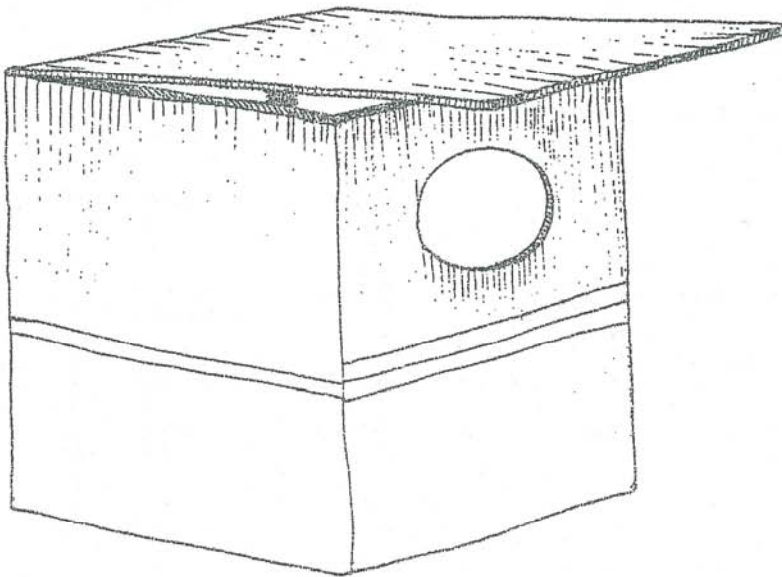


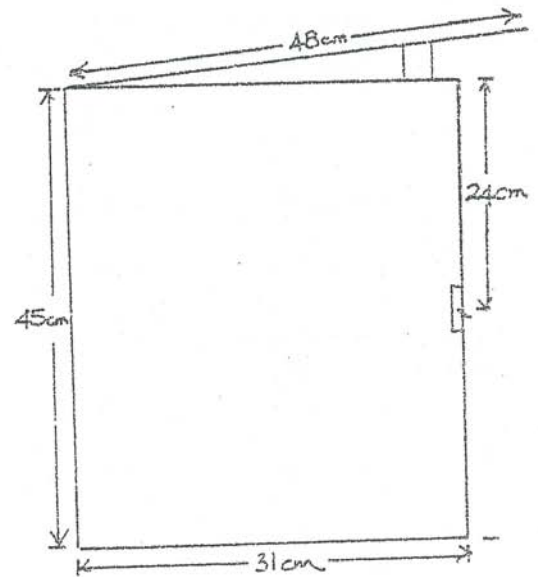
Perhaps the most economical method of making a nest box is by using existing boxes, e.g. ammunition boxes (available at Army Disposal Stores).

The design below has been used with some success*



Not to scale

(Ammunition Box)



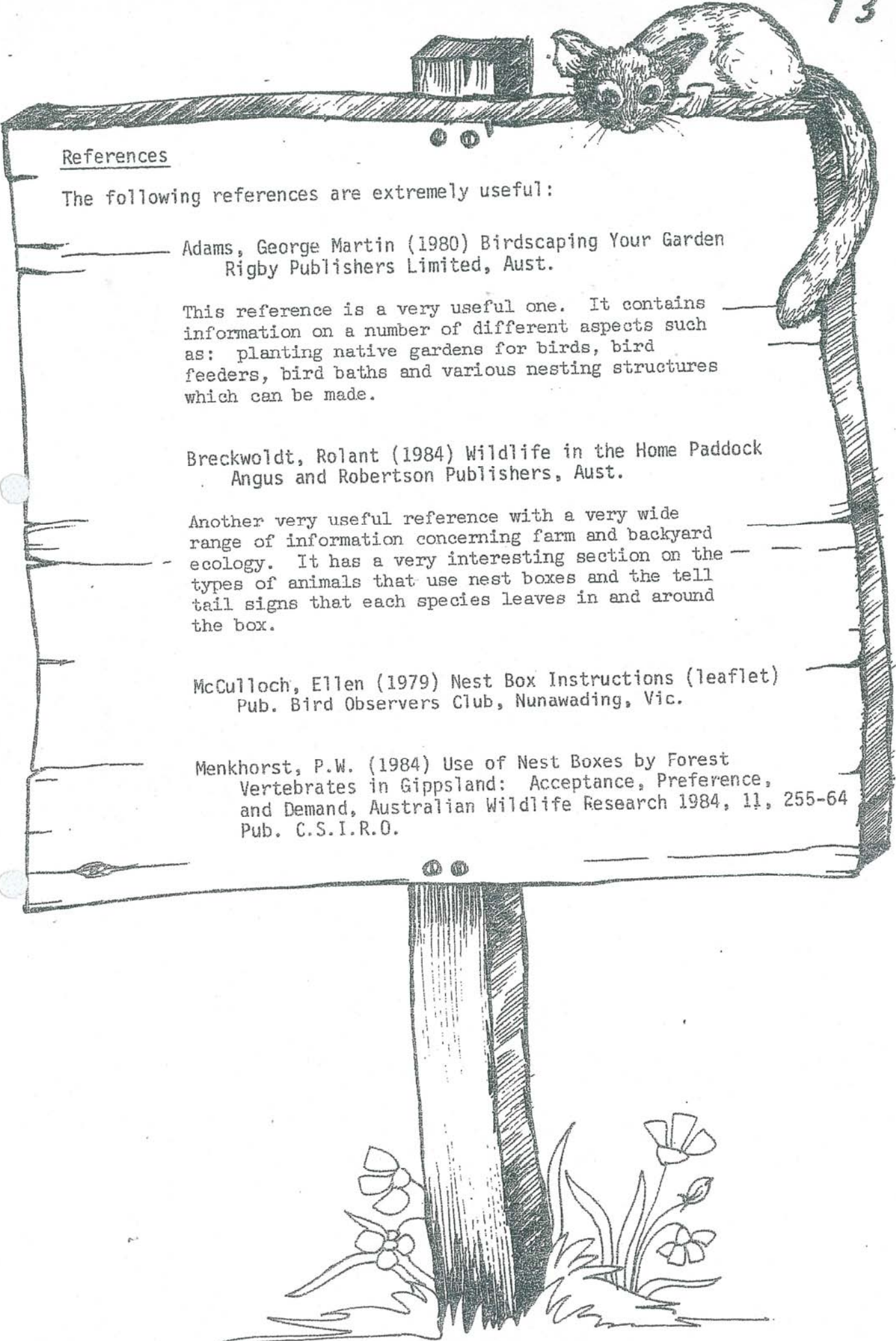
As with other nest box designs, the size of the entrance hole will have a large bearing on the animals that can live in the nest box.

Method of attachment to trees is as stated previously.

*See Reference - Use of Nest Boxes by Forest Vertebrates in Gippsland: Acceptance, Preference and Demand.

NEST BOXES FOR AUSTRALIAN ANIMALS (preferred sizes)

SPECIES	Inside Diameter or square dimension	Entrance above floor	Diameter of entrance	Height above ground	Placement	Breeding Season
<u>BIRDS</u> (Adams 1980)						
Eastern Rosella	135-150mm	350-800mm	75-100mm	5-6m	vertical or horizontal	August-January
Crimson Rosella	150-200mm	350-800mm	75-100mm	5-6m	vertical or horizontal	September-January
Galah	200mm	650mm	120mm	6m	vertical	August-November
Lorikeets	120mm	600mm	60mm	5m	horizontal	August-January
Red-rumped Parrot	100mm	600mm	75mm	5m	horizontal or vertical	August-January
Kookaburra	300-500mm	level	130mm(min.)	5-10m	horizontal	September-January
Sacred Kingfisher	130mm	600-900mm	75mm	5-10m	horizontal	September-March
Chestnut Teal, Grey Teal (Waterfowl)	200-400mm	450-750mm	100-120mm	1.5m	vertical	September-December (Chestnut Teal:) throughout the year (Grey Teal)
Pardalotes	120m	400-500mm	30-45m	5m	horizontal	July-January
Barn-owl	400mm	750mm	-	5m	horizontal	Autumn-Spring
Nankeen Kestrel	400mm	750mm	100mm	5m	vertical	August-November
Welcome Swallow	130mm	-	-	3m	horizontal	August-December
White-throated Treecreeper	75-100mm	300-400mm	50-70mm	5m	vertical	August-January
Australian Owllet- Nightjar	100-150mm	300-350mm	60-80mm	5m	vertical	September-December
<u>MAMMALS</u> (Derived from Menkhorst 1984 and data from Healesville Sanctuary)						
Yellow-Bellied Glider	300mm	350mm	80mm	8m or higher	vertical	August-April
Brown Antechinus + Pygmy Possums	140mm	65mm	50mm	1.5m	vertical	August-October
Bobuck	320mm	400mm	120-150mm	4-8m	vertical	March-May
Brush-tail Possum	320mm	400mm	120-150mm	4-8m	vertical	Autumn but may be anytime
Feathertail Glider	140mm	65mm	50-80mm	4-8m	vertical	August-February
Sugar Glider	250mm	300mm	50mm	4-8m	vertical	June-December
Greater Glider	320mm	300-340mm	80-120mm	8m or higher	vertical	March-August
Ringtail Possum	250mm	350mm	80mm	4-8m	vertical	April-November
Brush-tailed Phascogale	200mm	270-300mm	50-80mm	4-8m	vertical	Winter.



References

The following references are extremely useful:

Adams, George Martin (1980) Birdscaping Your Garden
Rigby Publishers Limited, Aust.

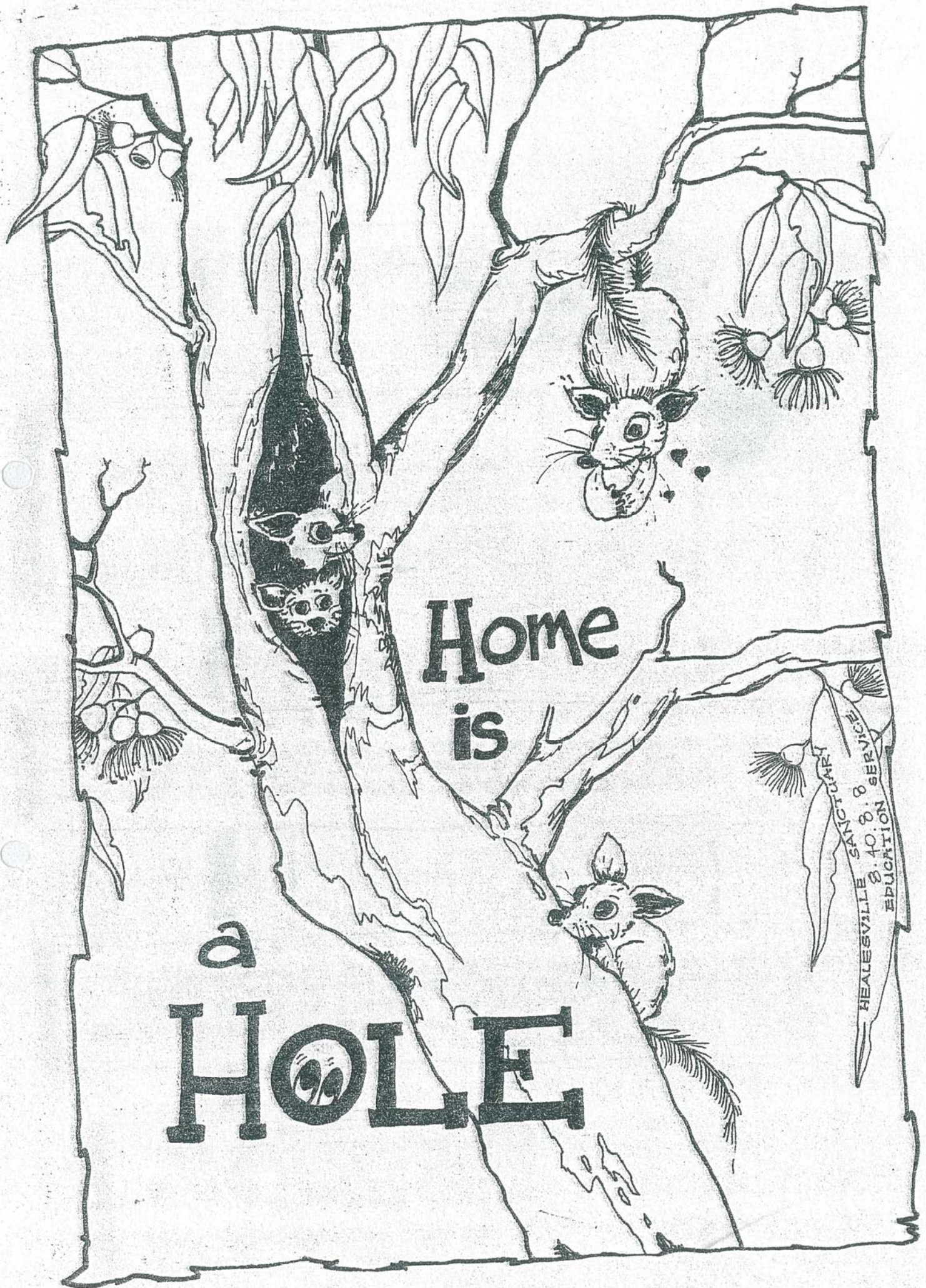
This reference is a very useful one. It contains information on a number of different aspects such as: planting native gardens for birds, bird feeders, bird baths and various nesting structures which can be made.

Breckwoldt, Rolant (1984) Wildlife in the Home Paddock
Angus and Robertson Publishers, Aust.

Another very useful reference with a very wide range of information concerning farm and backyard ecology. It has a very interesting section on the types of animals that use nest boxes and the tell tail signs that each species leaves in and around the box.

McCulloch, Ellen (1979) Nest Box Instructions (leaflet)
Pub. Bird Observers Club, Nunawading, Vic.

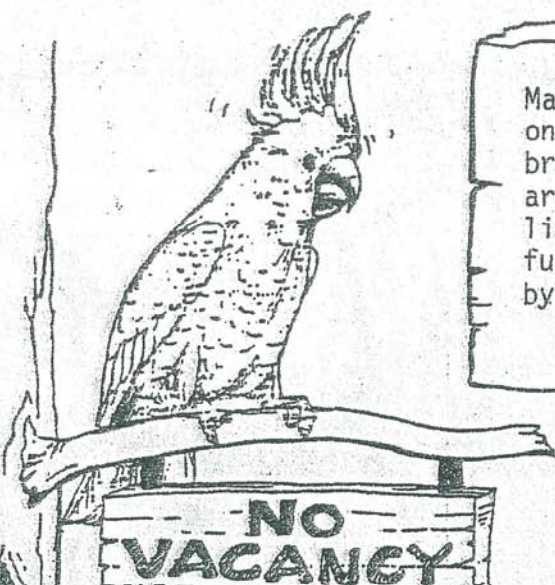
Menkhorst, P.W. (1984) Use of Nest Boxes by Forest Vertebrates in Gippsland: Acceptance, Preference, and Demand, Australian Wildlife Research 11, 255-64
Pub. C.S.I.R.O.



Home
is


a
HOLE

HEALESVILLE SANCTUARY
8:40-9:30 SERVICE
EDUCATION



Many of our native animals rely on nest hollows for shelter and breeding places. These hollows are formed when the centres of limbs and trunks rot out by fungal action or are eaten out by termites, etc.

**NO
VACANCY**



If these trees with hollows are removed from an area, many animals who use them as homes also disappear. Even if the animals move to a new area they will usually find that all the hollows are taken resulting in the animals deaths from exposure or predation.

We do not see many of these animals in our cities or even on farmland because mose of these areas do not have old trees with hollows. If hollows are present, many more species will be found in these areas.

The same probelm can occur in forests that are planted by people. It can take from 60 to 140 years for trees to form hollows, so planted forests, less than 60 years old, will lack tree hollows for animals. Mountain Ash trees can take even longer so poor old Leadbeater's Possum may have to wait well over 150 years for a new home.

The trend towards planting native gardens has meant that there is often lots of food, so now all the animals need is a home!

The plans and helpful hints on how to build homes are on the next few pages.

Making a home (hole) for the little Aussie Battlers...

Materials:-

Timber is best because it has good insulating properties - marine ply is excellent as it is waterproof and tough.

Metal heats up and cools down too quickly so that the inhabitants may die during extreme weather conditions. Chipboard does not stand up to being wet and so should not be used. Treated pine (the green coloured pine) is toxic and should not be used either.



Box sizes:-

The dimensions of the nest box will vary depending on which animals are to be attracted to using it (see table). Some designs are illustrated on the following pages.

Position of hole will also vary (see table).

Entrance hole:-

The diameter of this varies depending on the animals you intend to house. Smaller holes will exclude larger animals (see Table).

Weather proofing:-

It is important that the nest box should be properly sealed against the weather. All joins should be sealed and the box should be painted with weatherproof lacquer or weatherproof paint. Creosote has been used successfully. Do not paint the inside as paint is often toxic.

Decor:-

Most animals like a layer of termite bed or wood shavings on the bottom of the box. After all, it's what they are likely to find in a natural tree hollow.

PLACEMENT OF NEST BOXES

There are a number of points to be taken into account here:

- * Different animals prefer boxes at different heights (see table).
- * Nest boxes should also be placed where people and predators, such as cats and rats, cannot get to them. Tin guards around tree trunks may be used to keep predators at bay. Unfortunately, this also excludes the non-flying animals from using the box as they cannot climb the tree to use the box.
- * The box should be placed where it does not receive the full brunt of either the hot sun or prevailing winds.
- * Many animals prefer boxes that have overhead cover from trees and yet most prefer the box itself to be relatively clear of growth (so that predators can be seen).
- * Some birds prefer horizontal nest boxes (see table), e.g. kookaburras.

ATTACHING BOX TO TREE

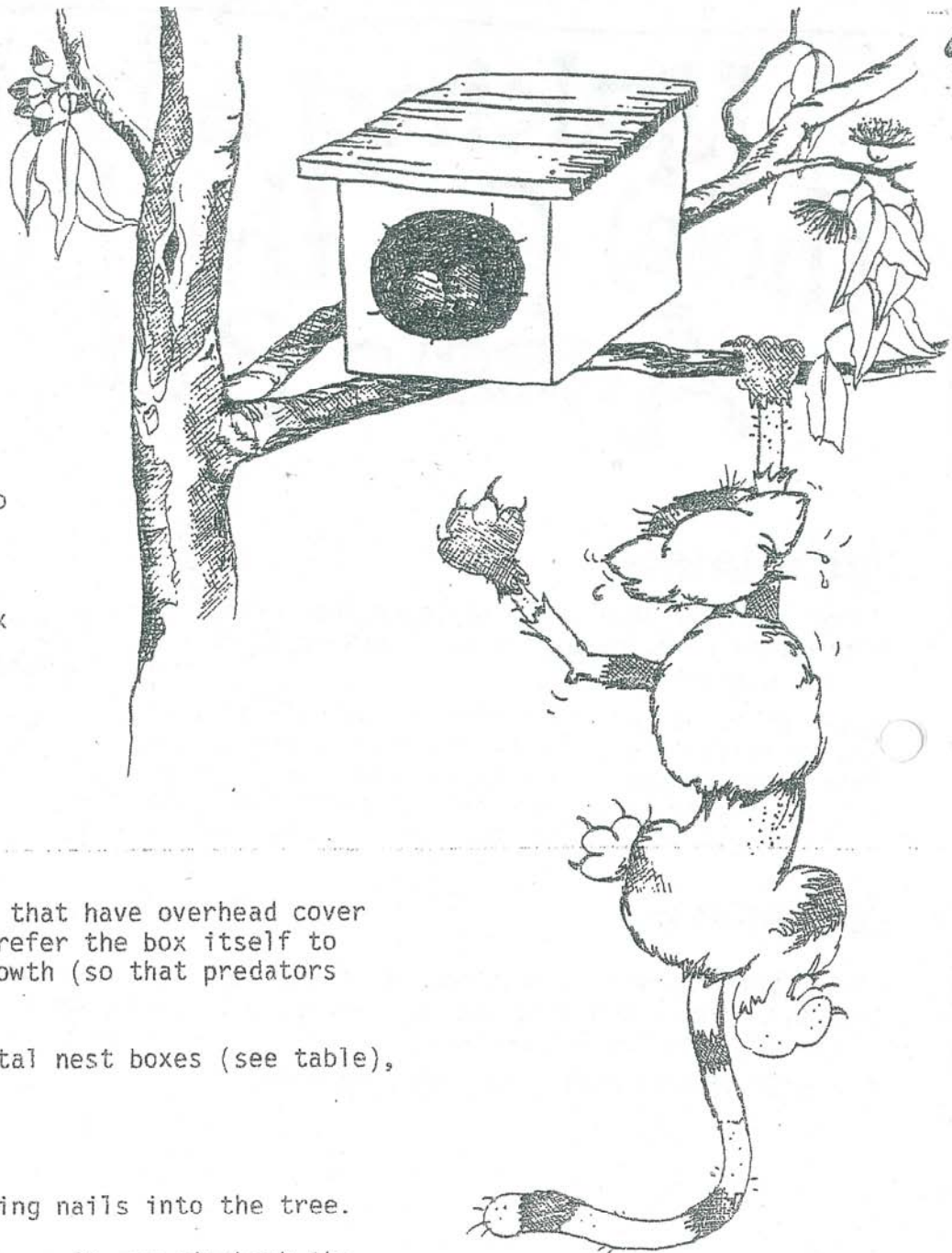
- * Where possible avoid putting nails into the tree.
- * Do not use wire on its own as it may ringbark the tree.
- * Place a strong piece of wire through an old garden hose and suspend from a fork in the tree so that the box rests against the trunk. This will leave some slack so that the tree can grow without being ringbarked.

SOME BASIC RULES

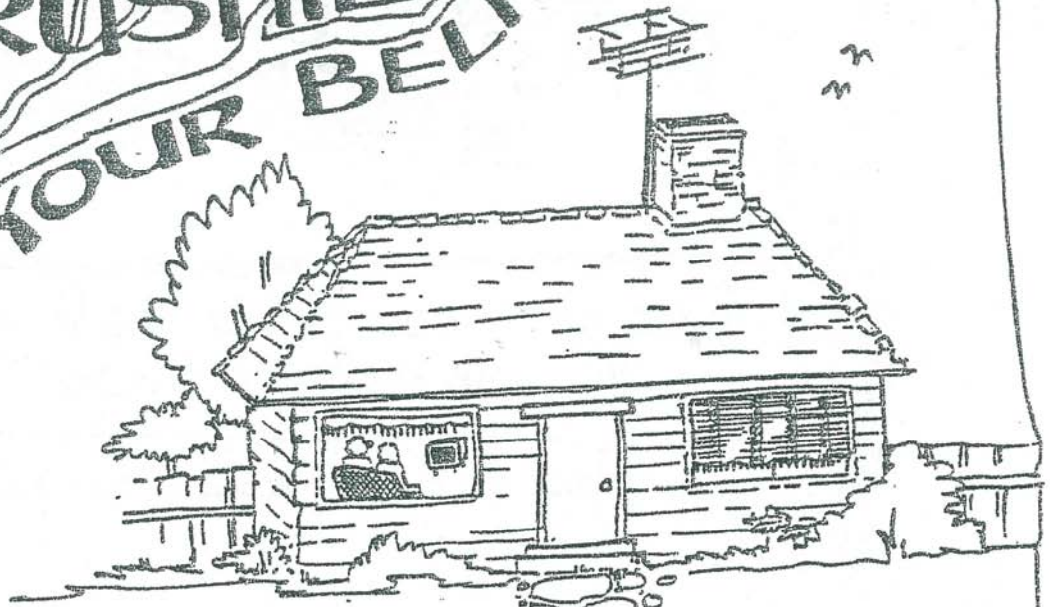
- * Internal inspection of boxes should be discouraged once native animals take up residence. This will help the animals to settle in and increase chance of breeding.
- * If the nest box is used and later vacated by an animal (breeding season may have finished) the box should be cleaned out.

UNWANTED VISITORS

- * Starlings, sparrows and Indian Mynahs can dominate nest boxes. They can be discouraged by removing their nesting material. (Be persistent, you may need to do this several times.) As a last resort, remove their eggs, but be certain that you know the species is not a native one!



BRUSHTAILS IN YOUR BELFRY (ROOF)



Brushtail Possums can be a nuisance when they get into the roof of your house.

During the night the possum(s) will leave "home" to feed. Try to discover where they enter and leave your roof, then block the access off whilst the possum(s) has left (not before the possum the possum(s) has definitely left). It is wise to check to make sure there are none left in the roof.....

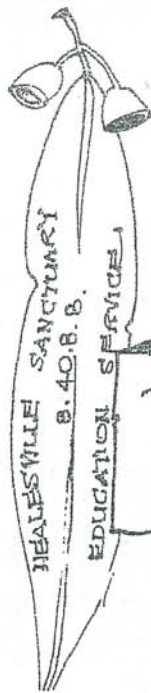
....however, it is not difficult to relocate them.



Alternative accommodation can be arranged for the possum(s) in your garden by building a nest box (see plans and sizes for brushtails in the rear of this booklet). Adult brushtails often keep other brushtails away, so if you can entice one to use a nest box, you are less likely to have others in your roof.Don't forget to block off any access points just the same!

The largest size of "Easy to Make Nest Box" is suitable (see following pages).





EASY to make NEST BOX

These nest boxes can be made from just one piece of timber.

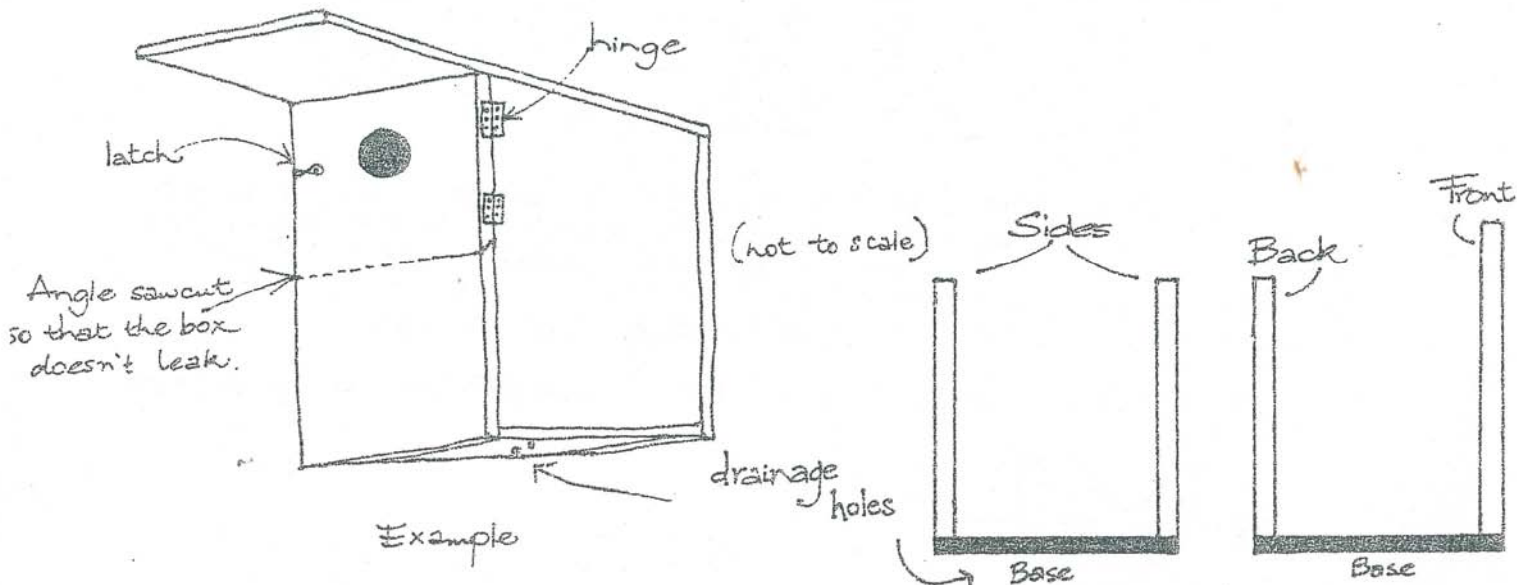
..... plans are on the following two pages.

Timber can be bought in sizes from 900mm. lengths, ranging upwards in 300mm. increases. Rough sawn timber is best as animals can grip it. It can be bought at most timber yards. On the next two pages are plans for eight sizes of nest box (2 on each diagram). The animals that might use them are listed underneath.

- * Do not use treated pine as this is toxic
- * Some glues may also be toxic and have offensive smells

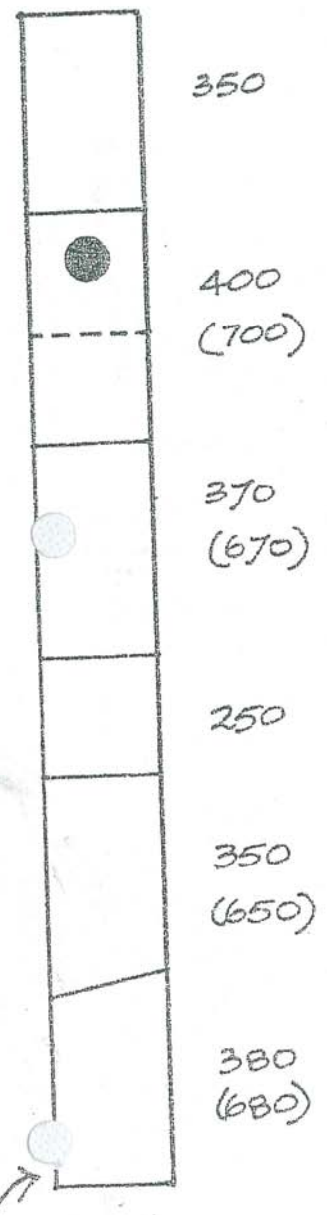
Construction Hints:

- * All seams should be sealed against leakage
- * The inside of the front panel needs to be rough enough for young animals to grip onto. Shallow saw cuts or horizontal slots will achieve this
- * Cut front panel in half using an angled saw cut. The angle will prevent leakage. The top section can then be hinged and latched to aid cleaning between nesting seasons and removal of feral species (see earlier note)
- * The sides of the box nest on the base whilst the base sits between the front and back.
- * You may need to rasp or plane the top edges at this stage so that the lid has a good fit.



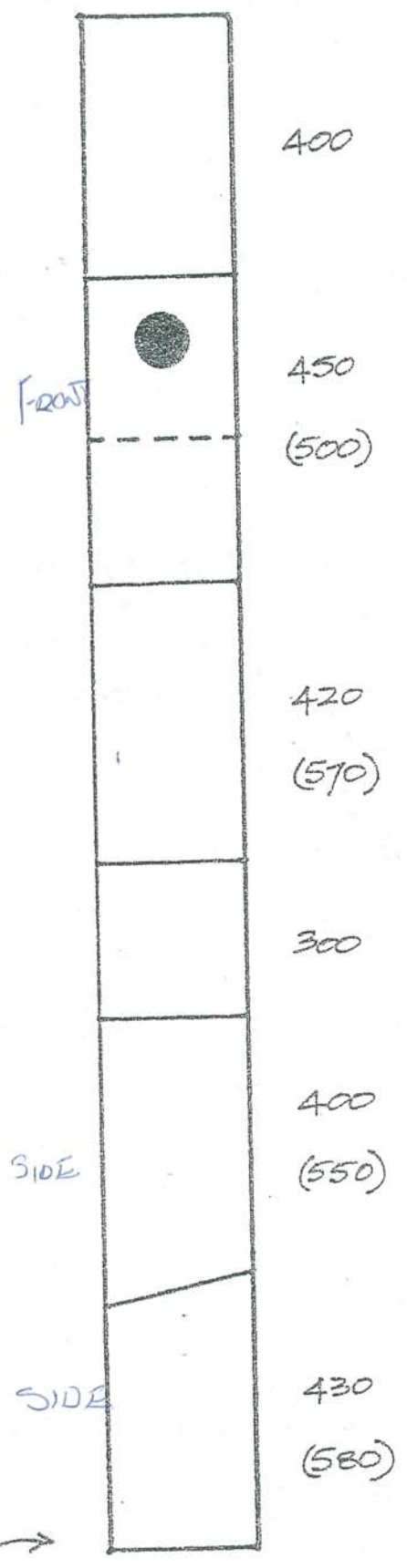
TIMBER

2100 x 250
(3300 x 250)



Entrance Hole:
see table at rear
for height and size
of entrance holes.

2400 x 300
(3000 x 300)



Will suit:-

Ringtail Possum,
Sugar Glider

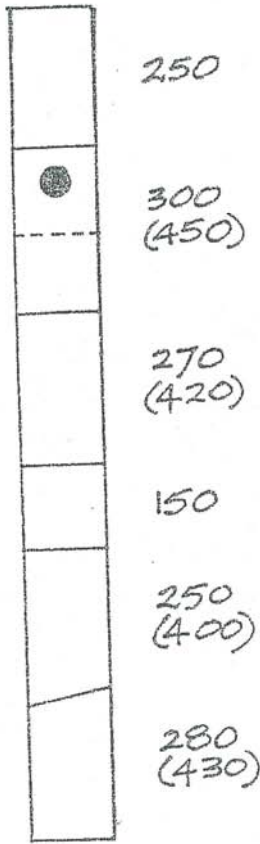
Figures in brackets suitable
for:- Water fowl.

Will suit:-
Yellow-bellied Glider,
Greater Glider.

Figures in brackets will suit:-
Brush-tail Possum, Bobuck.

TIMBER

1500 x 150
(2100 x 150)



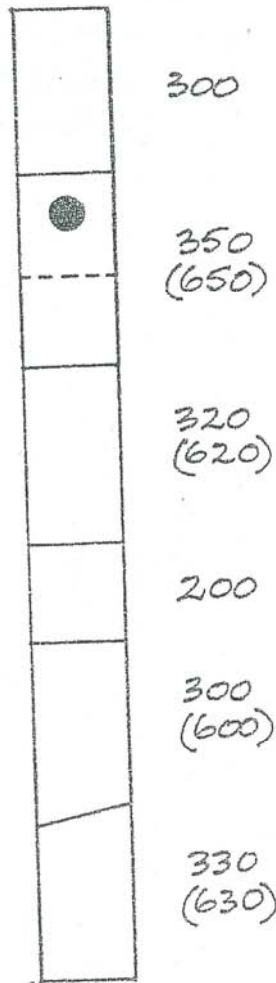
Entrance Hole:
see table at rear
for height and size
of entrance holes.

will suit:-

Brown Antechinus
Pygmy Possum and
Feathertail Glider

with longer front, back
and sides (figures in brackets)
Eastern Rosella
Crimson Rosella
Sacred Kingfisher
Owlet Nightjar

1800 x 200
(3000 x 200)



will suit:-

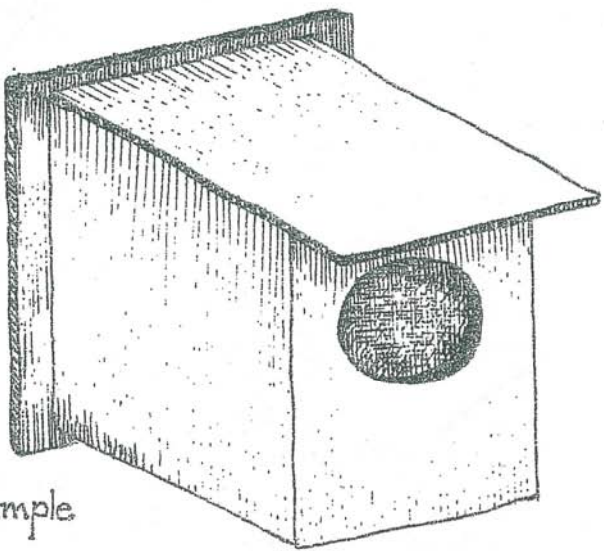
Brush-tailed Phascogale

Longer box (figures in brackets)
Chestnut Teal, Grey Teal,
Maned duck.

THE NEST BOX

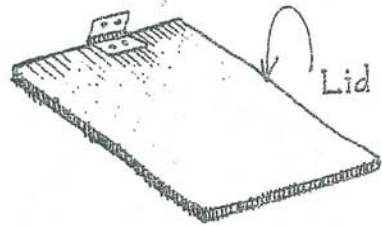


.....which is not only good to live in,
but is attractive too!



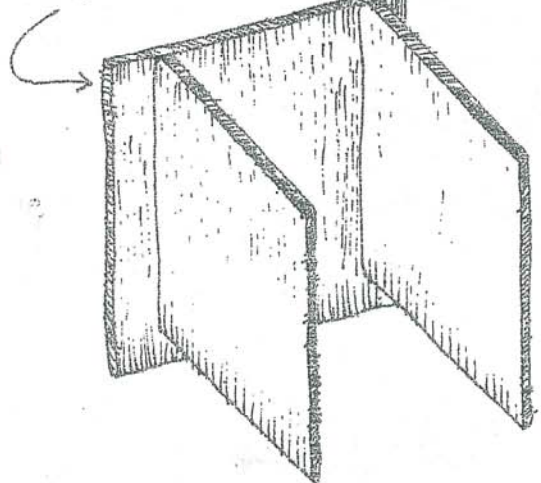
Example

(Not to scale)

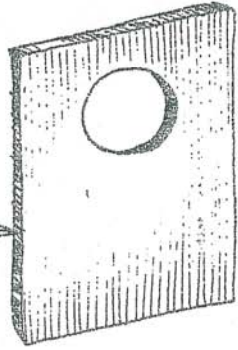


Lid

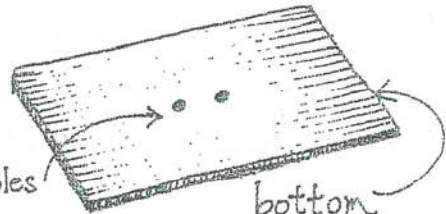
back and sides



front

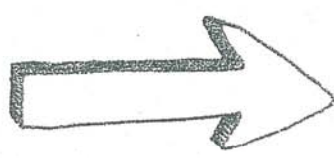


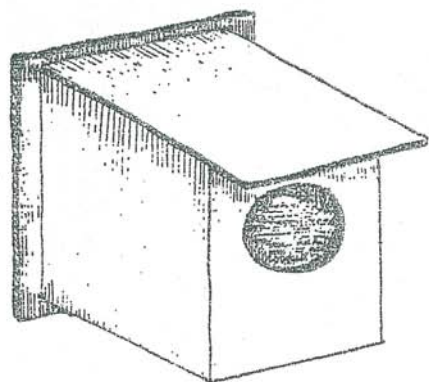
drainage holes



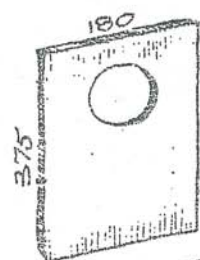
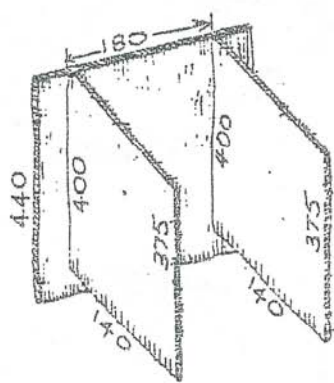
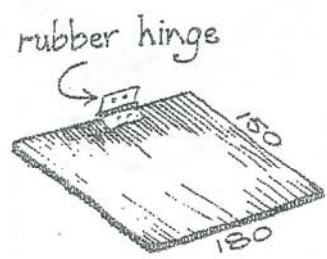
bottom

Dimensions will vary depending on the
animals to be attracted. The next page
has a suggested layout.

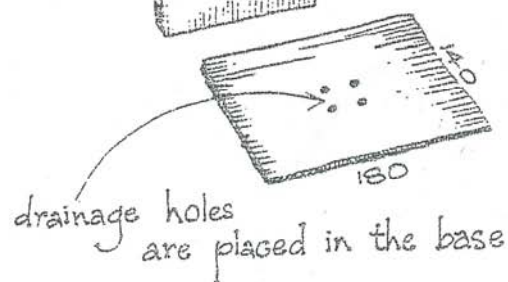




Not to scale



Entrance hole diameter 75mm



All measurements are in mm.

These are dimensions to suit:-

- Eastern Rosella
- Crimson Rosella
- Pardalotes
- Welcome Swallow
- Owlet Nightjar
- Brown Antechinus
- Feathertail Glider

See table at rear for dimensions to suit other species.