm slot	3-5m
Brush-tailed Phascagale (V)	50mm	3-6m
Mountain Brushtail Possum	90-150mm	4-8m
Common Brushtail Possum	90-150mm	4-8m
Ringtail Possum	60-80mm	4-8m
Eastern Pygmy Possum (V)	25mmm	
Eastern Quoll (V)		

Birds	Entrance diameter	Nest box height
Australian Owlet Nightjar	65mm	3-6m
Barn Owl	150mm	4-6m
Masked Owl (V)	150mm	4-6m
Sooty Owl (V)	150mm	4-6m
Grey Teal	80-120mm	Near water 1-3m
Pacific Black Duck	120mm	Near water 1-3m
Wood Duck	120mm	5-6m
Azure Kingfisher	75mm	3-6m
Forest Kingfisher	75mm	3-6m
Sacred Kingfisher	75mm	3-6m
Laughing Kookaburra	180mm arch	5-10m
Sulphur-crested Cockatoo	100mm	5-7m
Glossy Black Cockatoo	200mm	8-10m
Yellow-tailed Black Cockatoo	200mm	8-10m
Little Corella	100mm	5-7m
Long-billed Corella	100mm	5-7m
Galah	100mm	5-7m
Musk Lorikeet	25-30mm	
Little Lorikeet	25-30mm	
Rainbow Lorikeet	60mm	5m
Scaly-breasted Lorikeet	55mm	3-5m
King Parrot	Protruding entrance 100-120mm	6m +
Red-winged Parrot		
Red-rumped Parrot	50-60mm	5m
Crimson Rosella	70-100mm	5-6m
Eastern Rosella	65-80mm	5-6m
Striated Pardalote	30mm tube	5m
Red-browed Treecreeper	50-70mm	3-5m
Brown Treecreeper	50-70mm	3-5m
White-throated Treecreeper	50-70mm	3-5m
Tree Martin	30mm	2m +

Sydney to Blue Mountains World Heritage Area
Hollow Using Animal Species List

Mammals	Entrance diameter	Nest box height
Brown Antechinus	30mm	2-4m
Dusky Antechinus	30mm	2-4m
Feathertail Glider	30mm	2m
Greater Glider (southern subspecies)	130mm	(SE side of tree) 15-30m
Squirrel Glider (V)	50mm	4-8m
Sugar Glider	50mm	4-8m
Yellow-bellied Glider (V)	80mm	6-8m
Microbats (V)	30mm hole, 20mm slot	3-5m
Mountain Brushtail Possum	90-150mm	4-8m
Common Brushtail Possum	90-150mm	4-8m
Eastern Pygmy-possum (V)	25mmm	
Ringtail Possum	60-80mm	4-8m
Spotted-tailed Quoll (V)		

Birds	Entrance diameter	Nest box height
Barking Owl (V)	150mm	5m
Barn Owl	150mm	5m
Masked Owl (V)	150mm	5m
Powerful Owl (V)	150mm	15m +
Sooty Owl (V)	150mm	5m
Southern Boobook	150mm	5m
Australian Owlet-nightjar	65mm	3-6m
Grey Teal	80-120mm	1.5m
Pacific Black Duck	120mm	3m
Wood Duck	120mm	5-6m
Azure Kingfisher	75mm	5-10m
Sacred Kingfisher	75mm	5-10m
Laughing Kookaburra	180mm arch	5-10m
Gang-gang Cockatoo (V)	110-140mm	6m +
Glossy Black Cockatoo (V)	200mm	8-10m
Yellow-tailed Black-cockatoo	200mm	8-10m
Red-tailed Black-cockatoo (V)	200mm	8-10m
Sulphur-crested Cockatoo	150mm	5m +
Galah	120-150mm	6m
Little Lorikeet	25-30mm	
Musk Lorikeet	25-30mm	
Rainbow Lorikeet	60mm	5m
King Parrot	100-120mm protruding entrance	6m +
Red-rumped Parrot	50-60mm	5m
Turquoise Parrot (V)	80mm	0-3m
Crimson Rosella	70mm	5-6m
Eastern Rosella	65mm	5-6m
Spotted Pardalote	30mm tube	5m
Striated Pardalote	30mm tube	5m
Brown Treecreeper (V)	50mm	3-5m
Red-browed Treecreeper	50mm	3-5m
White-throated Treecreeper	50mm	3-5m
Tree Martin	30mm	2m +

Toowoomba to Sunshine Coast
Hollow Using Animal Species List

Mammals	Entrance diameter	Nest box height
Brown Antechinus	30mm	2-4m
Buff-footed Antechinus	30mm	2-4m
Subtropical Antechinus	30mm	2-4m
Yellow-footed Antichinus	30mm	2-4m
Feathertail Glider	30mm	2m
Greater Glider (V)	90mm	(SE side of tree) 15-30m
Sugar Glider	50mm	4-8m
Squirrel Glider	50mm	4-8m
Yellow-bellied Glider	80mm	6-8m
Microbats	30mm hole, 20mm slot	3-5m
Brush-tailed Phascagale	50mm	3-6m
Common Phascagale	50mm	3-6m
Brushtail Possum	90-150mm	4-8m
Ringtail Possum	60-80mm	4-8m
Northern Quoll (E)		
Spotted-tailed Quoll (E)		

Birds	Entrance diameter	Nest box height
Barn Owl	150mm	4-6m
Masked Owl	150mm	4-6m
Sooty Owl	150mm	4-6m
Southern Boobook	150mm	4-6m
Powerful Owl	150mm	15m +
Australian Owlet Nightjar	65mm	3-6m
Pink-eared Duck	150mm	Near water 1-3m
Green Pygmy-goose	150mm	Near water 1-3m
Australian Shelduck	150mm	Near water 1-3m
Australian Shoveler	150mm	Near water 1-3m
Chestnut Teal	80-120mm	Near water 1-3m
Grey Teal	80-120mm	Near water 1-3m
Pacific Black Duck	120mm	Near water 1-3m
Wood Duck	120mm	5-6m
Azure Kingfisher	75mm	3-6m
Forest Kingfisher	75mm	3-6m
Little Kingfisher	50mm	3-6m
Red-backed Kingfisher	50mm	3-6m
Sacred Kingfisher	75mm	3-6m
Blue-winged Kookaburra	180mm arch	5-10m
Laughing Kookaburra	180mm arch	5-10m
Budgerigar		
Cockatiel		
Glossy Black Cockatoo	200mm	8-10m
Major Mitchell's Cockatoo	100mm	5-7m
Red-tailed Black Cockatoo	200mm	8-10m
Sulphur-crested Cockatoo	150mm	5m +
Little Corella	100mm	5-7m
Galah	100mm	5-7m
Little Lorikeet	25-30mm	
Musk Lorikeet	25-30mm	
Scaly-breasted Lorikeet	55mm	3-5m
Rainbow Lorikeet	60mm	5m
Pale-headed Rosella	90mm	2-4m
Crimson Rosella	70mm	5-6m
King Parrot	Protruding entrance 100-120mm	6m +
Red-rumped Parrot	50-60mm	5m
Turquoise Parrot	80mm	0-3m
Grey Shrike-thrush	100mm	3-6m
Spotted Pardalote, Striated Pardalote	30mm tube	5m
Buff-rumped Thornbill		
Brown Treecreeper	50mm	3-5m
Red-browed Treecreeper	50mm	3-5m
White-throated Treecreeper	50mm	3-5m
Dollarbird	70mm	6-10m
Tree Martin	30mm	2m +

Nest Box Making Options

Use just three (small, medium, large) designs, and vary the entrance diameter.

Designs suit most hollow using species

Choose from a number of species specific nest box designs to make.

To consider: how many of which/each designs to make?

Ratio of nest box sizes to make:

For all locations in Australia, there are within each habitat, far more small and medium species, than large species. Large hollow using species (owls, Brushtail Possums) are the top order predators of the canopy, and prey on the smaller species, eggs and chicks. Naturally there are fewer large predators within any ecosystem.

Tiny-small tree hollows take less time to develop (think pygmy possum, pardalote, thornbill), and are naturally plentiful in unlogged old growth forests, and also older regenerating habitats with some older trees remaining.

Medium tree hollows (think Red-rumped Parrot to Crimson Rosella sized) take decades to over a hundred years to form, and are rare in regenerating habitats. In an unlogged old growth forest, this size range of tree hollows would also be quite numerous.

Large tree hollows take over a hundred years to form, and are much less common in even unlogged old growth forests (think Boobook Owl, Brushtail Possum, Wood Duck). In regenerating habitat, this size tree hollow is rare indeed.

Generic recommendation of size ratio of nest boxes to make, assuming tiny-small tree hollows exist in the habitat:

- Making 10 nest boxes:
  - 3 small : 6 medium : 1 large
- Making 5 nest boxes:
  - 1-2 small : 3-4 medium : 0-1 large

Nest box size key:	**Small**
	Medium
	Large

Making for a known habitat – have a look for tree hollows first, what do you see?

- Very young regrowth with no tree hollows at all
  - 5 small : 5 medium : 1 large
- Medium age regrowth or selectively logged forest with some small hollows
  - 5 small : 10 medium : 1 large
- Regrowth with some old hollow bearing trees, bushfire impacted forest with some older hollow bearing trees
  - 2 small: 7 medium : 1 large

Three Nest Box Sizes for Many Species

Make a series **in the same nest box dimensions** and **vary the entrance size** for different species. **Bold species name** (tables below) is the preferred entrance diameter. **Refer to the hollow using species list for your region also.**

Small Nest Box Dimensions

Width	Length	Height
200mm	200mm	500

Entrance Diameter	Species
30mm	Pygmy Possum species, Feathertail Glider, Antechinus species, Musk Lorikeet, Little Lorikeet, Purple-crowned Lorikeet, Pardalote species, Tree Martin
40mm	Sugar Glider, Thornbill species
50mm	**Sugar Glider**, **Squirrel Glider**, Thornbill species, **Treecreeper species**, Red-rumped Parrot
60mm	**Red-rumped Parrot**, **Rainbow Lorikeet**, Scaly-breasted Lorikeet, Treecreeper species

Medium Nest Box Dimensions

Width	Length	Height
230mm	260mm	500mm

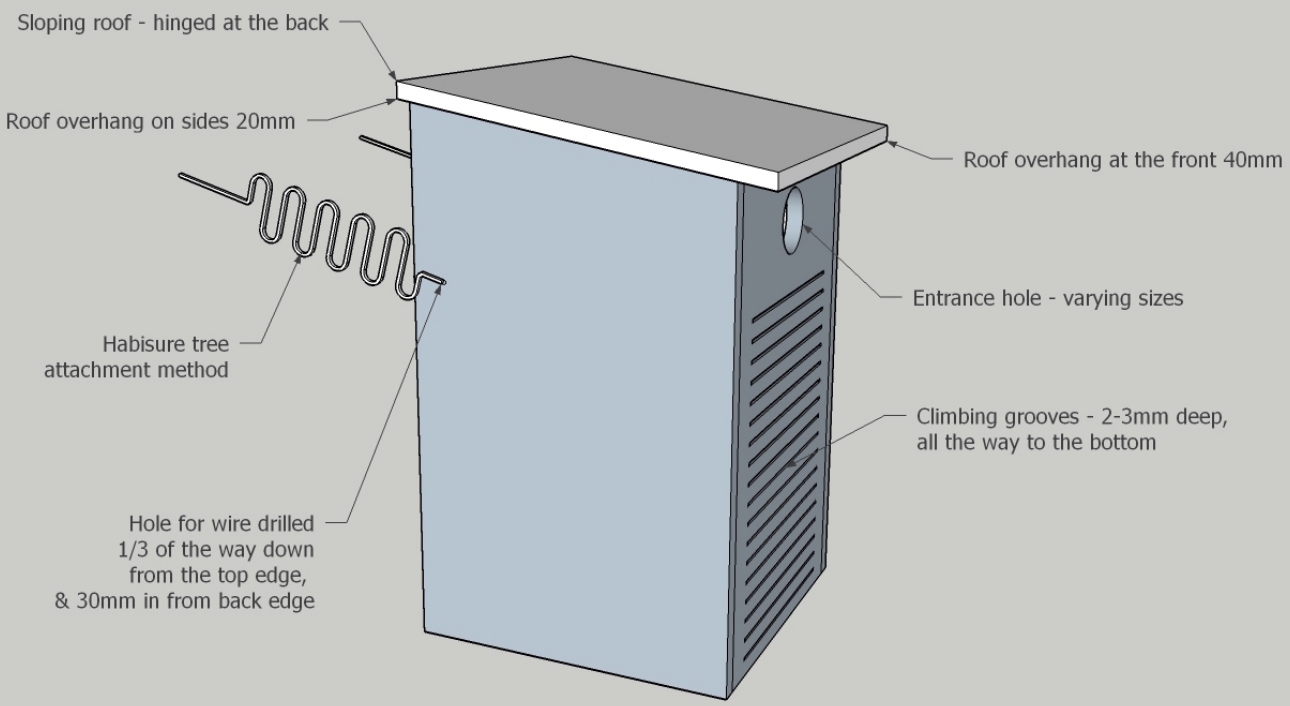
Entrance Diameter	Species
65mm	Ringtail Possum, **Eastern Rosella, Australian Owlet-nightjar**
70mm	Ringtail Possum, Eastern Rosella, Australian Owlet-nightjar, **Crimson Rosella, Western Rosella**
75mm	**Ringtail Possum**, Crimson Rosella, **Dollarbird**
90mm	**Pale-headed Rosella**
100mm	**Green Rosella**

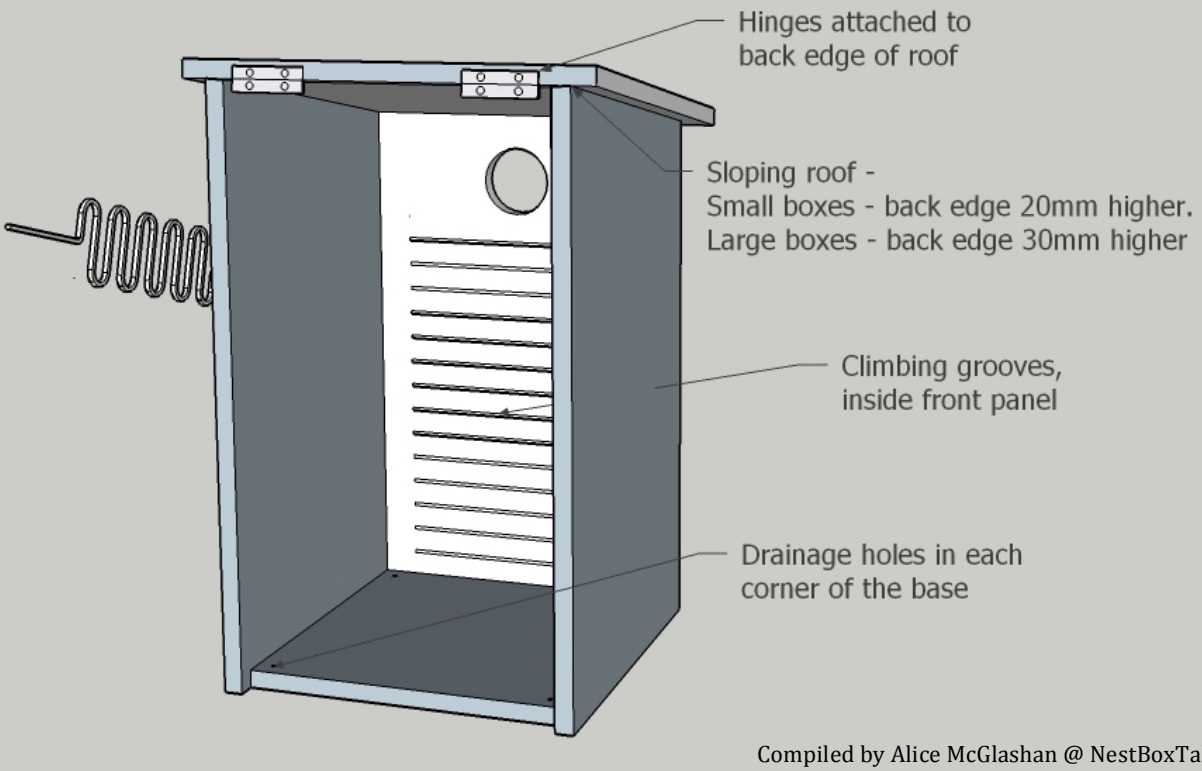
Large Nest Box Dimensions

Width	Length	Height
250mm	300mm	500mm

Entrance Diameter	Species
80mm	Ringtail Possum, Yellow-bellied Glider
90mm	Ringtail Possum, **Galah**
100mm	Brushtail Possum, King Parrot, Galah, Gang-gang Cockatoo
130mm	Greater Glider, Brushtail Possum, **Duck species**, Owl species, Gang-gang Cockatoo, Galah, Corella species
150mm	Brushtail Possum, Duck species, **Owl species**, Galah, Sulphur-crested Cockatoo, Corella species

Basic Nest Box Design Features





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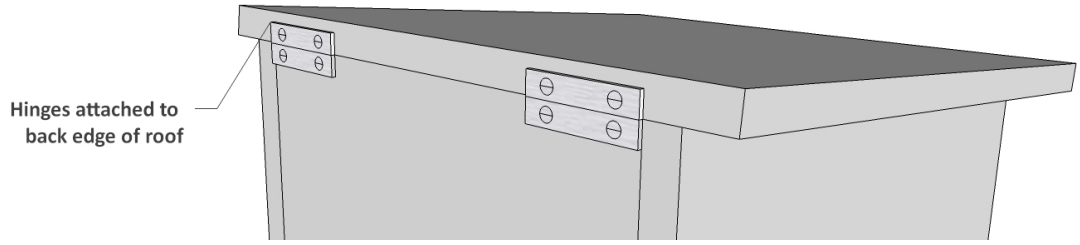
Graphics assistance by Jenny Bigelow

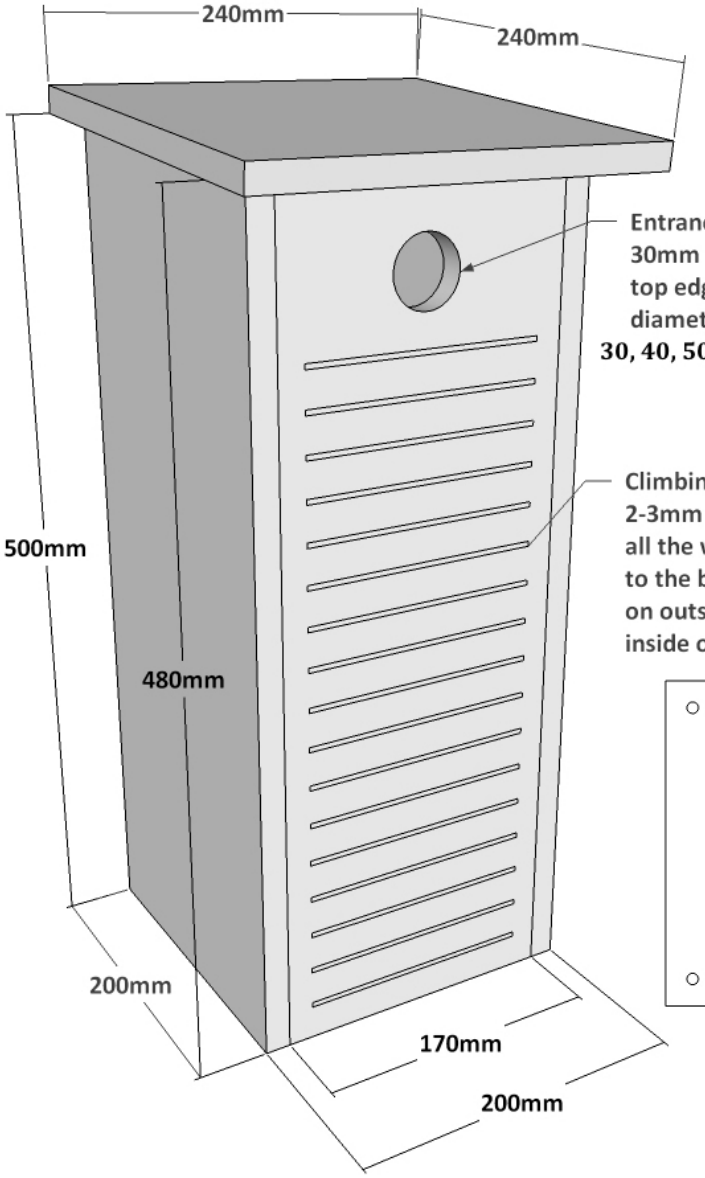
Small Nest Box Design

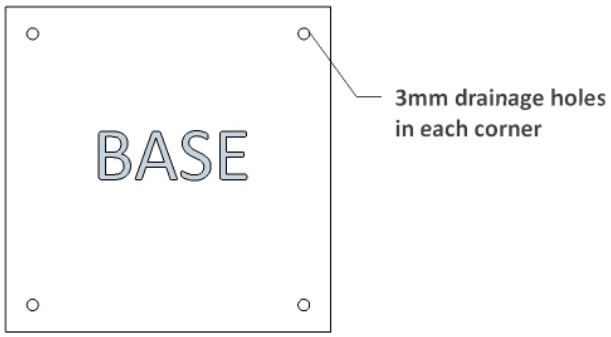
SMALL NEST BOX

Cutting list – 15mm ply

Sides	2 x 500mm back/480mm front x 200mm
Back	1 x 500mm x 170mm
Front	1 x 480mm x 170mm
Base	1 x 170mm x 170mm
Roof	1 x 240mm x 240mm







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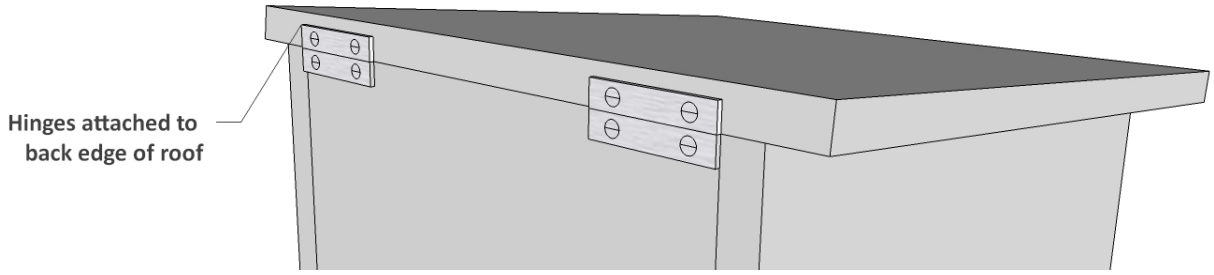
Graphics assistance by Jenny Bigelow

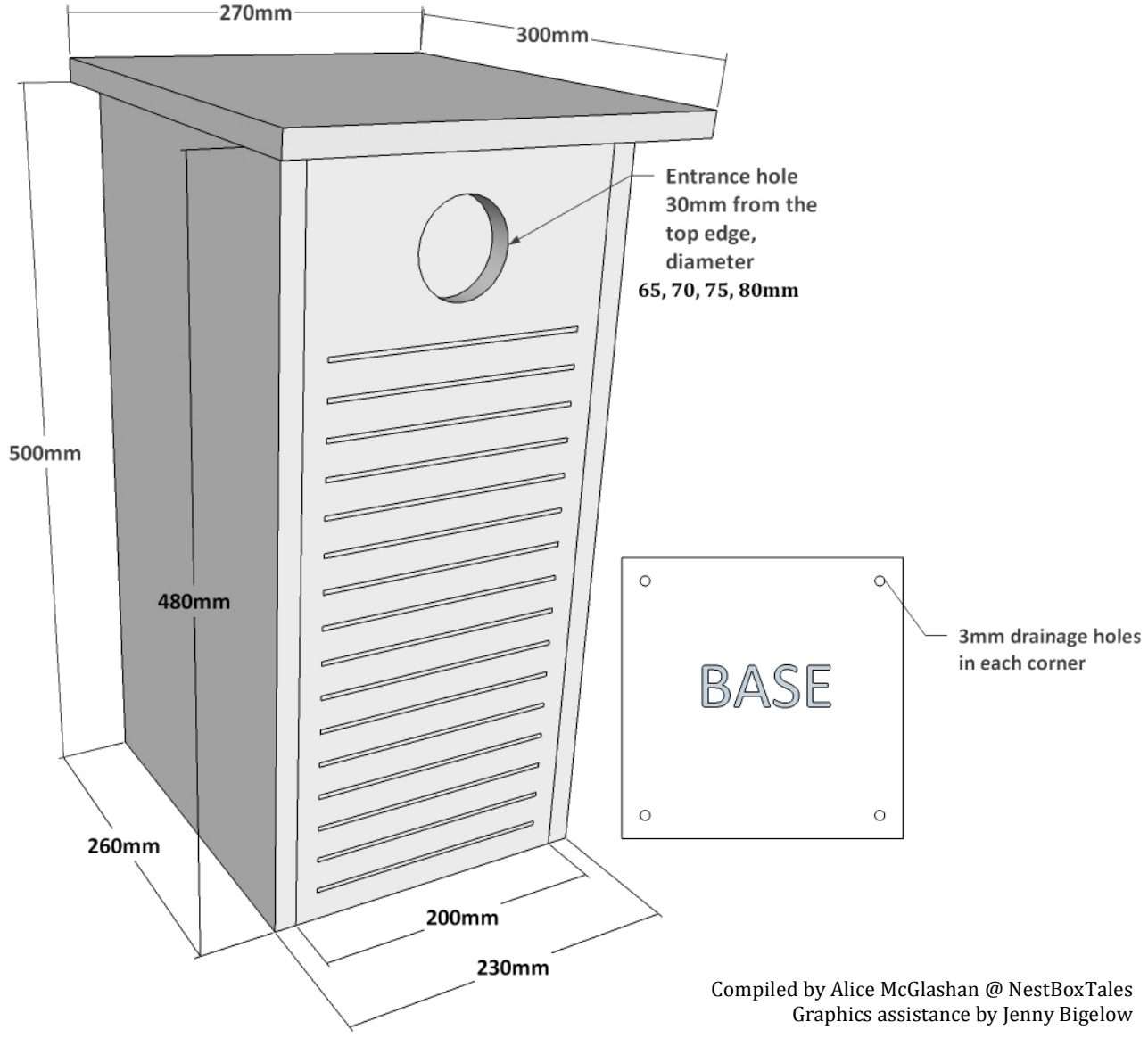
Medium Nest Box Design

MEDIUM NEST BOX

Cutting list – 15mm ply

Sides	2 x 500mm back/480mm front x 260mm
Back	1 x 500mm x 200mm
Front	1 x 480mm x 200mm
Base	1 x 230mm x 200mm
Roof	1 x 300mm x 270mm





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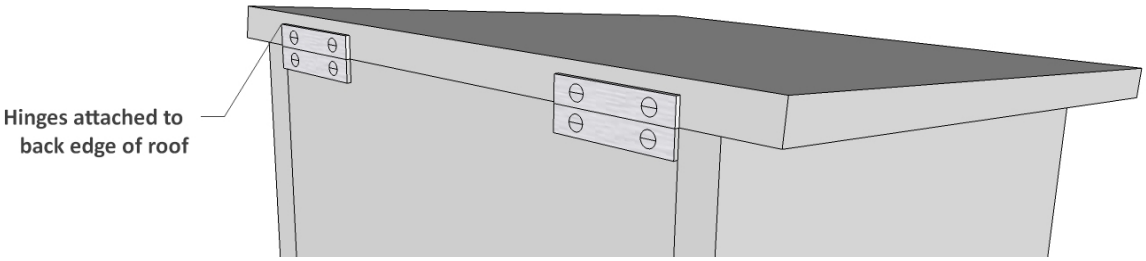
Graphics assistance by Jenny Bigelow

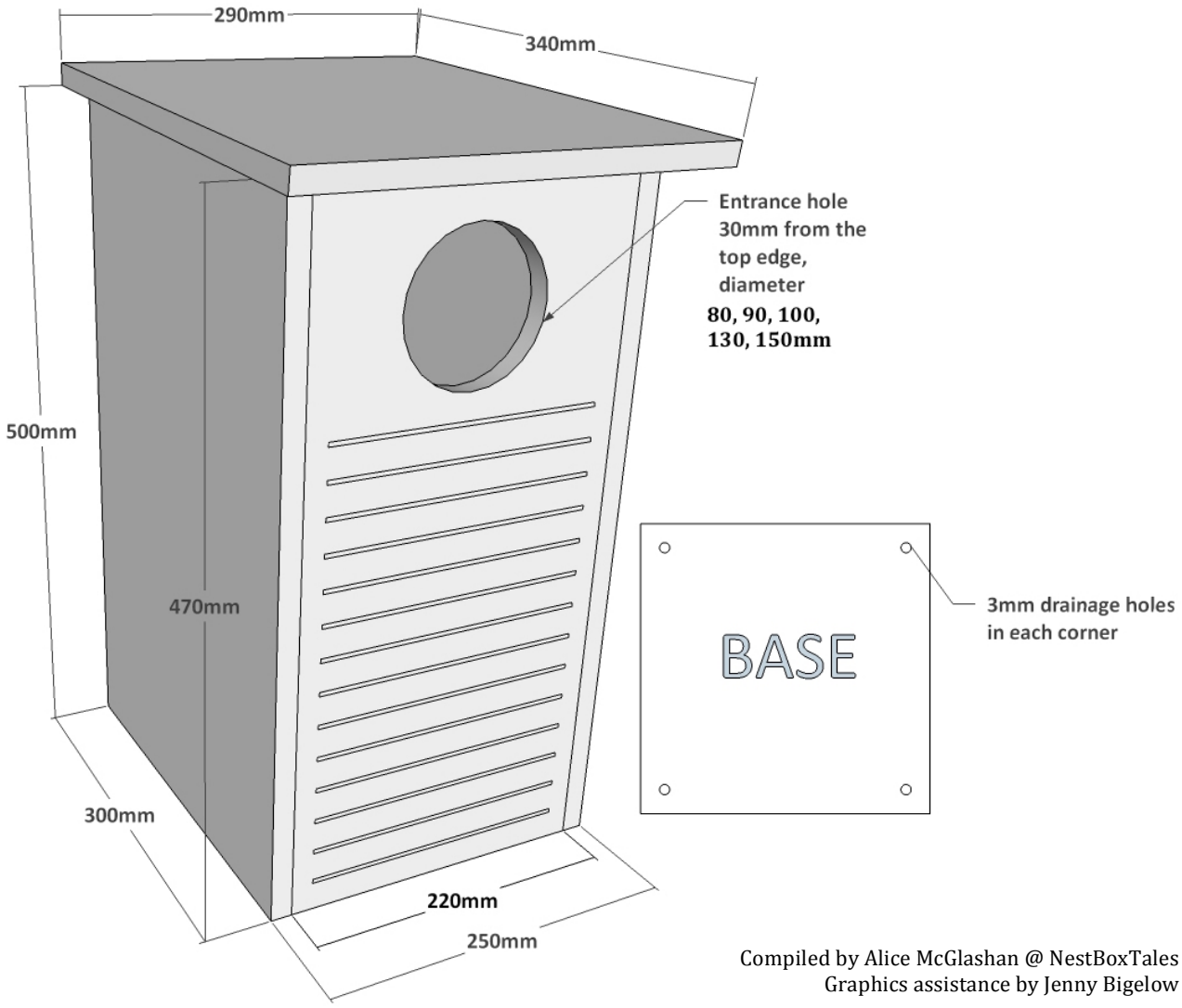
Large Nest Box Design

LARGE NEST BOX

Cutting list – 15mm ply

Sides	2 x 500mm back/470mm front x 300mm
Back	1 x 500mm x 220mm
Front	1 x 470mm x 220mm
Base	1 x 270mm x 220mm
Roof	1 x 340mm x 290mm





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Graphics assistance by Jenny Bigelow

Nest box designs

- **Feathertail Glider / Antechinus / Pygmy Possum (side entrance)**
- **Thornbill/Feathertail Glider / Antechinus / Pygmy Possum (front entrance)**
- **Sugar Glider / Squirrel Glider**
- **Greater Glider**
- **Ringtail Possum**
- **Brushtail Possum**
- **Microbat**
- **Australian Owlet-nightjar**
- **Owl / Duck (not Powerful Owl)**
- **Laughing Kookaburra**
- **Galah**
- **Glossy Black-cockatoo / Powerful Owl**
- **Red-rumped Parrot**
- **Turquoise Parrot**
- **Crimson, Eastern, Green, Pale-headed, Western Rosella**
- **Musk / Little / Purple-crowned Lorikeet**
- **Rainbow Lorikeet**
- **Scaly-breasted Lorikeet**
- **Grey Shrike-Thrush**
- **Dollarbird (see Crimson Rosella design)**
- **Pardalote**
- **Treecreeper**
- **Thornbill (see Treecreeper design)**

Nest box size key	Small
	Medium
	Large

Ratio of nest box sizes to make

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- Making 5 nest boxes:
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- Medium age regrowth or selectively logged forest with some small hollows
  - 5 small : 10 medium : 1 large

- Regrowth with some old hollow bearing trees, bushfire impacted forest with some older hollow bearing trees
  - 2 small: 7 medium : 1 large

If you recognise this from a page above, good spotting!

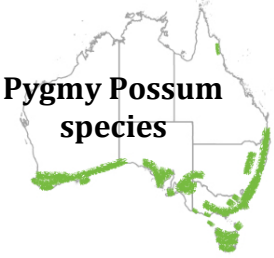
I have repeated this information here so as it is not missed, as the ratio of nest box sizes installed within a habitat is REALLY IMPORTANT. Install nest boxes only for large (albeit very cute) predators such as Brushtail Possums, and this will likely have an adverse impact on the ecosystem that you are attempting to assist. Really not a good idea, but I have heard of this happening at multiple locations as part of the bushfire recovery efforts during 2020.

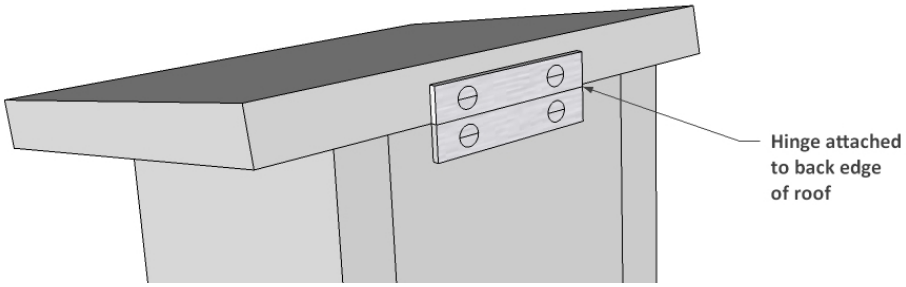
Feathertail Glider/ Antechinus / Pygmy Possum (Side Entrance)

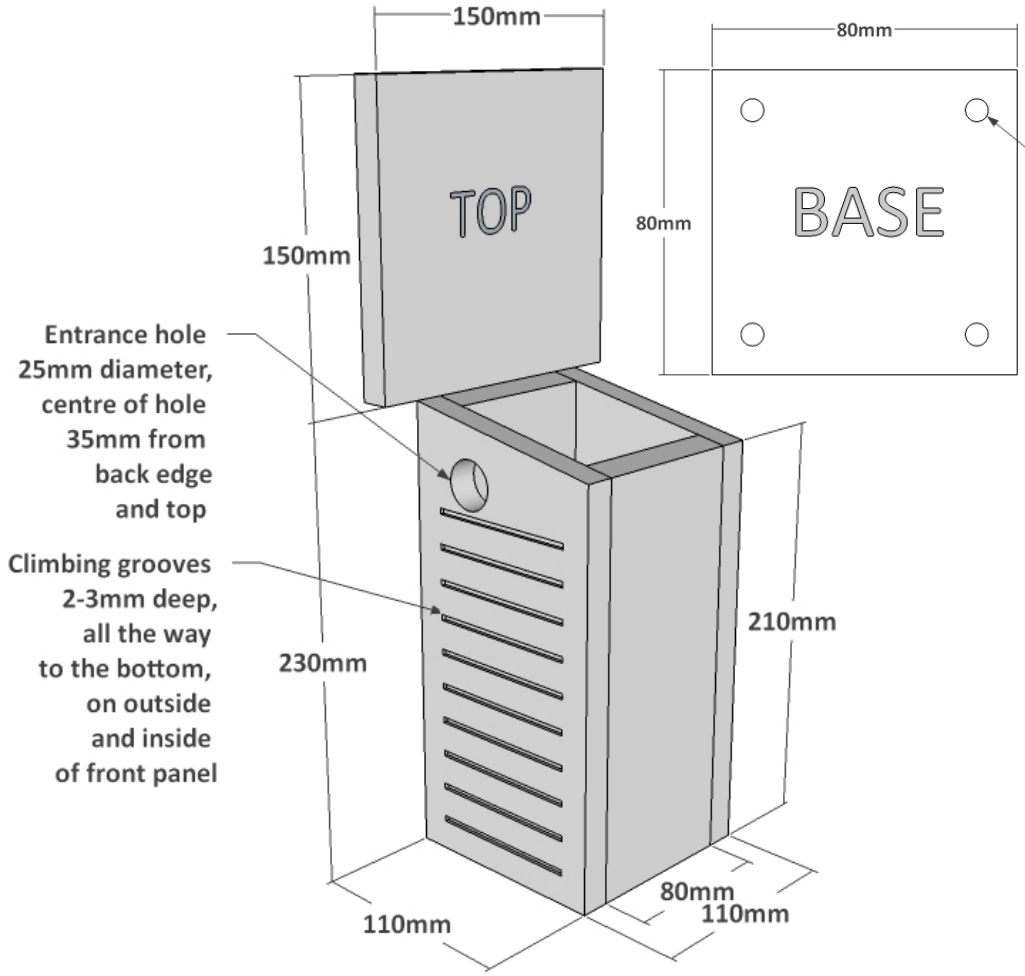
Small

Cutting list – 15mm ply

Sides	2 x 230mmback/210mm front x 110mm
Back	1 x 230mm x 80mm
Front	1 x 210mm x 80mm
Base	1 x 80mm x 80mm
Roof	1 x 150mm x 150mm







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Graphics assistance by Jenny Bigelow

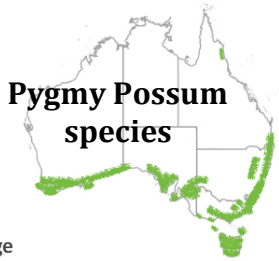
Feathertail Glider/ Antechinus / Pygmy Possum (Front Entrance)

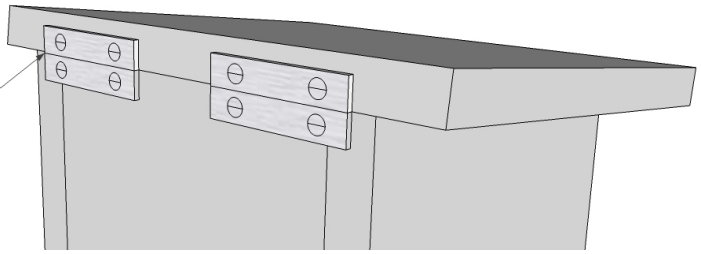
Small

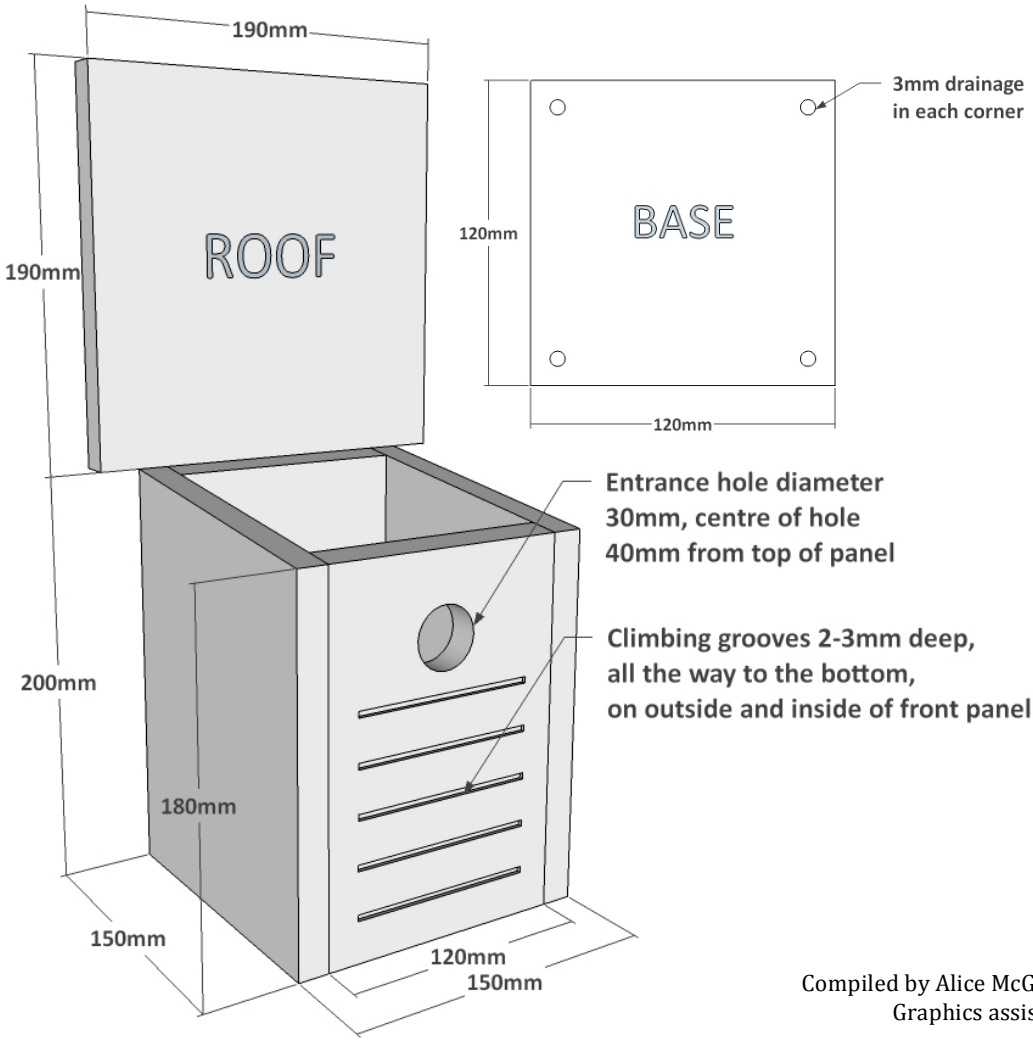
FEATHERTAIL GLIDER

Cutting list – 15mm ply

Sides	2 x 200mm back/180mm front x 150mm
Back	1 x 200mm x 120mm
Front	1 x 180mm x 120mm
Base	1 x 120mm x 120mm
Roof	1 x 190mm x 190mm







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Graphics assistance by Jenny Bigelow

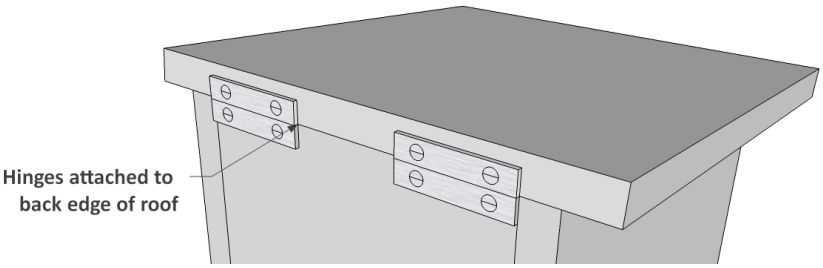
Sugar Glider / Squirrel Glider

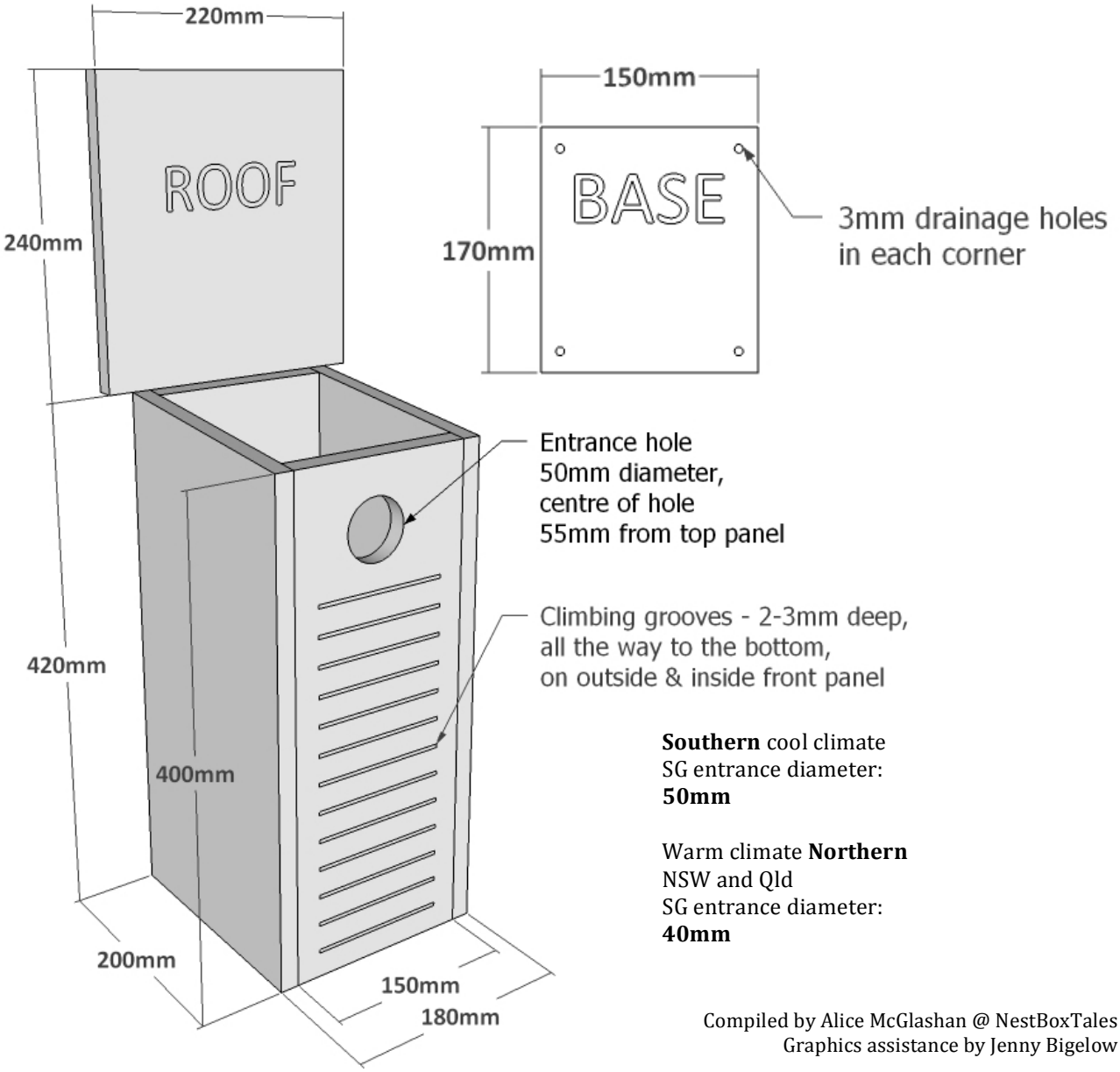
Small

Sugar Glider

Cutting list – 15mm ply

Sides	2 x 420mm back/400mm front x 200mm
Back	1 x 420mm x 150mm
Front	1 x 400mm x 150mm
Base	1 x 170mm x 150mm
Roof	1 x 240mm x 220mm





Southern cool climate
SG entrance diameter:
50mm

Warm climate **Northern**
NSW and Qld
SG entrance diameter:
40mm

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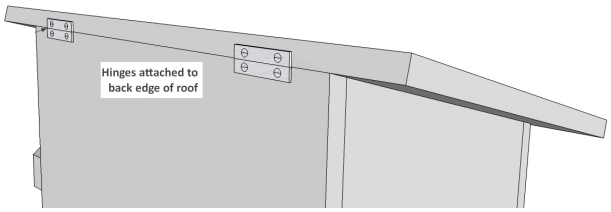
Graphics assistance by Jenny Bigelow

Greater Glider

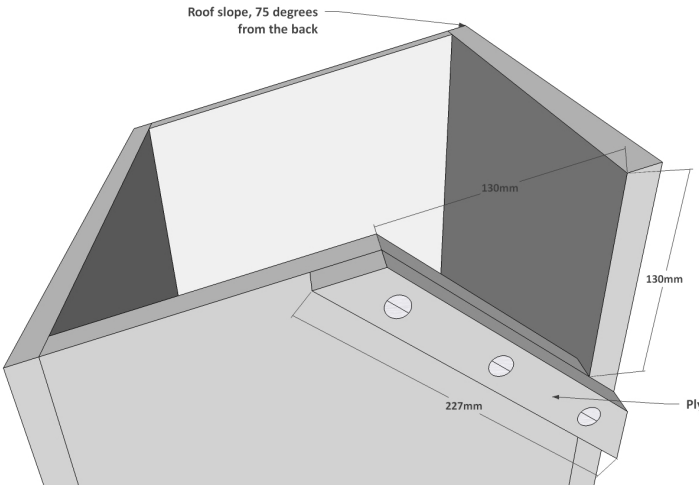
GREATER GLIDER
Cutting list – 18mm ply

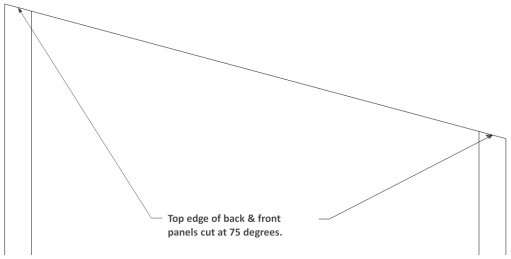
Sides	2 x 520mm back/440mm front x 300mm
Back	1 x 525mm/520mm x 386mm [allowance for bevelled edge]
Front	1 x 440mm/435mm x 386mm [allowance for bevelled edge]
Entrance block	1 x 227mm x 30mm
Base	1 x 350mm x 300mm
Roof	1 x 516mm x 400mm

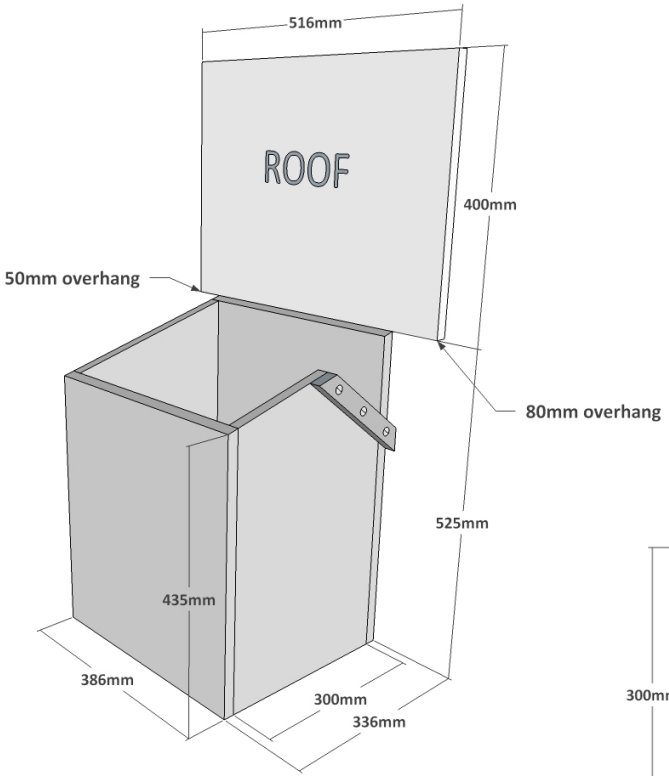
Medium

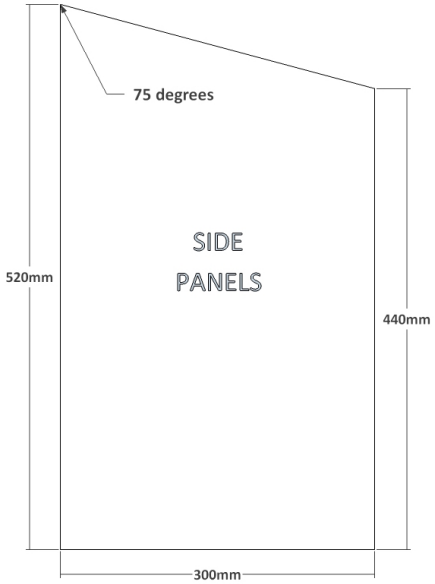


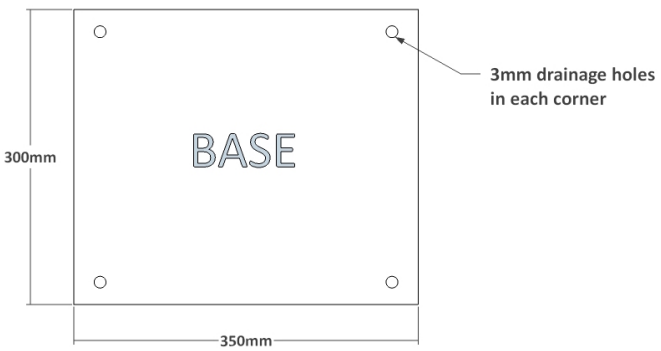
Note: nest box needs to be installed between 15-30m high, on the South Eastern side of the tree. Install at an average of 10 per HA.











Design by Drew Liepa, Greening Australia
Detailed diagram by Anne Mouland-Claassens, Creature Comforts
Compiled by Alice McGlashan @ NestBoxTales
Graphics assistance by Jenny Bigelow

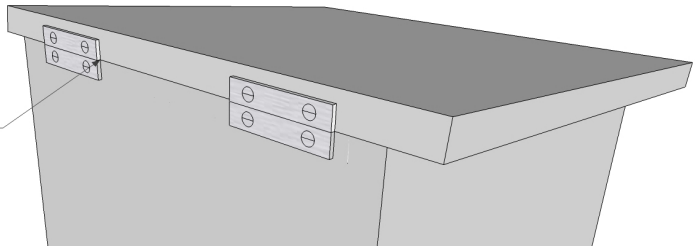
Ringtail Possum

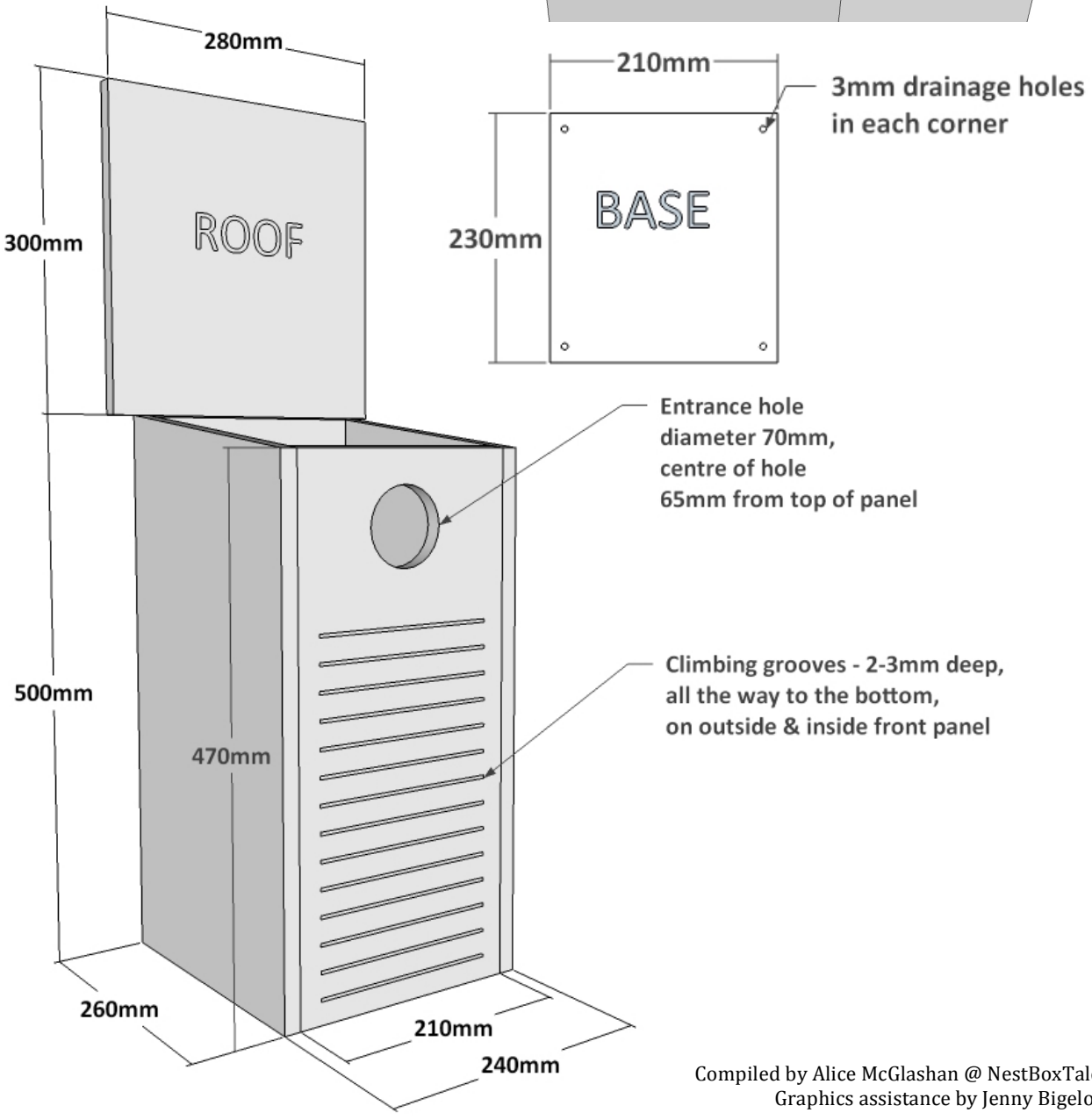
Medium

Ringtail possum

Cutting list – 15mm ply

Sides	2 x 500mm back/470mm front x 260mm
Back	1 x 500mm x 210mm
Front	1 x 470mm x 210mm
Base	1 x 230mm x 210mm
Roof	1 x 300mm x 280mm





Compiled by Alice McGlashan @ NestBoxTales
Graphics assistance by Jenny Bigelow

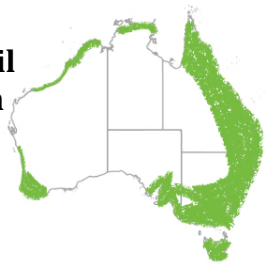
Brushtail Possum

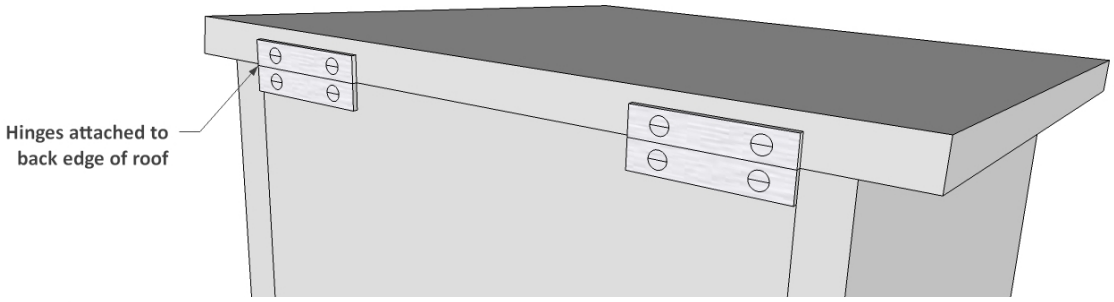
Large

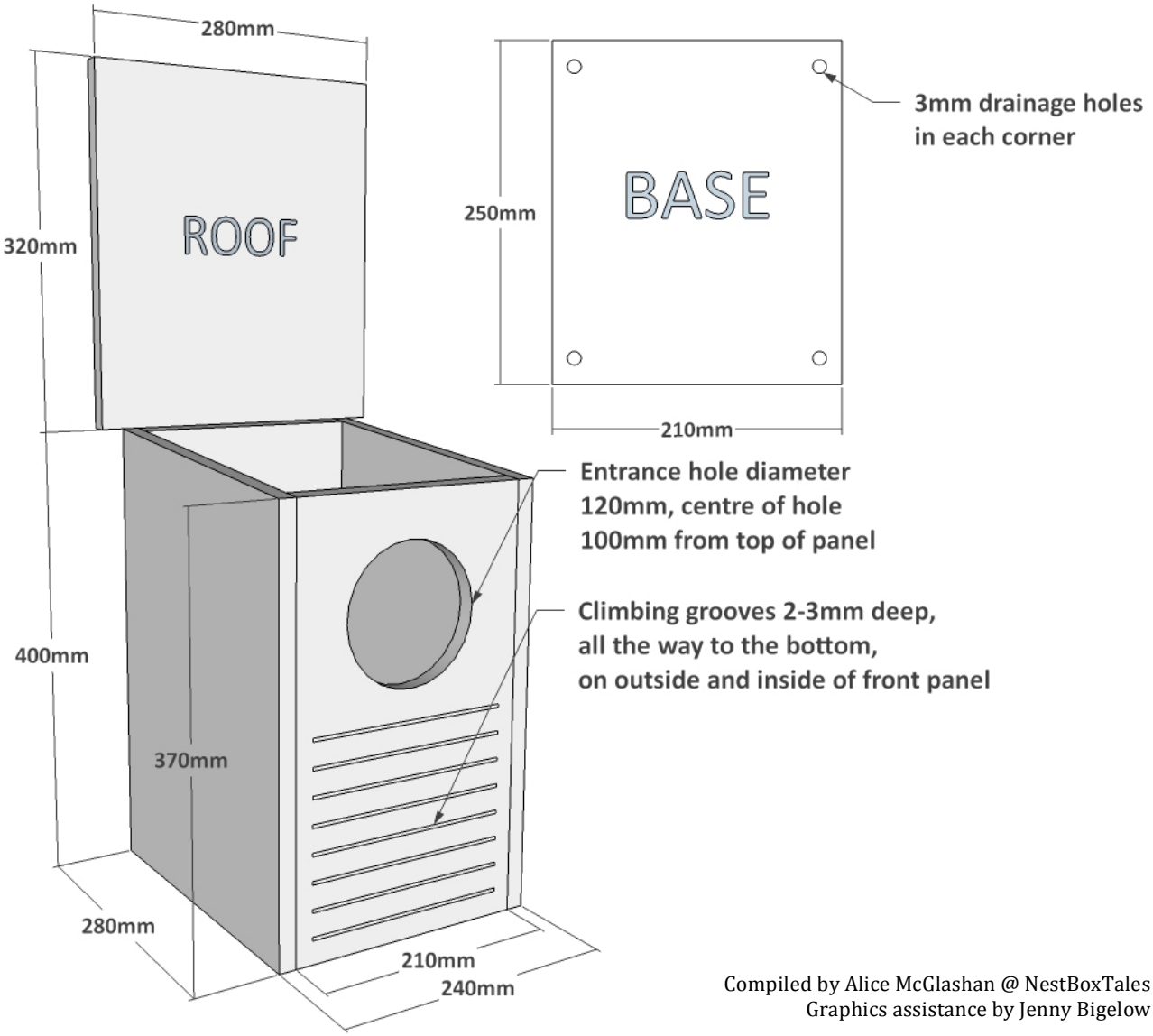
BRUSHTAIL POSSUM
Cutting list – 15mm ply

Sides	2 x 400mm back/4000mm front x 370mm
Back	1 x 400mm x 210mm
Front	1 x 370mm x 210mm
Base	1 x 250mm x 210mm
Roof	1 x 320mm x 280mm

Brushtail Possum species







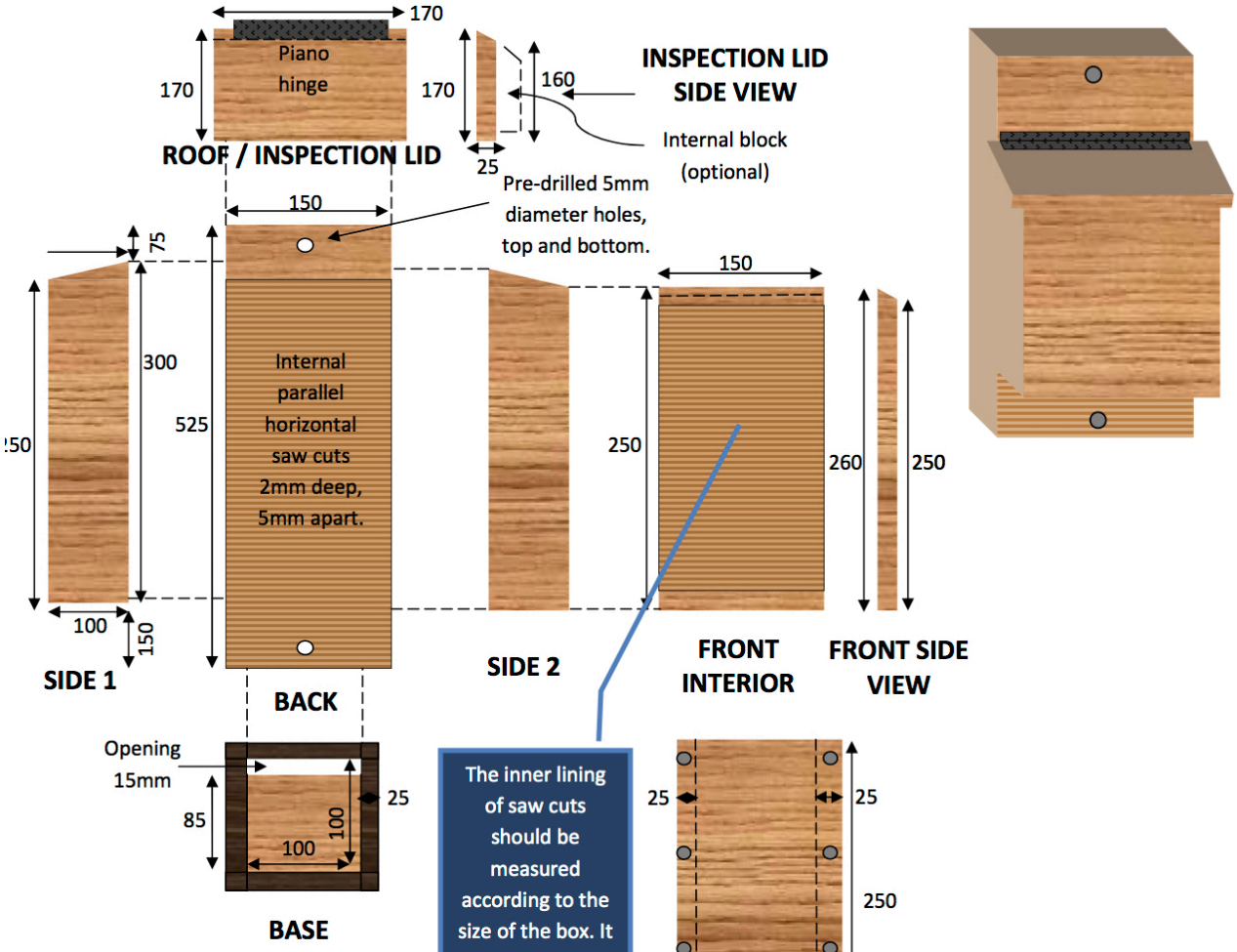
Compiled by Alice McGlashan @ NestBoxTales
Graphics assistance by Jenny Bigelow

Microbat

Small

From the publication: **Nest Boxes for the Gippsland Region**, by East Gippsland & Maffra and District Landcare Networks.

Microbat species (Au Wide)



Bats can take up to two years to make a nest box their home, so don't be dismayed if your bat box remains unclaimed. Bats regularly move between a number of nest boxes so it is important to have a large number of roost sites in the one area, eg. 10 -15. The ideal installation height for this nest box is 2-4 metres.

Measurements are in millimetres (mm).
Timber thickness 25mm.

Australian Owlet-nightjar

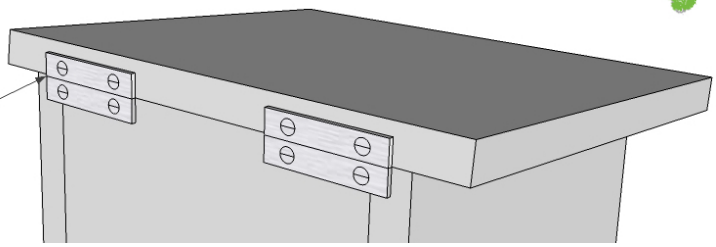
Medium

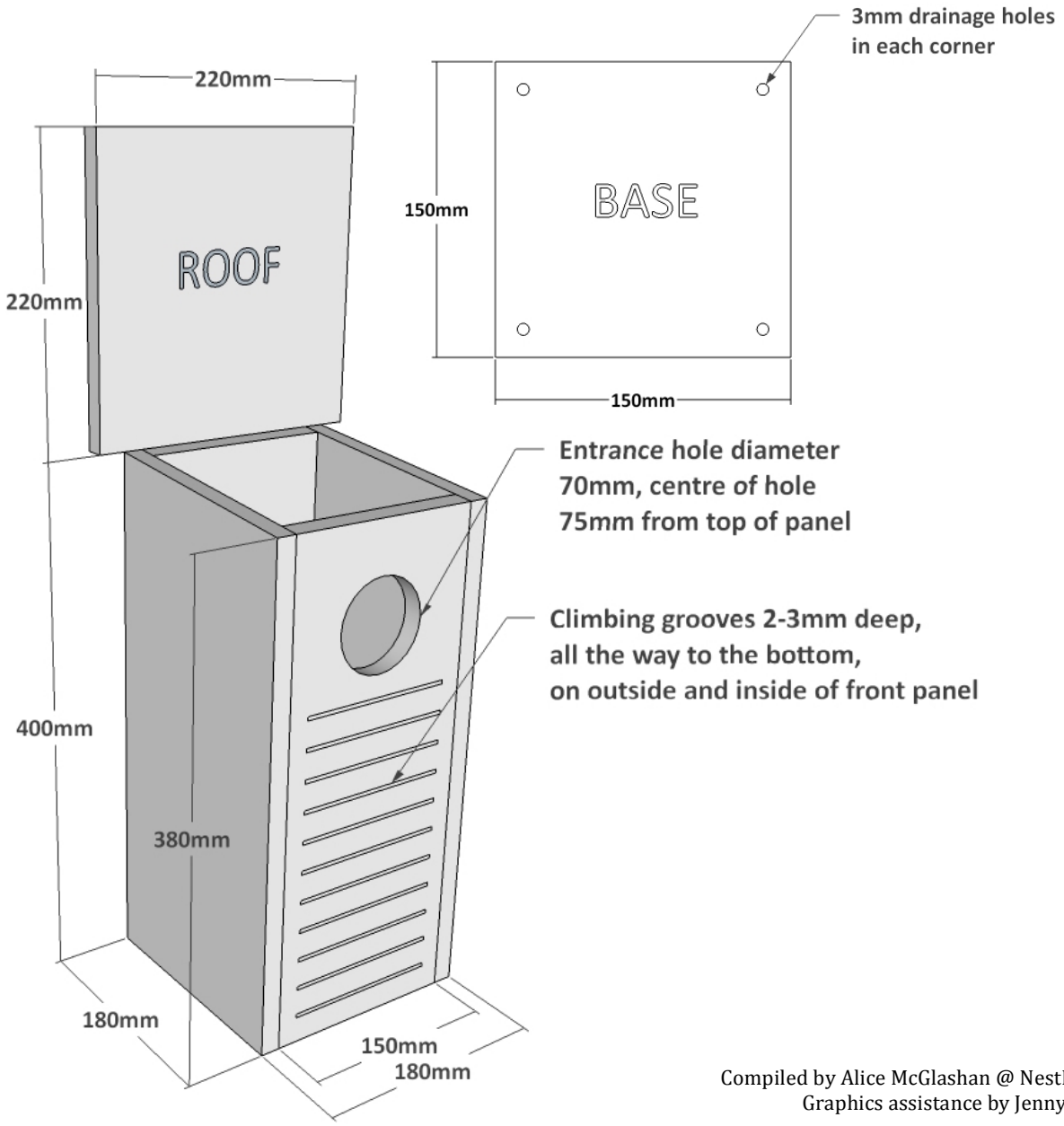
AUSTRALIAN OWLET NIGHTJAR

Cutting list – 15mm ply

Sides	2 x 400mm back/380mm front x 180mm
Back	1 x 400mm x 150mm
Front	1 x 380mm x 150mm
Base	1 x 150mm x 150mm
Roof	1 x 220mm x 220mm

Australian Owlet-nightjar (Au Wide)





Compiled by Alice McGlashan @ NestBoxTales
Graphics assistance by Jenny Bigelow

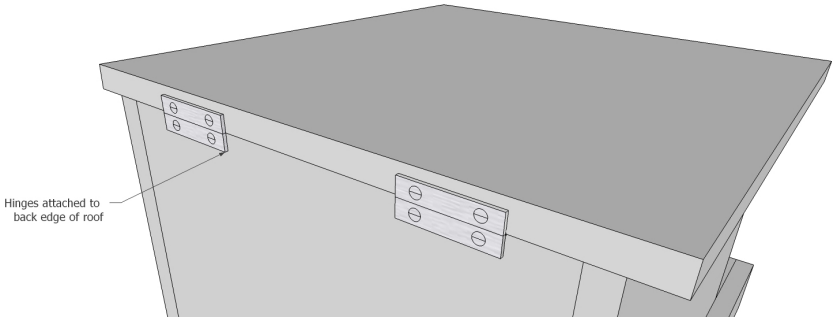
Owl / Wood Duck
(duckling safe)

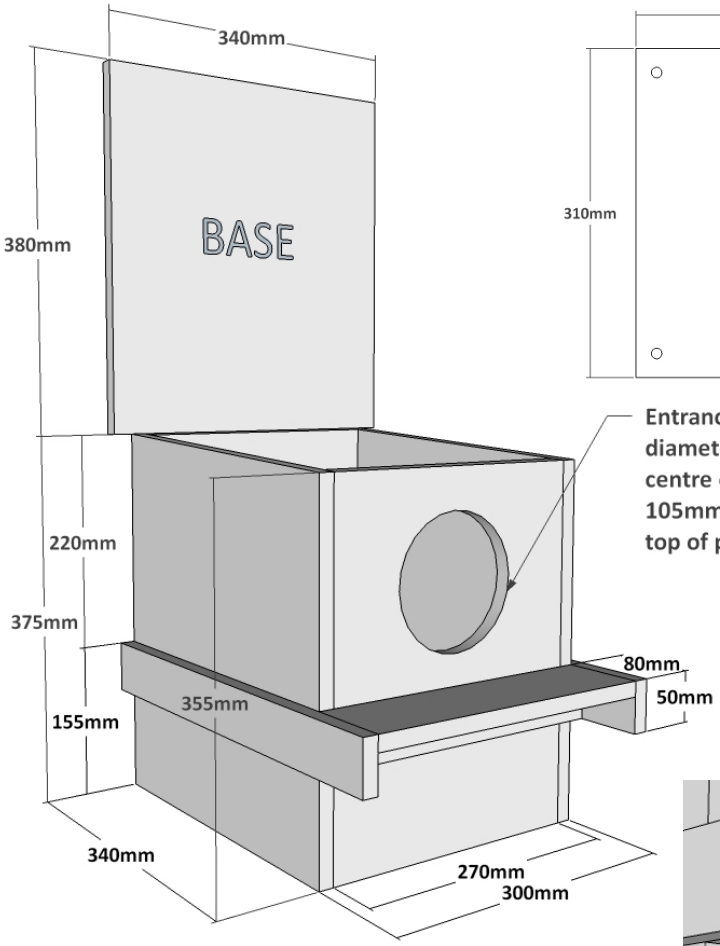
Large

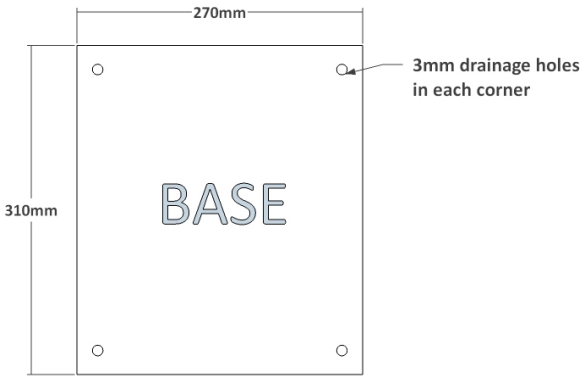
Australian Wood Duck

Cutting list – 15mm ply

Sides	2 x 375mm back/355mm front x 340mm
Back	1 x 375mm x 270mm
Front	1 x 355mm x 270mm
Base	1 x 310mm x 270mm
Roof	1 x 380mm x 340mm
Front shelf	1 x 300mm x 80mm
Shelf supports	2 x 420mm x 50mm, 1 x 300mm x 35mm

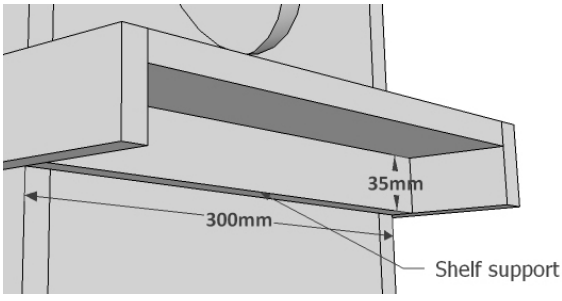






Note: ensure the **internal height** from the nest box base to bottom of entrance hole is **170mm** or less. Otherwise ducklings may be unable to jump out.

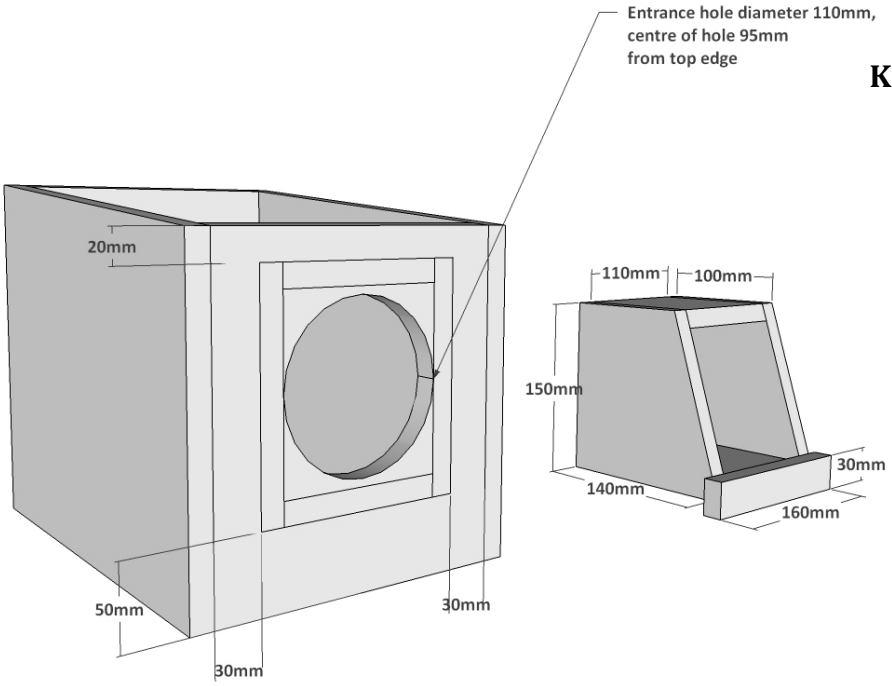
180mm jump height = some will make it (with difficulty, eventually), some won't.



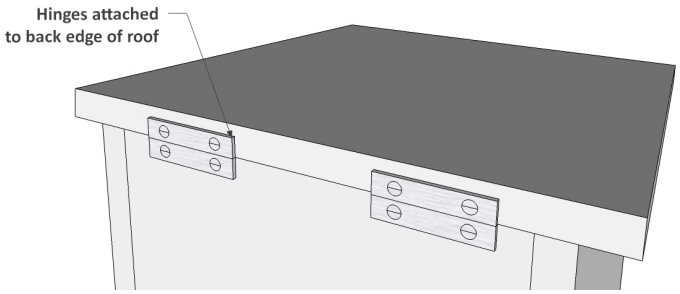
Nest box design credit: Hollow Log Homes, Allan and Stacey Franks
Modified dimensions to prevent trapping of ducklings
Compiled by Alice McGlashan @ NestBoxTales
Graphics assistance by Jenny Bigelow

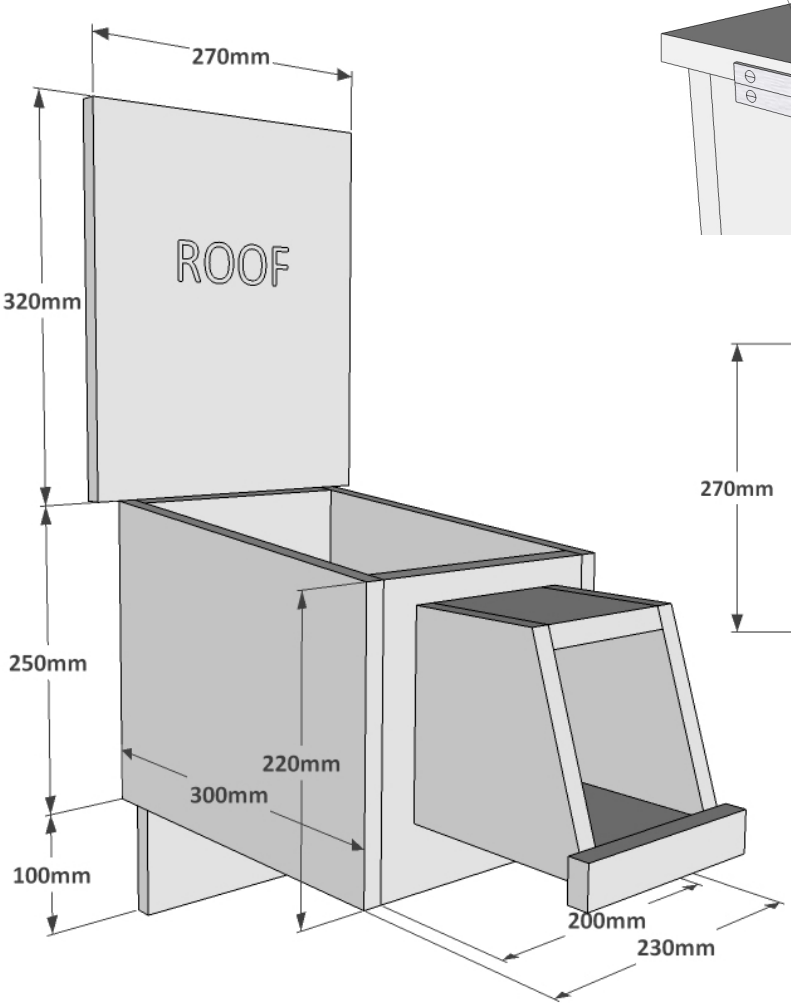
Kookaburra

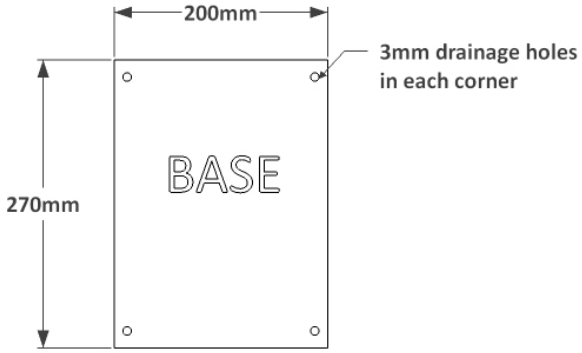
Large



Kookaburra Species







Nest box design credit: Nest Boxes for Wildlife
by Allan and Stacey Franks

Compiled by Alice McGlashan @ NestBoxTales
Graphics assistance by Jenny Bigelow

Galah

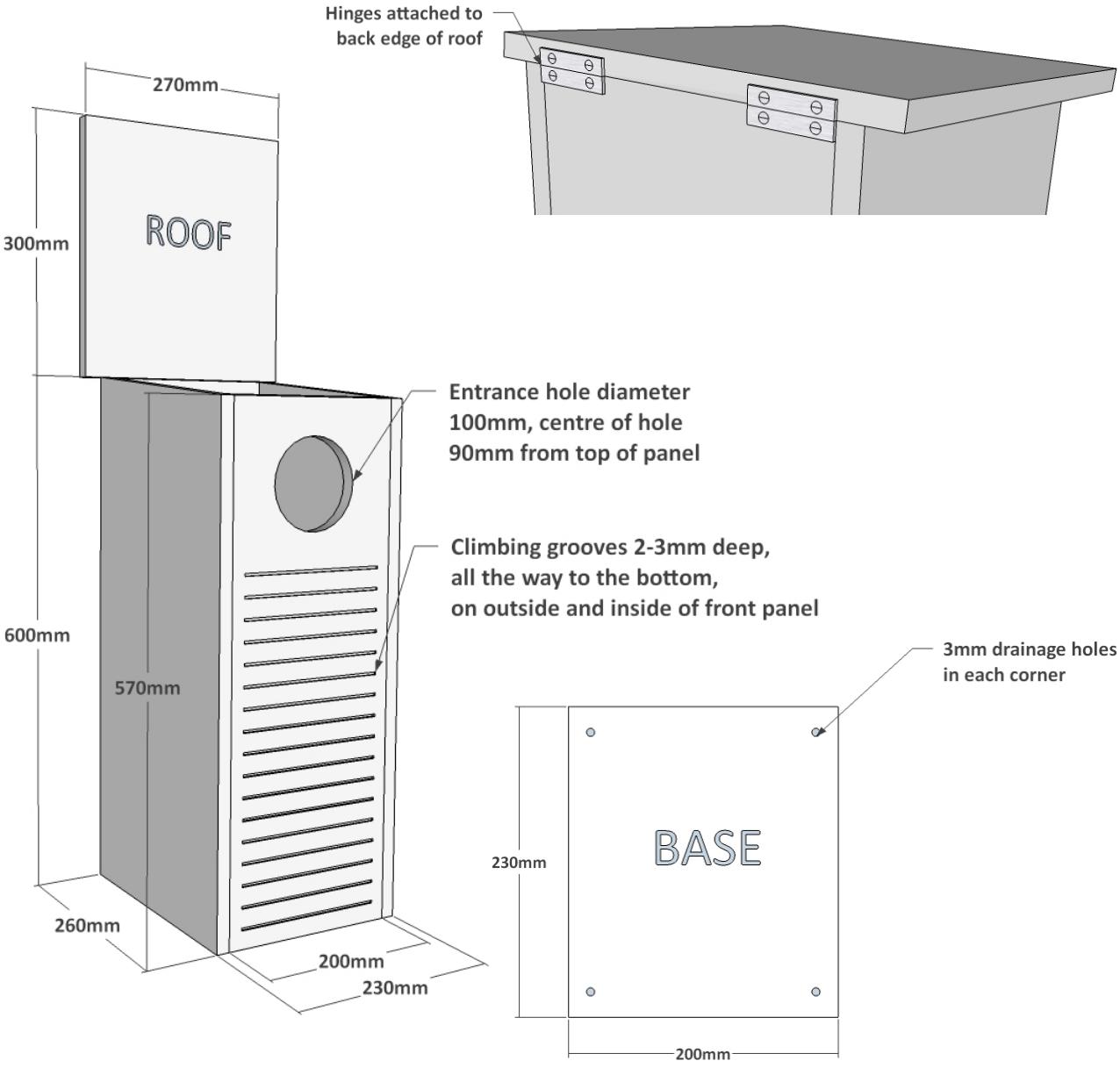
Large

Galah
(Mainland Au)

GALAH

Cutting list – 15mm ply

Sides	2 x 600mm back/570mm front x 260mm
Back	1 x 600mm x 200mm
Front	1 x 570mm x 200mm
Base	1 x 230mm x 200mm
Roof	1 x 300mm x 270mm



Compiled by Alice McGlashan @ NestBoxTales
Graphics assistance by Jenny Bigelow

Black-cockatoo / Powerful Owl

Large

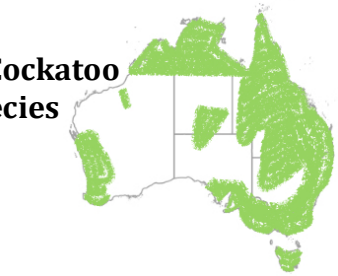
Cutting list – 15mm ply

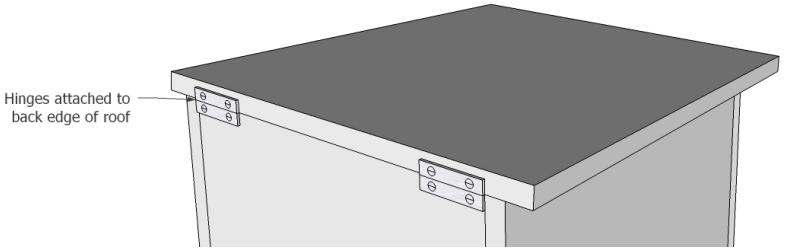
Sides	2 x 1000mm back/970mm front x 350mm
Back	1 x 1000mm x 280mm
Front	1 x 970mm x 280mm
Front cover	1 x 280mm x 310mm
Base	1 x 320mm x 280mm
Roof	1 x 410mm x 350mm
Front perch	1 x 310mm x 25mm x 25mm [timber]

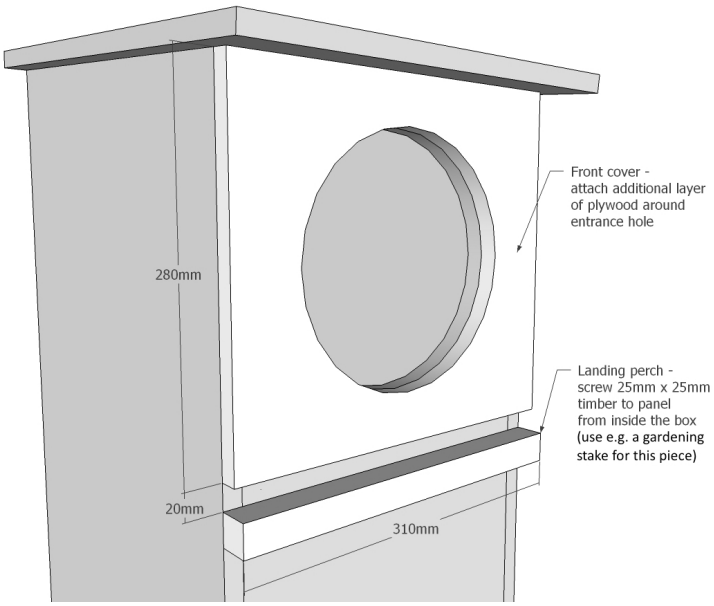
For Powerful Owl: Nest box needs to be installed at least 15m high.

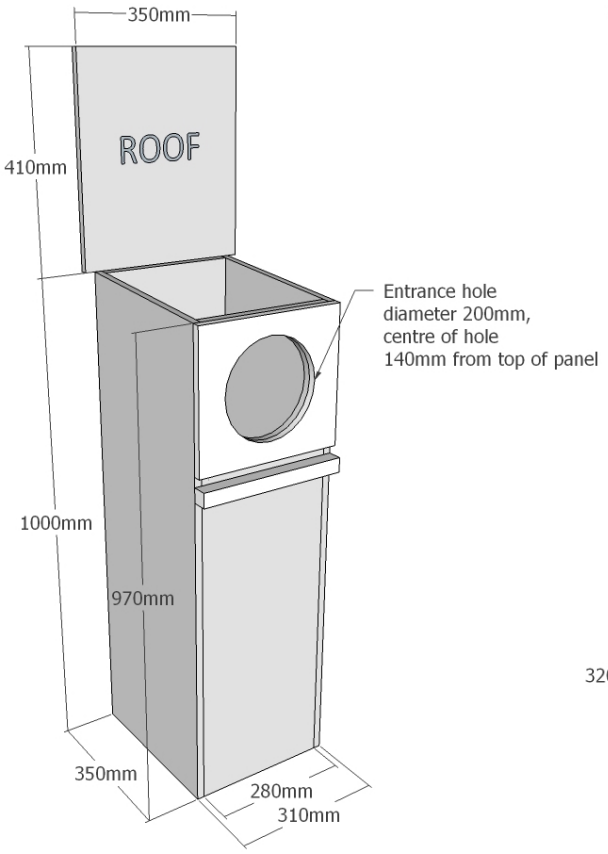
Powerful Owl

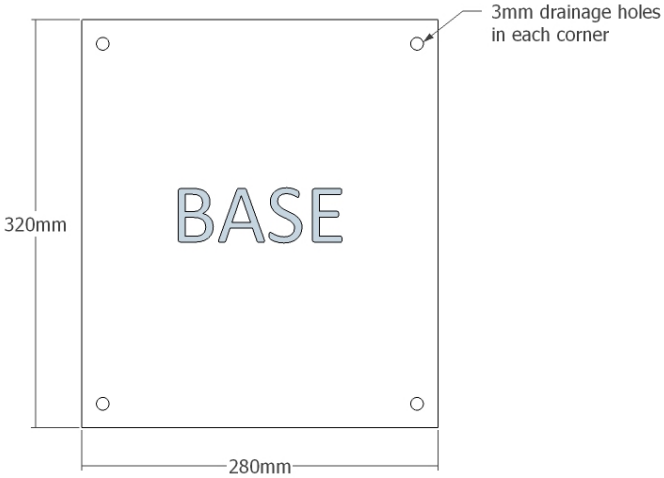
Black-Cockatoo species











Compiled by Alice McGlashan @ NestBoxTales
Graphics assistance by Jenny Bigelow

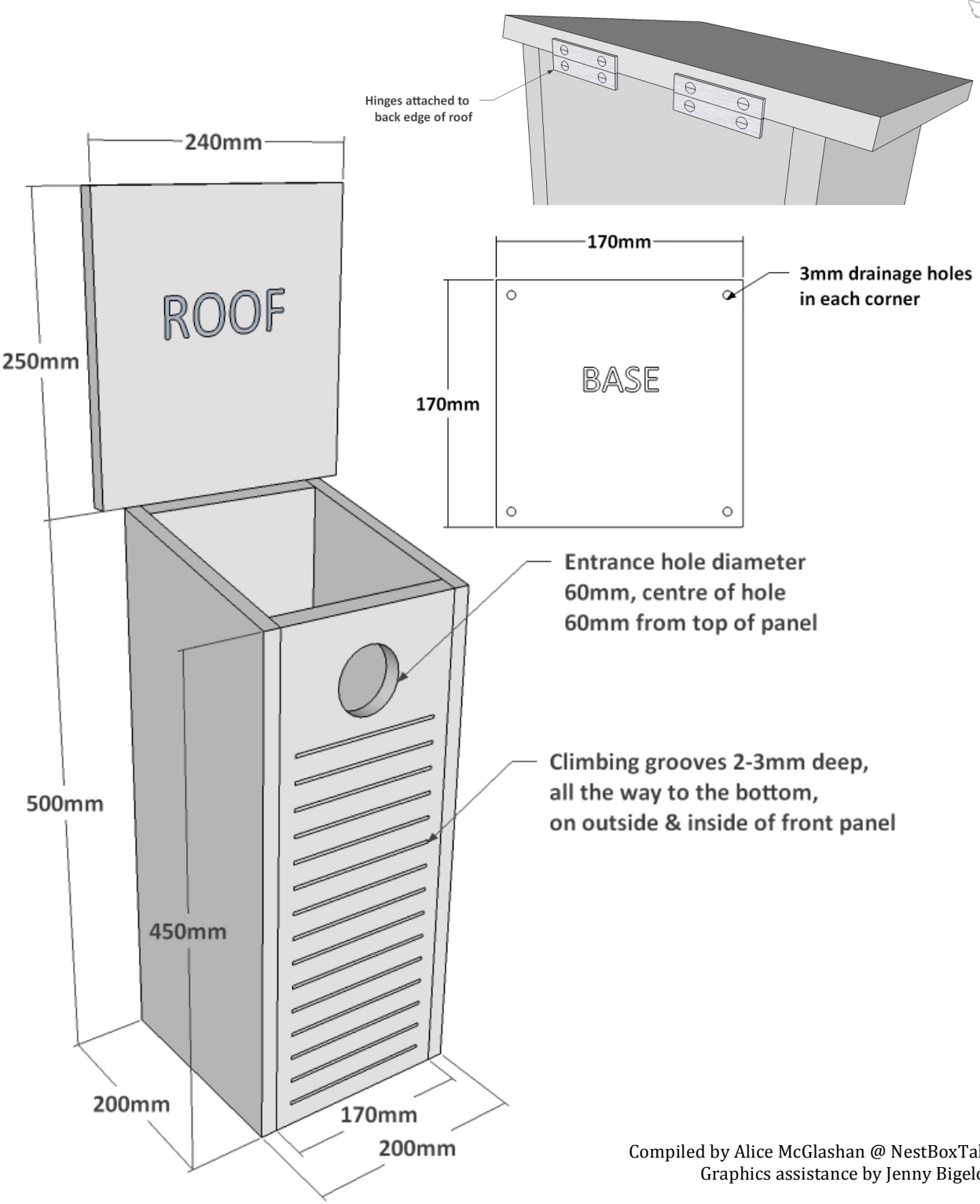
Red-rumped Parrot

RED-RUMPED PARROT

Medium

Cutting list – 15mm ply

Sides	2 x 500mm back/450mm front x 200mm
Back	1 x 500mm x 170mm
Front	1 x 450mm x 170mm
Base	1 x 170mm x 170mm
Roof	1 x 250mm x 240mm

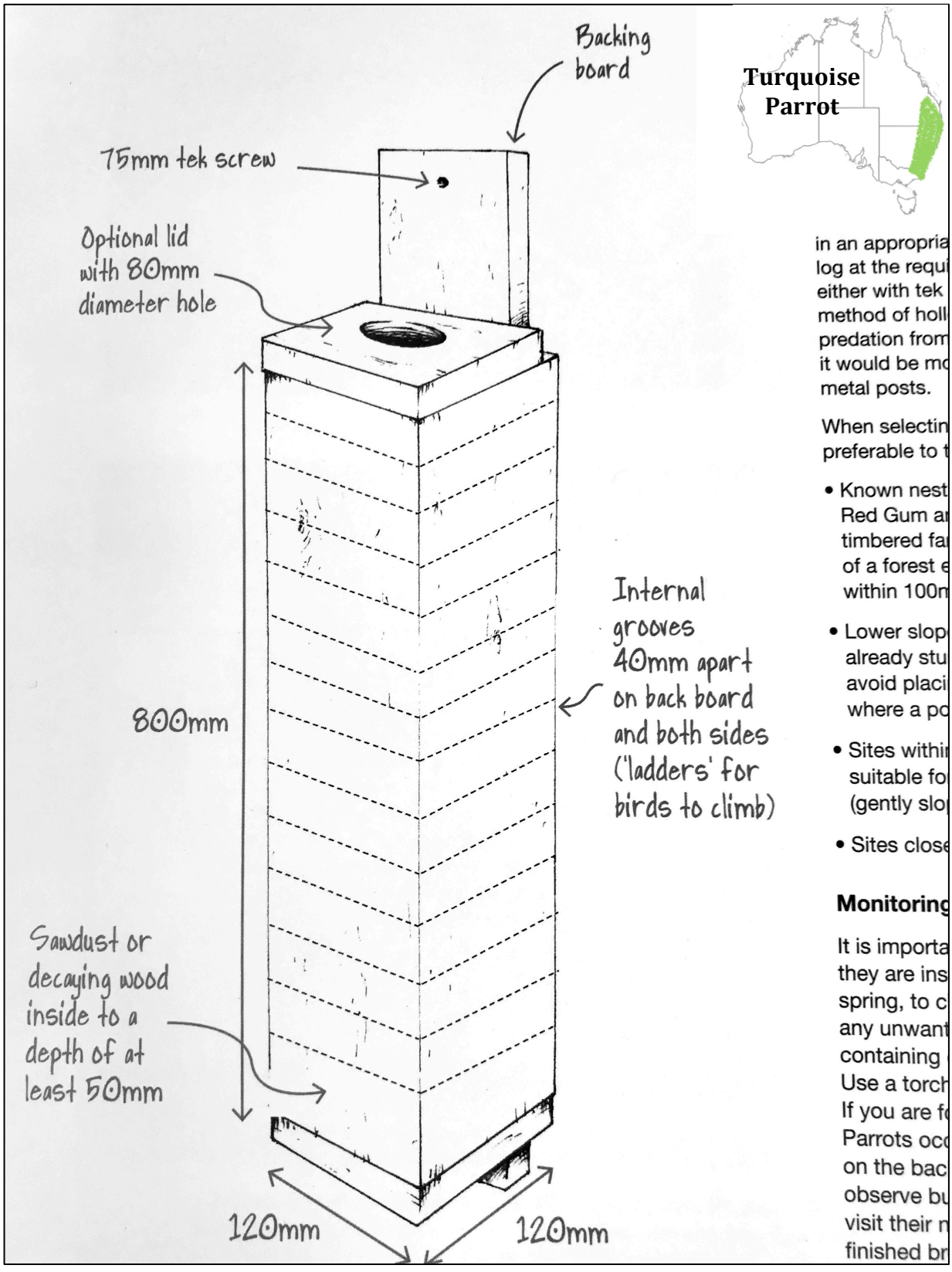


Compiled by Alice McGlashan @ NestBoxTales
Graphics assistance by Jenny Bigelow

Turquoise Parrot

Medium

From 'Turquoise Country, Communities caring for the threatened Turquoise Parrot'.
By the Goulburn Broken Catchment Management Authority



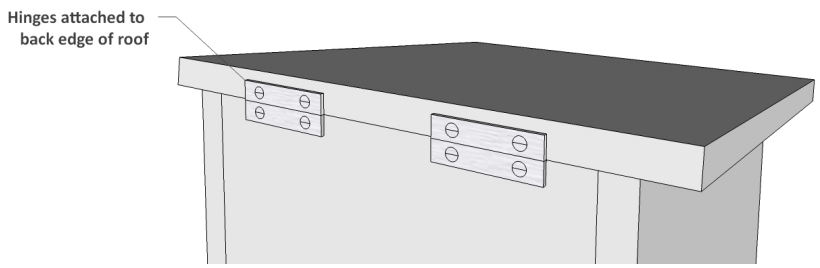
Crimson Rosella / Dollarbird

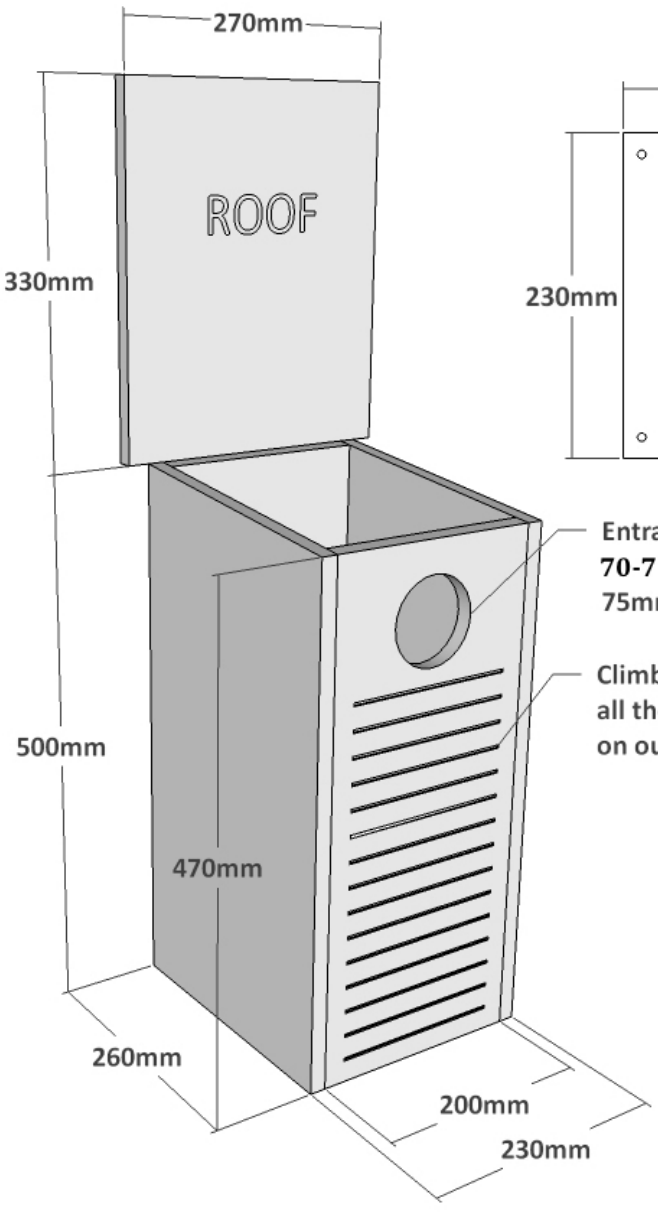
Medium

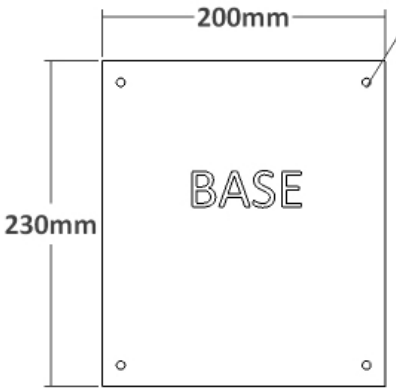
CRIMSON ROSELLA

Cutting list – 15mm ply

Sides	2 x 500mm back/470mm front x 260
Back	1 x 500mm x 200mm
Front	1 x 470mm x 200mm
Base	1 x 230mm x 200mm
Roof	1 x 330mm x 270mm







Entrance hole diameter
70-75mm centre of hole
75mm from top of panel

Climbing grooves 2-3mm deep,
all the way to the bottom,
on outside & inside of front panel

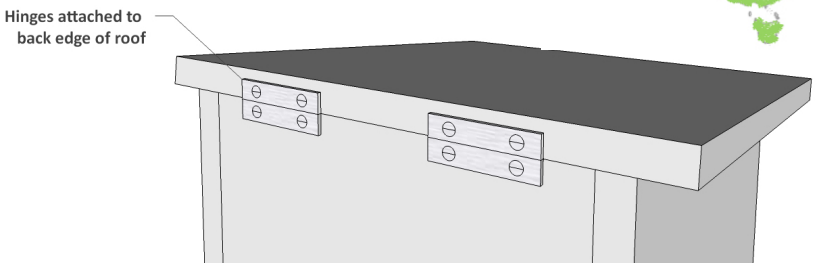
Compiled by Alice McGlashan @ NestBoxTales
Graphics assistance by Jenny Bigelow

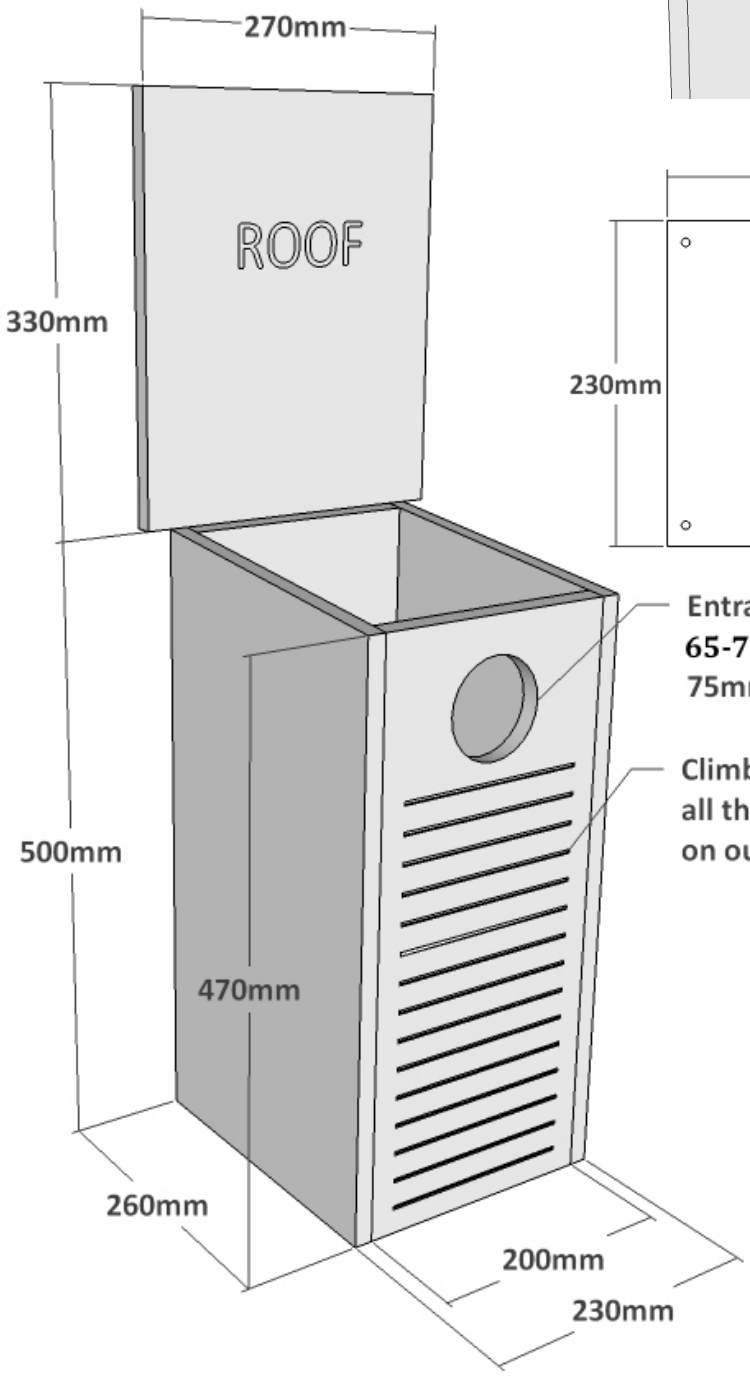
Eastern Rosella

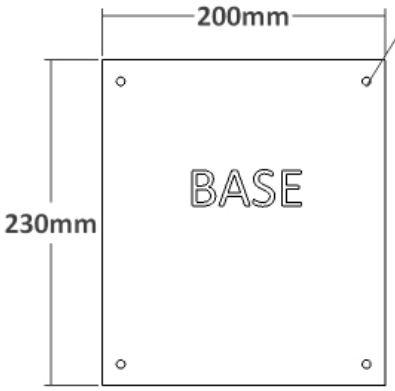
Eastern Rosella **Medium**

Cutting list – 15mm ply

Sides	2 x 500mm back/470mm front x 260
Back	1 x 500mm x 200mm
Front	1 x 470mm x 200mm
Base	1 x 230mm x 200mm
Roof	1 x 330mm x 270mm







Entrance hole diameter
65-70mm centre of hole
75mm from top of panel

Climbing grooves 2-3mm deep,
all the way to the bottom,
on outside & inside of front panel

Compiled by Alice McGlashan @ NestBoxTales
Graphics assistance by Jenny Bigelow

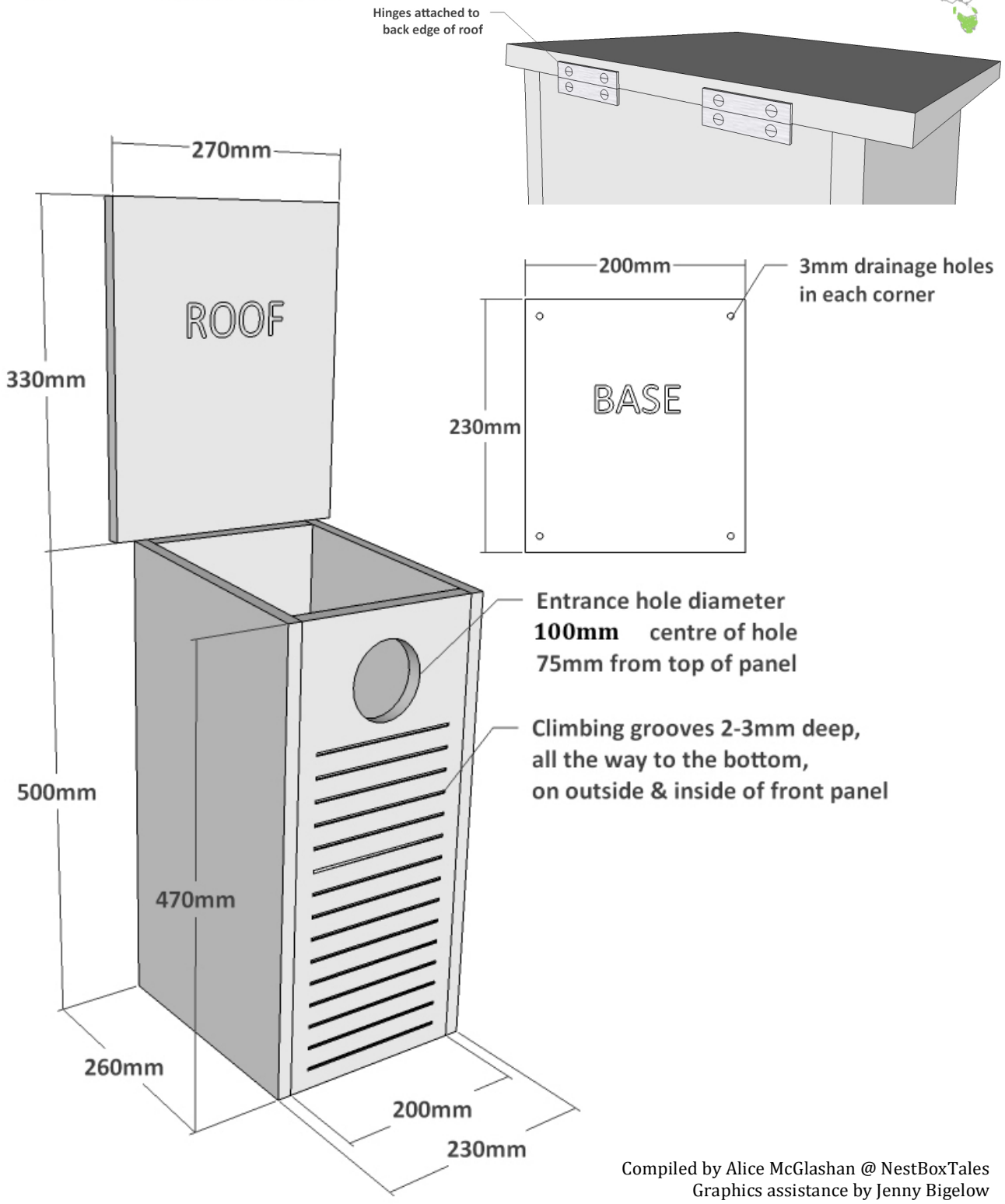
Green Rosella

Green Rosella

Medium

Cutting list – 15mm ply

Sides	2 x 500mm back/470mm front x 260
Back	1 x 500mm x 200mm
Front	1 x 470mm x 200mm
Base	1 x 230mm x 200mm
Roof	1 x 330mm x 270mm



Compiled by Alice McGlashan @ NestBoxTales
Graphics assistance by Jenny Bigelow

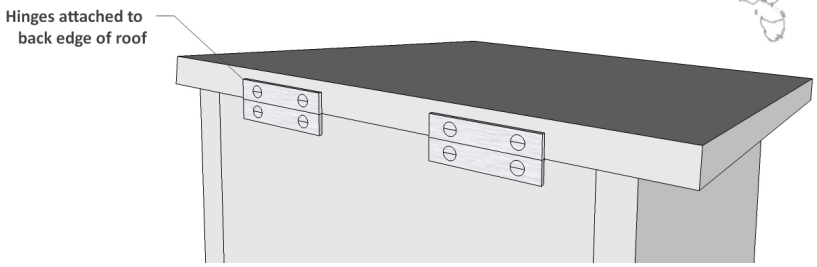
Pale-headed Rosella

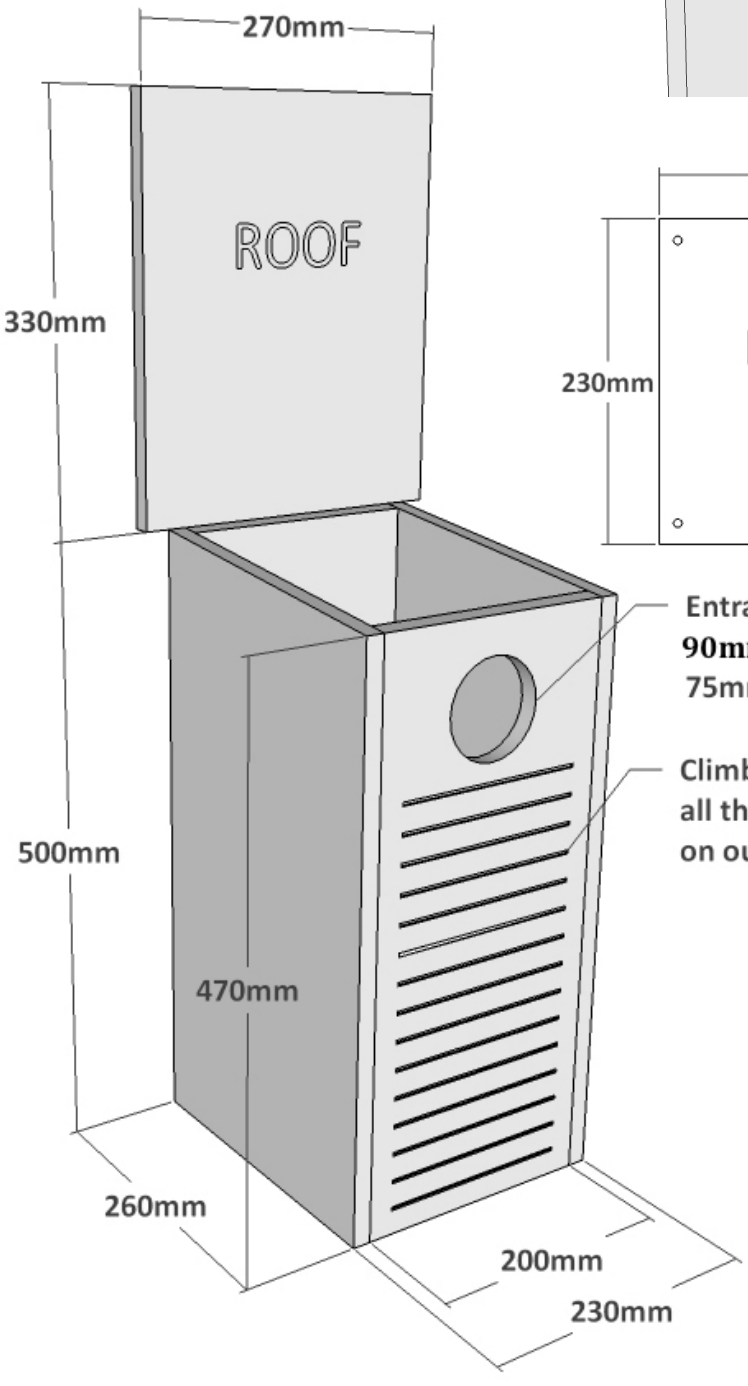
Medium

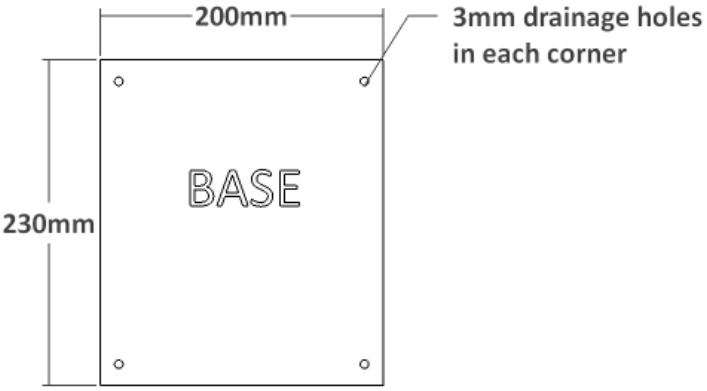
Pale-headed Rosella

Cutting list – 15mm ply

Sides	2 x 500mm back/470mm front x 260
Back	1 x 500mm x 200mm
Front	1 x 470mm x 200mm
Base	1 x 230mm x 200mm
Roof	1 x 330mm x 270mm







Entrance hole diameter
90mm centre of hole
75mm from top of panel

Climbing grooves 2-3mm deep,
all the way to the bottom,
on outside & inside of front panel

Compiled by Alice McGlashan @ NestBoxTales
Graphics assistance by Jenny Bigelow

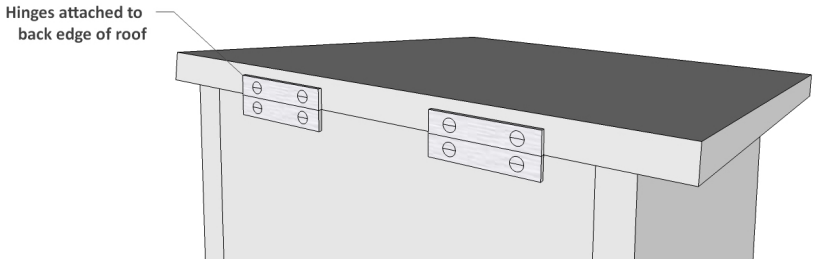
Western Rosella

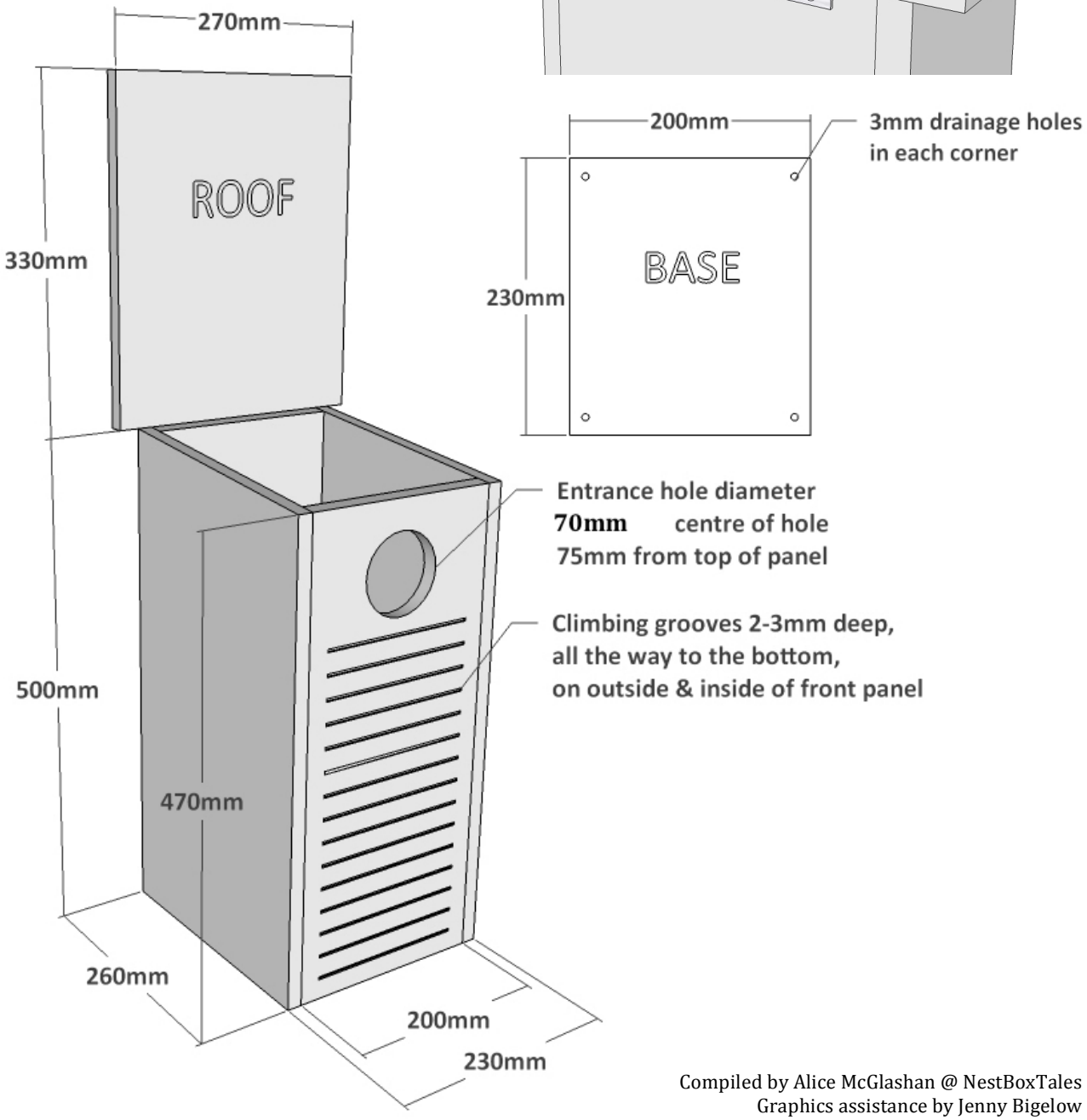
Western Rosella

Medium

Cutting list – 15mm ply

Sides	2 x 500mm back/470mm front x 260
Back	1 x 500mm x 200mm
Front	1 x 470mm x 200mm
Base	1 x 230mm x 200mm
Roof	1 x 330mm x 270mm

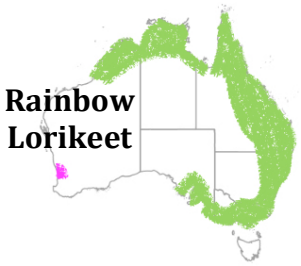




Compiled by Alice McGlashan @ NestBoxTales
Graphics assistance by Jenny Bigelow

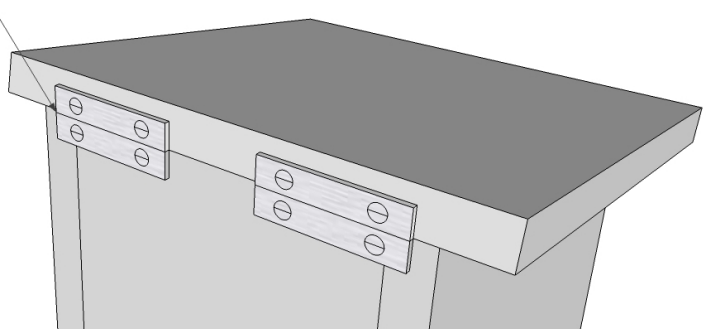
Rainbow Lorikeet

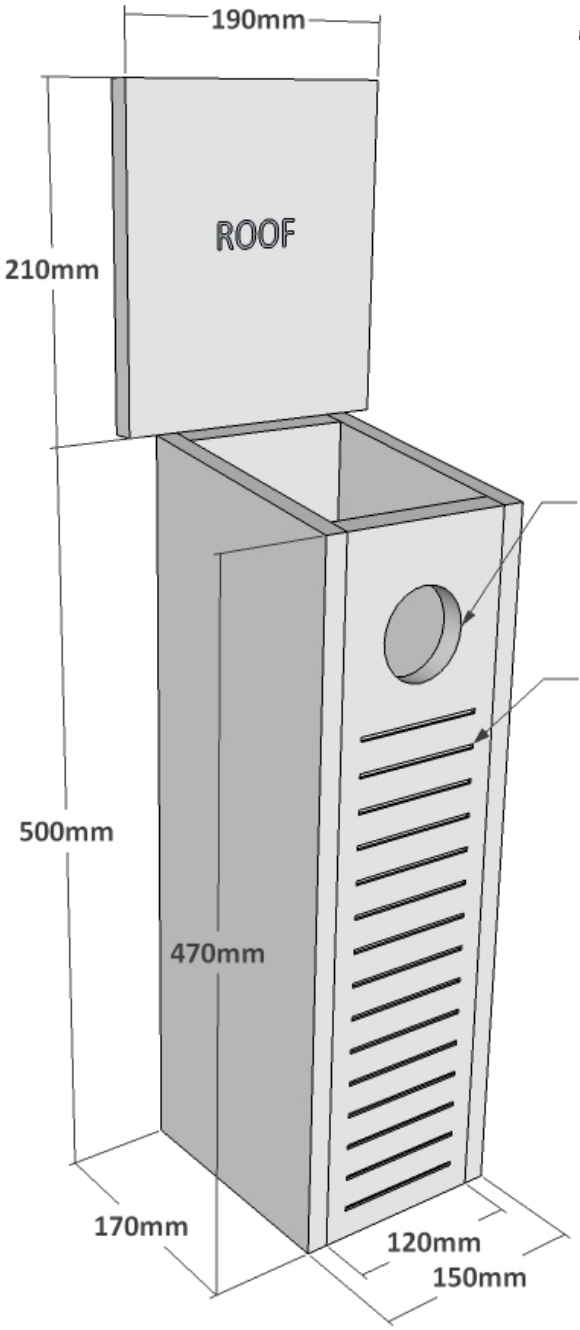
Medium



RAINBOW LORIKEET
Cutting list – 15mm ply

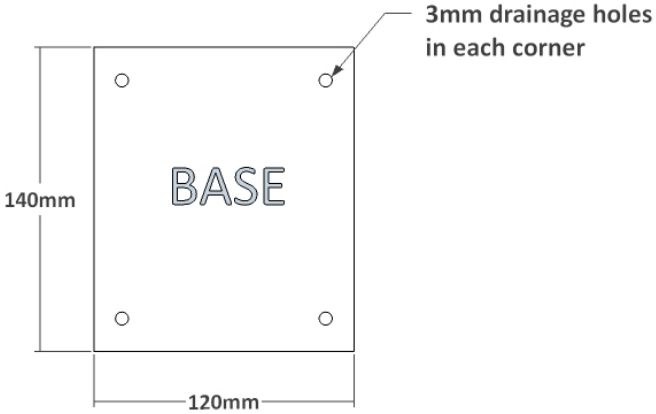
Sides	2 x 500mm back/470mm front x 170mm
Back	1 x 500mm x 120mm
Front	1 x 470mm x 120mm
Base	1 x 140mm x 120mm
Roof	1 x 210mm x 190mm





Entrance hole diameter
60mm, centre of hole
70mm from top of panel

Climbing grooves 2-3mm deep,
all the way to the bottom,
on outside and inside of front panel



Compiled by Alice McGlashan @ NestBoxTales
Graphics assistance by Jenny Bigelow

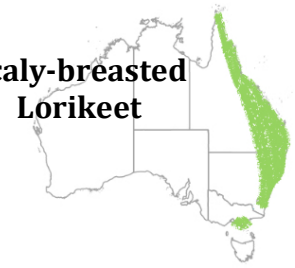
Scaly-breasted Lorikeet

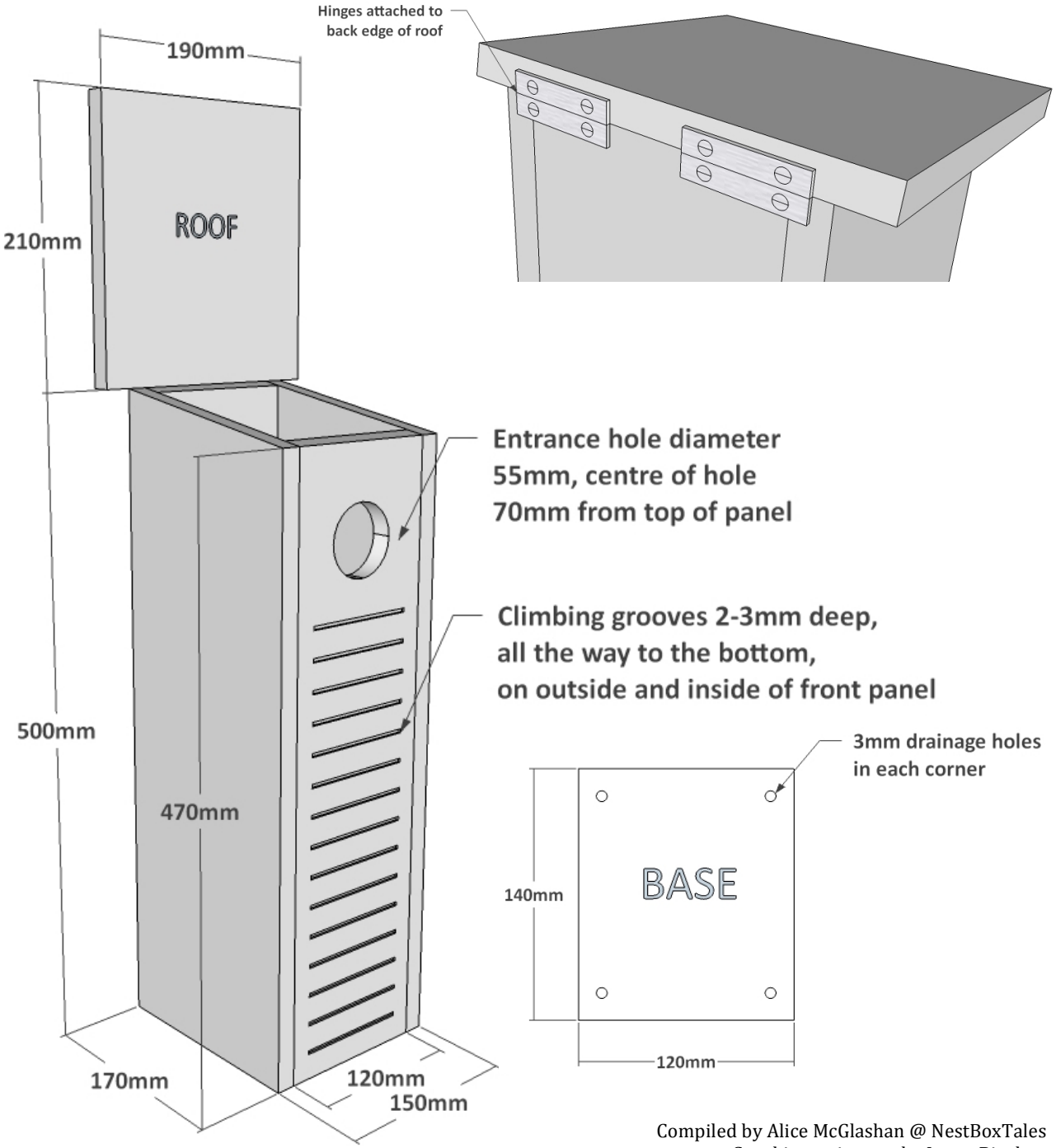
Medium

SCALY-BREASTED LORIKEET

Cutting list – 15mm ply

Sides	2 x 500mm back/470mm front x 170mm
Back	1 x 500mm x 170mm
Front	1 x 470mm x 170mm
Base	1 x 140mm x 120mm
Roof	1 x 210mm x 190mm





Compiled by Alice McGlashan @ NestBoxTales
Graphics assistance by Jenny Bigelow

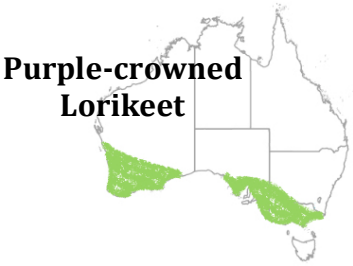
Small Lorikeet Species
(Musk, Little, Purple-crowned)

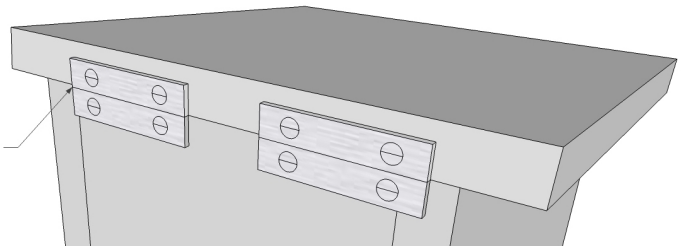
SMALL LORIKEET

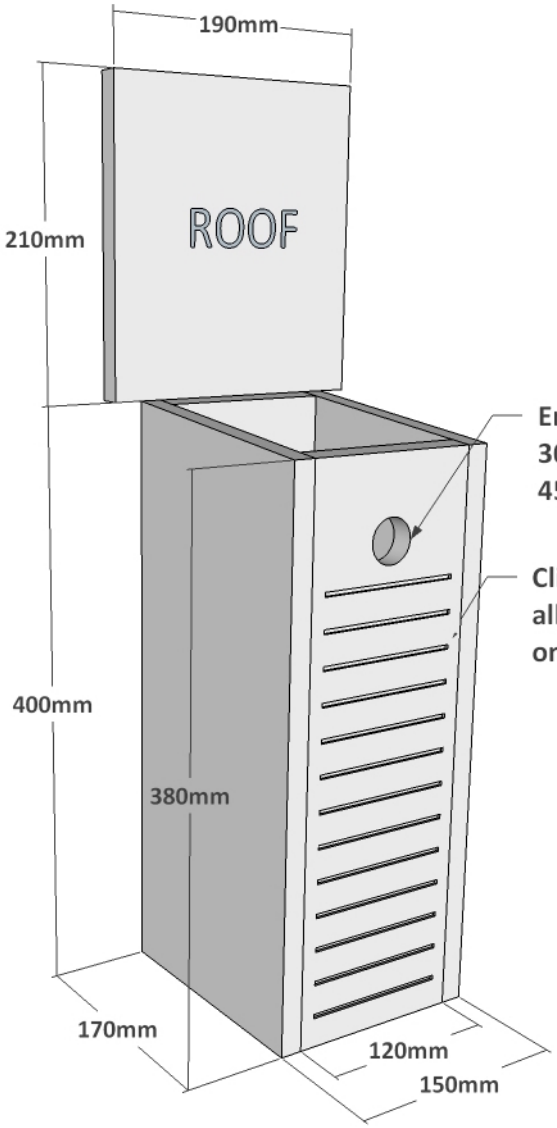
Cutting list – 15mm ply

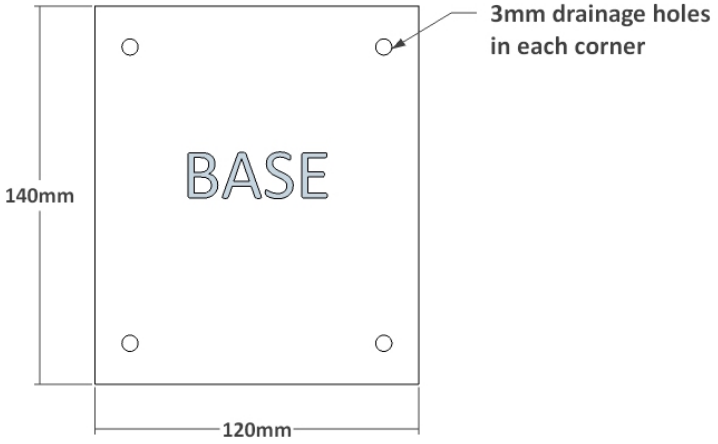
Sides	2 x 400mm back/380mm front x 170mm
Back	1 x 400mm x 120mm
Front	1 x 380mm x 120mm
Base	1 x 140mm x 120mm
Roof	1 x 190mm x 210mm

Small









Compiled by Alice McGlashan @ NestBoxTales
Graphics assistance by Jenny Bigelow

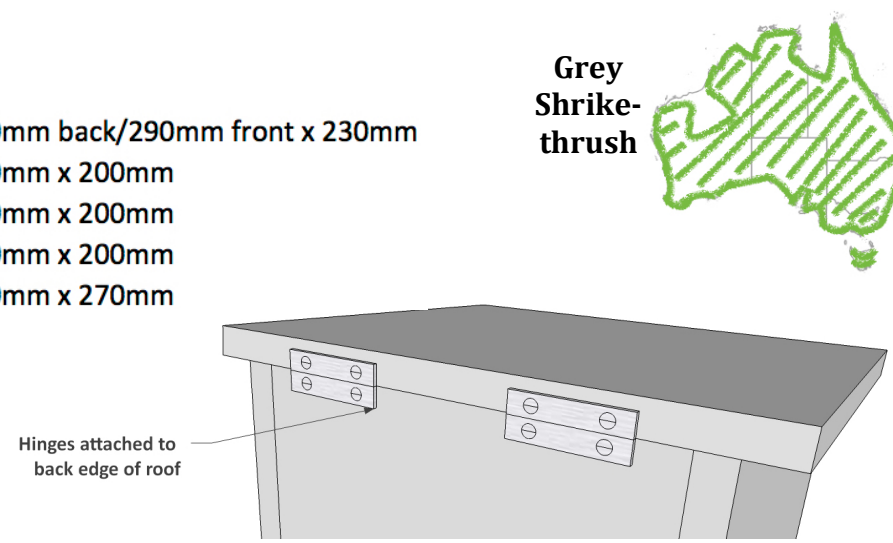
Grey Shrike-thrush

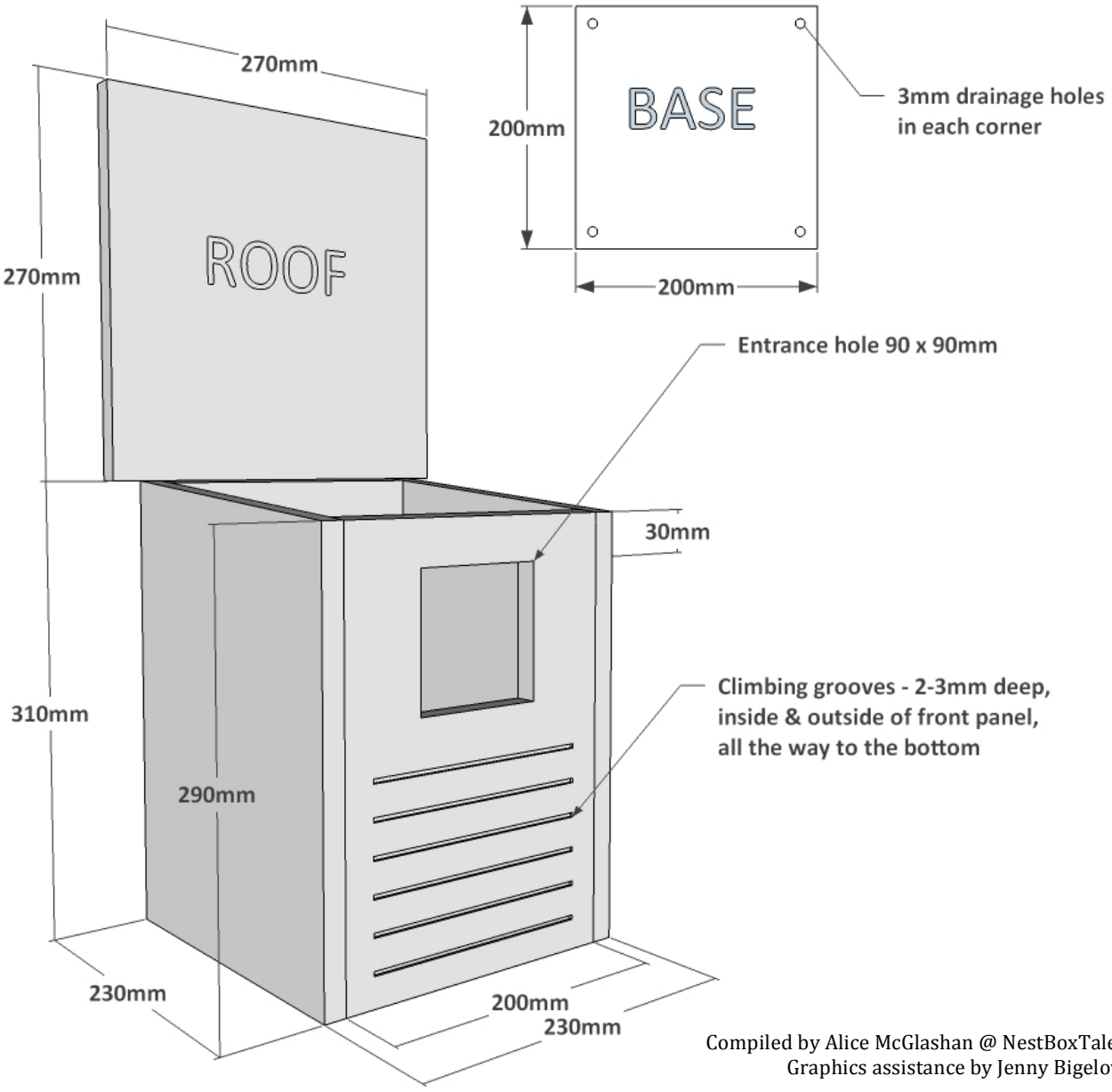
Small

Grey Shrike Thrush

Cutting list – 15mm ply

Sides	2 x 310mm back/290mm front x 230mm
Back	1 x 310mm x 200mm
Front	1 x 290mm x 200mm
Base	1 x 200mm x 200mm
Roof	1 x 270mm x 270mm





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Graphics assistance by Jenny Bigelow

Pardalote

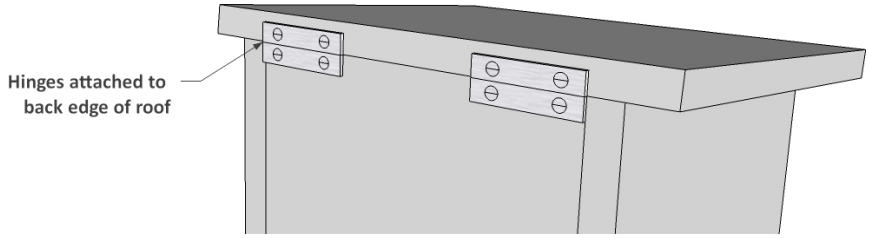
PARDALOTE

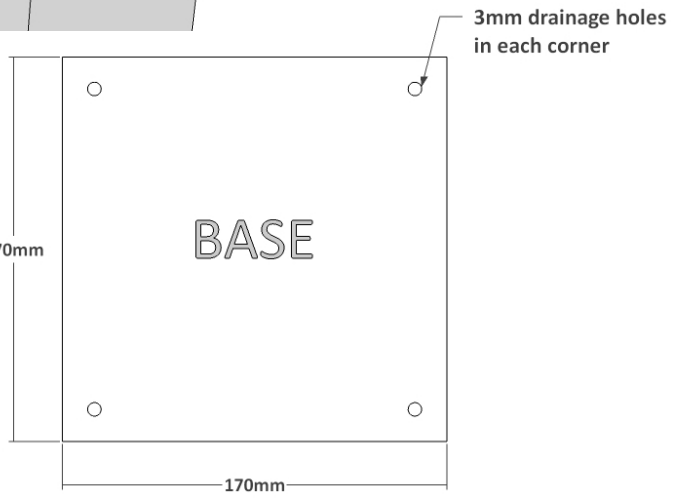
Cutting list – 15mm ply

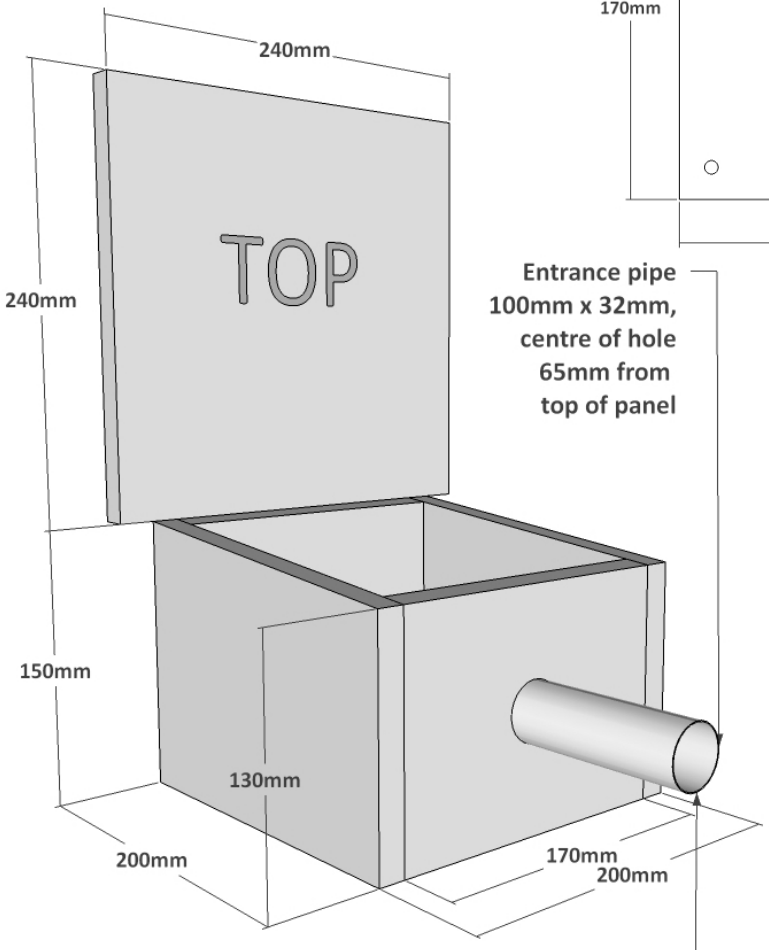
Sides	2 x 150mmback/130mm front x 200mm
Back	1 x 150mm x 170mm
Front	1 x 130mm x 150mm
Base	1 x 170mm x 170mm
Roof	1 x 240mm x 240mm
Entrance	1 x 100mm x 32mm PVC pipe

Small

Pardalote species (Au-wide)







Rough up the inside of the PVC pipe with coarse sandpaper to make the surface easier to grip

Compiled by Alice McGlashan @ NestBoxTales
Graphics assistance by Jenny Bigelow

Treecreeper

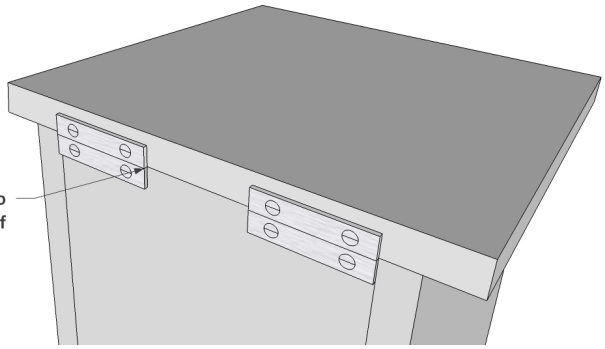
Small

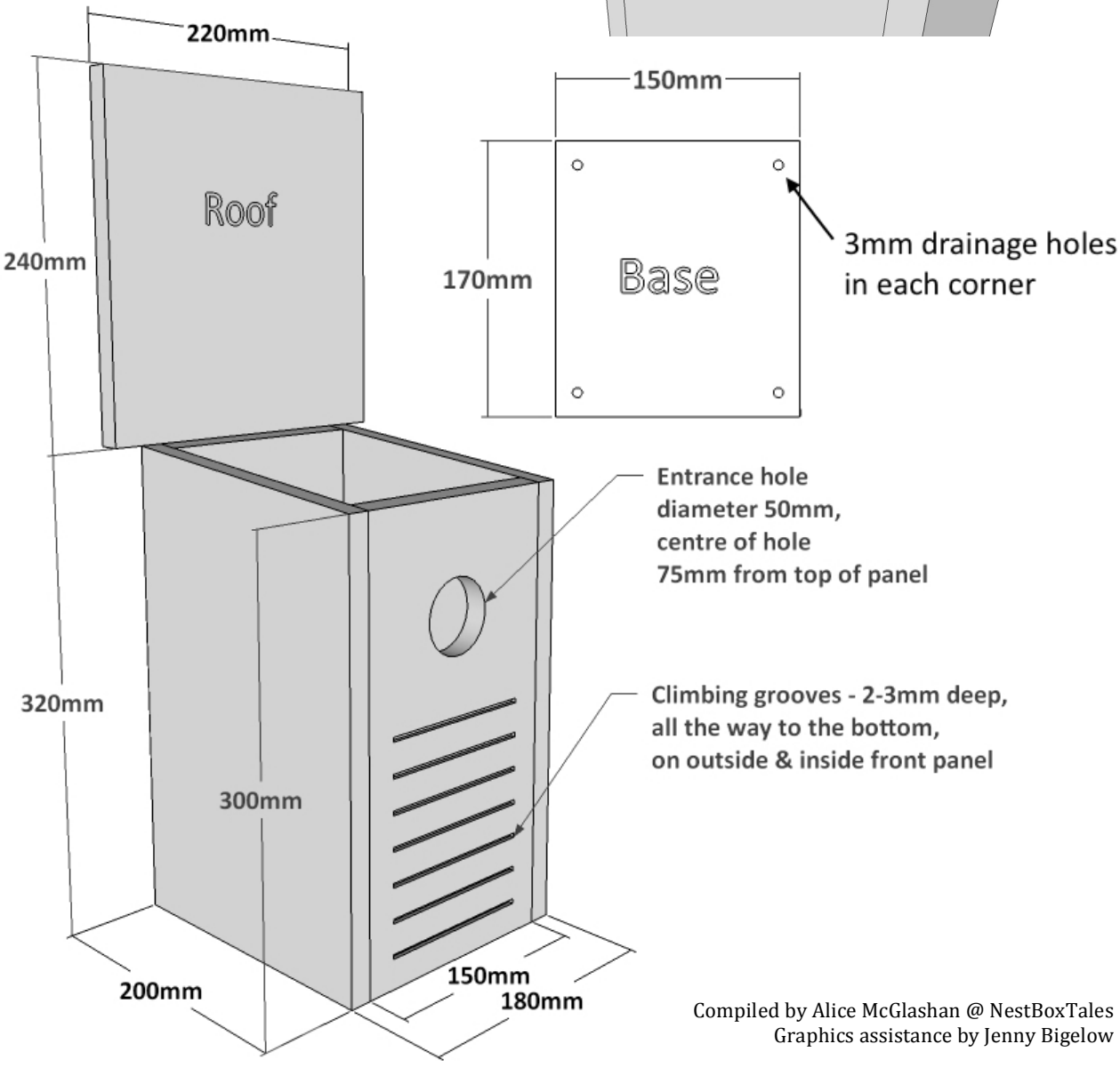
Treecreeper species (Au-wide)

Treecreeper

Cutting list – 15mm ply

Sides	2 x 320mm back/300mm front x 200mm
Back	1 x 320mm x 150mm
Front	1 x 300mm x 150mm
Base	1 x 170mm x 150mm
Roof	1 x 240mm x 220mm





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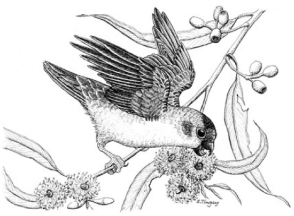
Graphics assistance by Jenny Bigelow

Nest Boxes – Technical Information



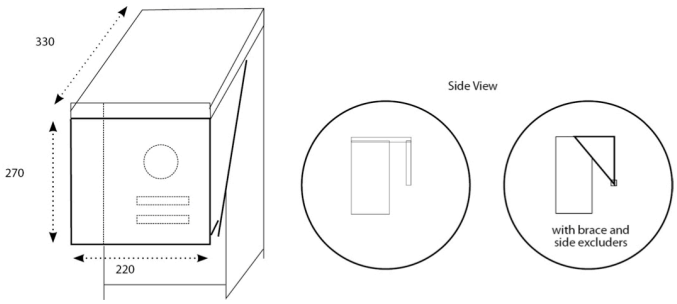
Purple-crowned Lorikeet © BirdLife Australia

Nest boxes are an important aspect to wildlife conservation in any areas where natural nesting hollows are not available. This information sheet provides a little extra technical assistance for anyone who wants to go the next step, and make or install a nest box. For a general introduction to the importance of nest boxes, please read BirdLife Australia Information Sheet entitled 'Nest Boxes for Native Birds'.

The Anti-Myna Baffle

The Anti-Myna Baffle is a simple device which shields the entrance hole to the nest box, and prevents Common Mynas from entering (they always fly directly to the entrance of the nest hollow), while allowing access to rosellas and other parrots, which usually climb up to the entrance of their nesting hollow, and so are able to climb between the baffle and the nest box. It is important to provide a 'ladder' for the parrot to climb up the entrance — chisel or saw a few horizontal grooves into the front of the nest box, or attach a small piece of wire mesh that they can climb up, but do not attach a stick, which may allow Mynas to land there.

The distance that the baffle is placed in front of the nest box should be the same as the diameter of the entrance hole.



A Few More Useful Tips for Nest Boxes

- Add a few wood shavings to the bottom of your nest box; some parrots will not nest there without them.
- In vertical (or steeply sloping) nest boxes, t is a good idea to install a 'ladder' for birds to climb out of the nest, especially if the inner surface of the nest box is relatively smooth. A few horizontal grooves, either sawn or chiselled into the wood will act as 'steps', as will a strip of wire mesh.

Tree installation materials

Now, there are a few different options for attaching a nest box to a tree. My preferred option is the Habisure system (and variations) by Hollow Log Homes, as this does no harm to the tree, is very durable, and makes installation a cinch. However the materials for this and similar variations are more expensive than alternatives, and so may be not an option for some seeking to install nest boxes. That's understandable!

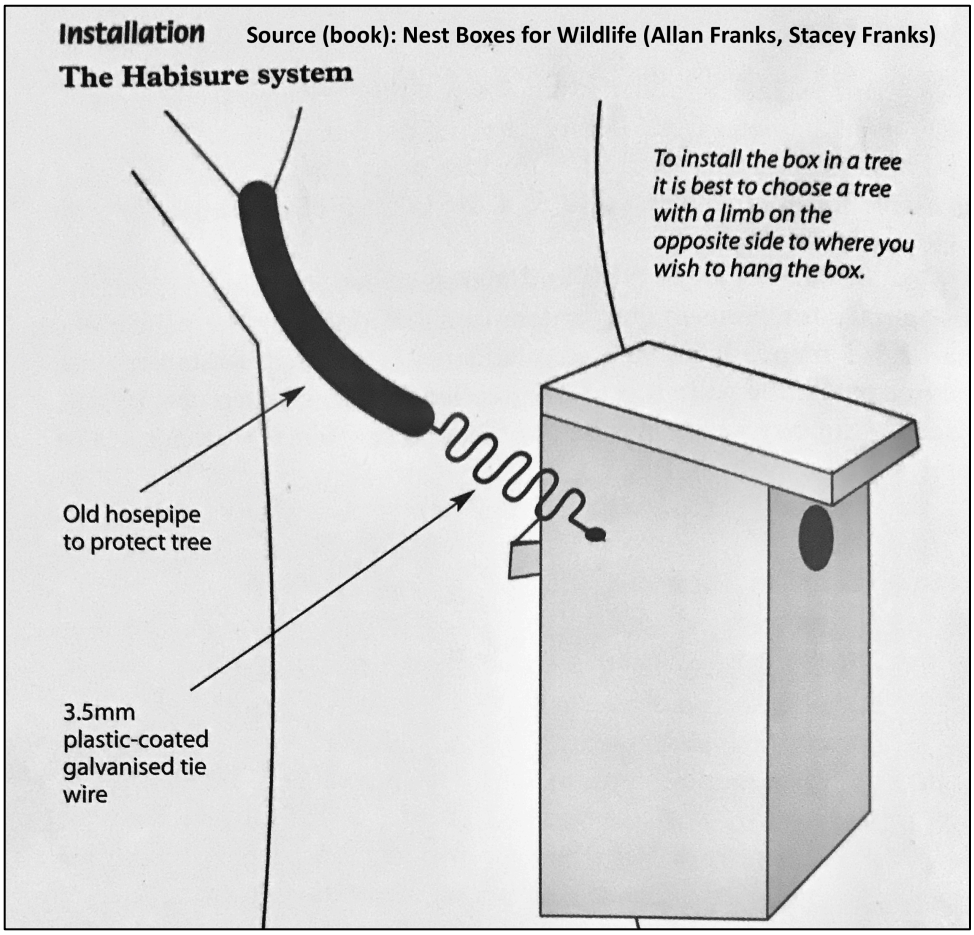
The Habisure System (Nest Boxes for Wildlife, by Alan and Stacey Franks)

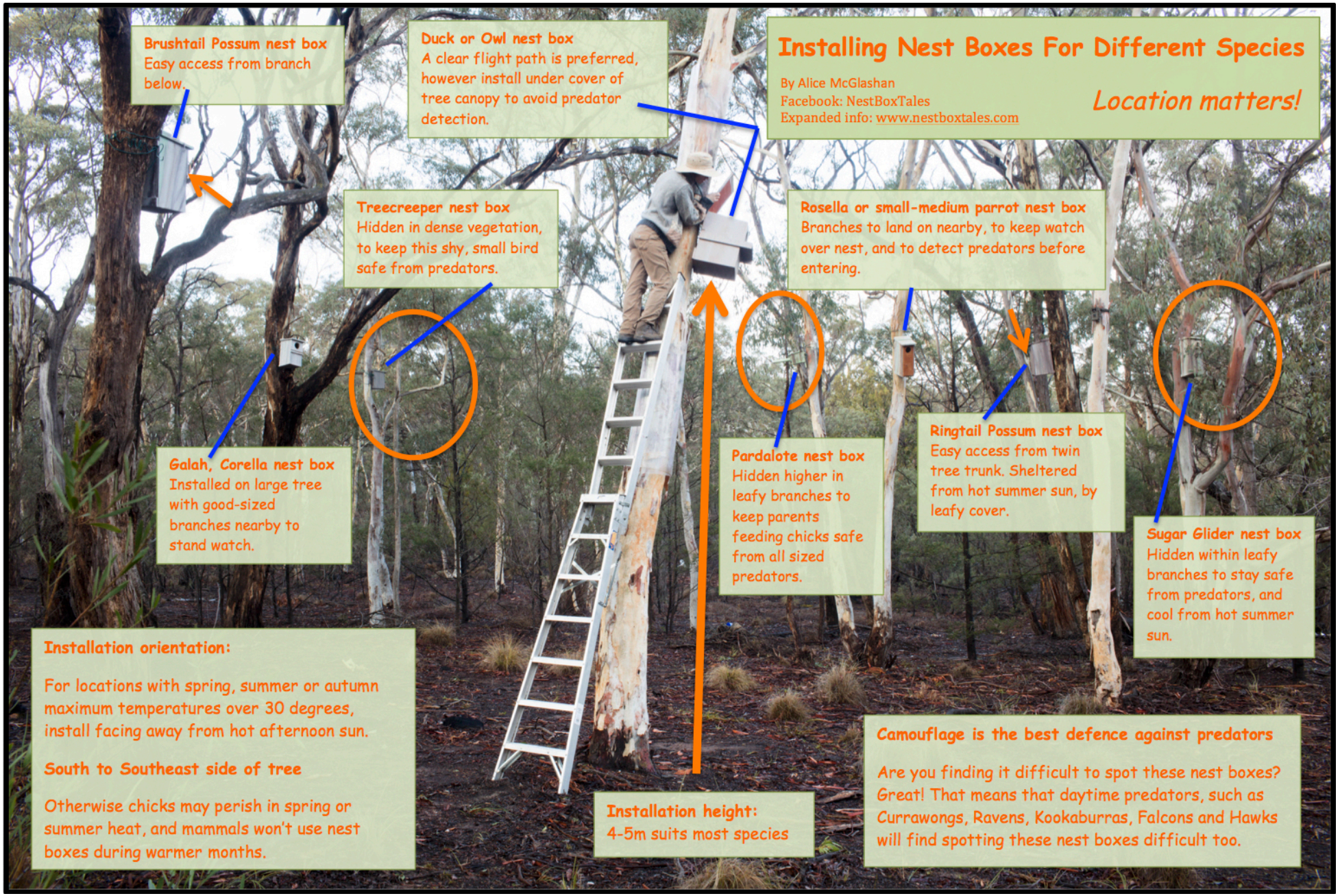
The Habisure system is a single piece of plastic coated 3.15-3.5mm galvanised wire (fencing wire is an alternative option), that goes through holes right at the back of the two side panels of the nest box. The wire is bent to a zigzag shape for the first 20-30cm, and then runs straight after. One end has a loop, the other is longer with a straight end that goes around the tree and through the loop.

One variation has a piece of garden hose on the part that hangs off the tree – this would be a good option if plain fencing wire (not plastic coated) were to be used.

The zig zag shape allows for the growth of the tree, so the nest box stays secure, but the wire does not strangle the tree as it grows.

Link to how-to video: https://fb.watch/6PHK_h4RHB/
Option for purchasing PVC coated galvanised 3.15mm wire: The Fencing Store, PVC coated fencing wire, 3.15mm diam hot dip gal wire, lo-tensile.




Installing Nest Boxes For Different Species
By Alice McGlashan
Facebook: NestBoxTales
Expanded info: www.nestboxtales.com
Location matters!
Brushtail Possum nest box
Easy access from branch below.
Duck or Owl nest box
A clear flight path is preferred, however install under cover of tree canopy to avoid predator detection.
Treecreeper nest box
Hidden in dense vegetation, to keep this shy, small bird safe from predators.
Rosella or small-medium parrot nest box
Branches to land on nearby, to keep watch over nest, and to detect predators before entering.
Galah, Corella nest box
Installed on large tree with good-sized branches nearby to stand watch.
Pardalote nest box
Hidden higher in leafy branches to keep parents feeding chicks safe from all sized predators.
Ringtail Possum nest box
Easy access from twin tree trunk. Sheltered from hot summer sun, by leafy cover.
Sugar Glider nest box
Hidden within leafy branches to stay safe from predators, and cool from hot summer sun.
Installation orientation:
For locations with spring, summer or autumn maximum temperatures over 30 degrees, install facing away from hot afternoon sun.
South to Southeast side of tree
Otherwise chicks may perish in spring or summer heat, and mammals won't use nest boxes during warmer months.
Installation height:
4-5m suits most species
Camouflage is the best defence against predators
Are you finding it difficult to spot these nest boxes? Great! That means that daytime predators, such as Currawongs, Ravens, Kookaburras, Falcons and Hawks will find spotting these nest boxes difficult too.

Good luck and enjoy!

Studies have found that hollow using species are initially absent from badly burnt ecosystems (0-15yrs), and when they do return, are in very small numbers compared to pre-fire populations - studied from memory out to 50 years. Tree hollows take decades (tiny) to hundreds (large) of years to form. So there is a very big need for artificial tree hollows to be added to the huge areas of bushfire-affected ecosystems

Most of our native hollow-using species are tiny, small or medium sized, with only a small number of large individuals and species for any location. So nest boxes really need to be made to match this natural balance, for the bushfire affected ecosystems, where many of all sized tree hollows will have been lost.

An important consideration is the need for small to medium sized nest boxes to be made with a variety of entrance diameter sizes to keep all the slightly different hollow using species safe from slightly and much larger predators and predators. Most of our native animals compete with each other for scarce tree hollows. Slightly different hollow entrance sizes are important for enabling the different sized species to find a spot that is safe from slightly bigger predators and competitors, the difference often is only 5mm.

Thank you so much for making a difference.

Our native wildlife desperately need a helping hand to survive this current living hell of bushfire and drought. We really don't want to lose more than we already have. Sure, we may lose some at-risk species because of this season's bushfires. But don't forget all the other wonderful native animals out there that we have the chance, right now to help survive. While we cannot undo the past, we can change the future to some extent depending on our choice of actions.

Every little tiny bit of difference made, cumulatively makes a big difference if many participate. Thank you so much for your contribution.

This is one of my contributions.
I hope you find this helpful.

Compiled by Alice McGlashan
Facebook: https://www.facebook.com/groups/nestboxtales/
Website: www.nestboxtales.com
Sharing stories and knowledge about nest boxes for Australian native animals to encourage everyone to improve habitat for wildlife.