

NRM  
North



BANDICOOT FRIENDLY GARDENS

# Urban Refuges

Design your  
garden for eastern  
barred bandicoots



[www.nrmnorth.org.au](http://www.nrmnorth.org.au)





## BANDICOOT FRIENDLY GARDENS

In recognition of the deep history and culture of this island, we acknowledge and pay our respects to all Tasmanian Aboriginal people; the past and present custodians of the Land.

We appreciate and value the connection of Tasmanian Aboriginal people to native animals such as the eastern barred bandicoot, and native plants including species featured in this booklet, many of which have cultural uses for food, fibre and medicine.



## About this booklet

**Five unique, specialised and beautiful garden designs have been created to inspire backyard gardeners and professional landscapers to create habitat for eastern barred bandicoots.**

Eastern barred bandicoots are quite at home in many of Tasmania's urban areas and townships, where well-watered gardens, parklands and grassy roadsides provide excellent feeding grounds. However, living in our populated areas can be perilous for this threatened species, which is at risk from cats, dogs, cars, and cases of mistaken identity.

Together, we can establish a network of refuges for bandicoots and other native animals and birds to live and thrive.

Choose a design to suit your space, from formal to informal garden styles. 'The Nook' can fit into a corner of your existing layout; if you are looking for a full makeover then the 'Woodland Hideaway' provides an informal option, or perhaps the 'Suburban Getaway' for a ready-made landscape design to complement your new build.



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### **BANDICOOT LANDSCAPES**

Tasmania's National Parks and forests don't offer much sanctuary for eastern barred bandicoots. Their stronghold is in farmland and peri-urban areas which offer a 'mosaic' of grassland, woodland and pasture. Here, patches of vegetation with healthy understorey are vital as a daytime retreat and to provide a quick escape from predators.

# An island refuge



**Eastern barred bandicoots (*Perameles gunnii*) are small, grey-brown, nocturnal Australian marsupials with several distinctive stripes across their rump.**

Australia once had 11 bandicoot species, three of which are now extinct. On mainland Australia, the eastern barred bandicoot is extinct in the wild, surviving only behind predator-proof fencing and in insurance populations on islands. Parts of northern Tasmania as well as the Huon Valley and Hobart's urban fringes are the last stronghold for the species, but numbers are believed to be in decline.

Tasmania is also home to the southern brown bandicoot, which is dark brown and has no stripes. It lives in forest and heathland across the state.

Eastern barred bandicoots do not dig burrows; their nest is usually a shallow depression in the ground, with a dome of tussock grass pulled over the top.

They emerge from their nest close to sunset and are active for most of the night. Some individuals have been observed traveling up to 2 km nightly to feed. Bandicoots feed mainly on worms, grubs and other invertebrates, although they will also eat roots, small bulbs and fruit. Small cone-shaped (nose-shaped!) holes are often found as evidence of their night-time activity.

If disturbed, they either 'freeze' or take off rapidly, often zig-zagging or leaping as they try to avoid a predator by using sudden turns.

The species has one of the shortest gestations recorded for any mammal, with the young born just 12.5 days after mating. At birth, the bandicoot is smaller than a jellybean. It attaches to a nipple inside its mother's rear-opening pouch and grows rapidly on her rich milk. At only nine weeks old, young bandicoots leave the nest and become independent.

Eastern barred bandicoots can reproduce quite quickly in good conditions; however, the young are extremely vulnerable, with many dying from predation or disease. When seasonal conditions are favourable, eastern barred bandicoots can produce up to four litters each year; each litter having between one to four young.



# Bandicoot friendly gardens

**Bandicoots require an area safe from predators to sleep during the day, with open grassy feeding grounds nearby for night-time foraging.**

These five garden designs are created specifically to provide the habitat elements that eastern barred bandicoots need, and will also attract a range of other native species to your yard.

The designs can be adapted to suit your site and needs. Using the species list and guidance in this booklet will ensure that your garden is bandicoot-friendly. For example, The Nook could be duplicated to frame two corners of your lawn. The terraced designs can be used in part if you wish to retain some lawn or a veggie garden and can be adapted for a flat site or one that slopes in the opposite direction.

Ask your native plant nursery or local Natural Resource Management or Landcare group if you need further advice on species suitable for your conditions.



**A HAVEN FOR BIRDS** The same prickly plantings that provide habitat for bandicoots will also create excellent nesting sites for small native birds like wrens, robins and honeyeaters. Small native blossoms attract a wider variety of birds than large, showy flowers.

## Five tips for creating your bandicoot paradise

1

**CREATE NESTING SITES** Plant grasses and sedges in clumps. Good species include tussock grass (*Poa*), sagg (*Lomandra*) and flax lily (*Dianella*).

2

**PROVIDE FOOD** Lawns, leaf litter, branches, logs and rocks not only look great in your landscape, but they also attract soil invertebrates such as insects and worms which are great food for hungry bandicoots.

3

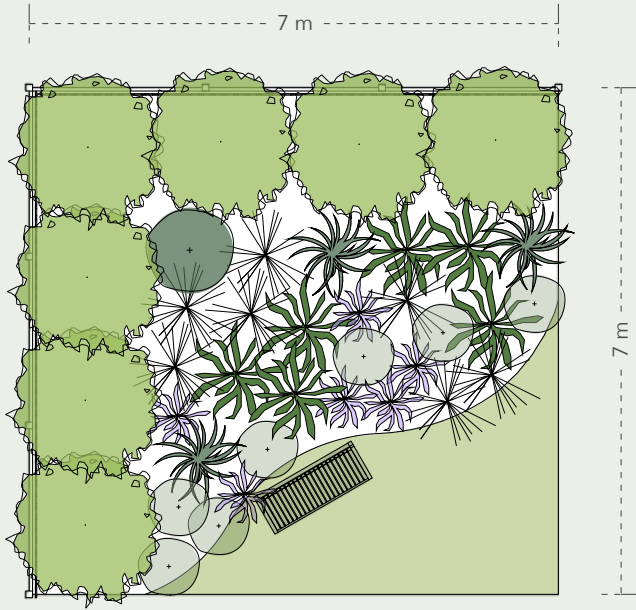
**KEEP THEM SAFE** Prickly shrubs including native currant (*Coprosma quadrifida*), prickly Moses (*Acacia verticillata*) and hakea species provide protection from dogs and cats.

4

**HIDE THEM FROM PRYING EYES** Larger shrubs and trees provide overhead protection from owls and hawks. Some examples include manuka (*Leptospermum scoparium*), lemon bottlebrush (*Callistemon pallidus*) and silver banksia (*Banksia marginata*).

5

**DON'T FENCE THEM OUT** When planning boundary fencing or fencing pets in or out of certain areas of your yard, make sure bandicoots can still get in and out. Solid fences and chicken mesh restrict local wildlife from exploring your garden freely.



small corner garden (7 x 7 m) 1:100

# The Nook

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**BANDICOOTS HAVE POUCHES** Unlike many marsupials though, the pouch of the bandicoot faces backward. This means that it remains clean as the animal digs in the ground to find food.



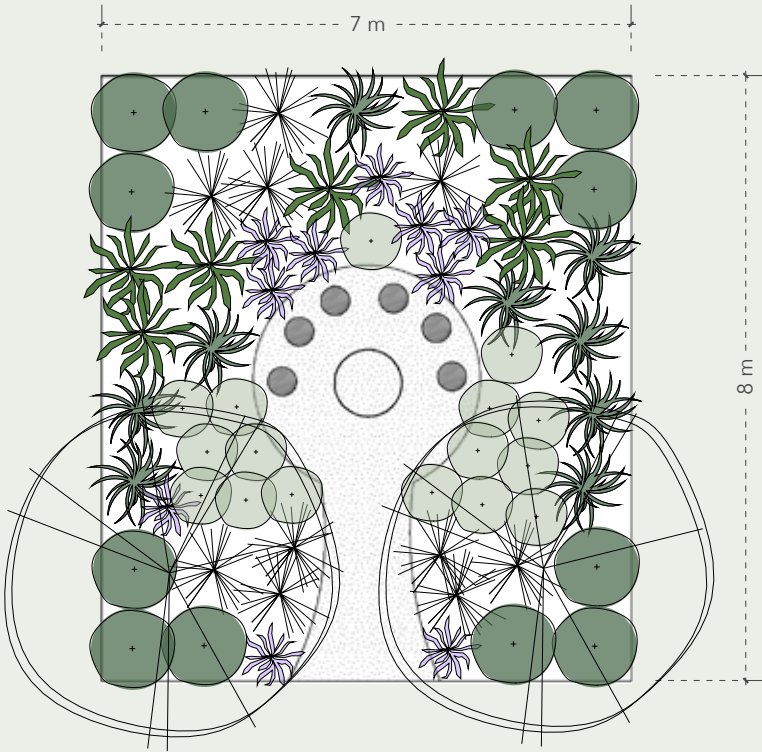
elevation



perspective

This wildflower garden is designed to fit into any corner of your existing layout, and is abundant with strappy-leaved foliage and wildflowers of mauve, white and soft yellow, native to Tasmania. The garden style is informal, provides good, dense cover for bandicoots, as well as a peaceful nook to sit and observe visiting wildlife.

SYMB	BOTANICAL NAME	QTY
	<i>Dodonaea viscosa</i>	7
	<i>Correa alba</i>	1
	<i>Lomandra longifolia</i>	6
	<i>Poa labillardierei</i>	7
	<i>Dianella tasmanica</i>	3
	<i>Dianella revoluta</i>	6
	<i>Diplarrena moreaea</i>	7



*small formal garden (7 x 8 m) 1:100*

# Bandicoot Retreat

2

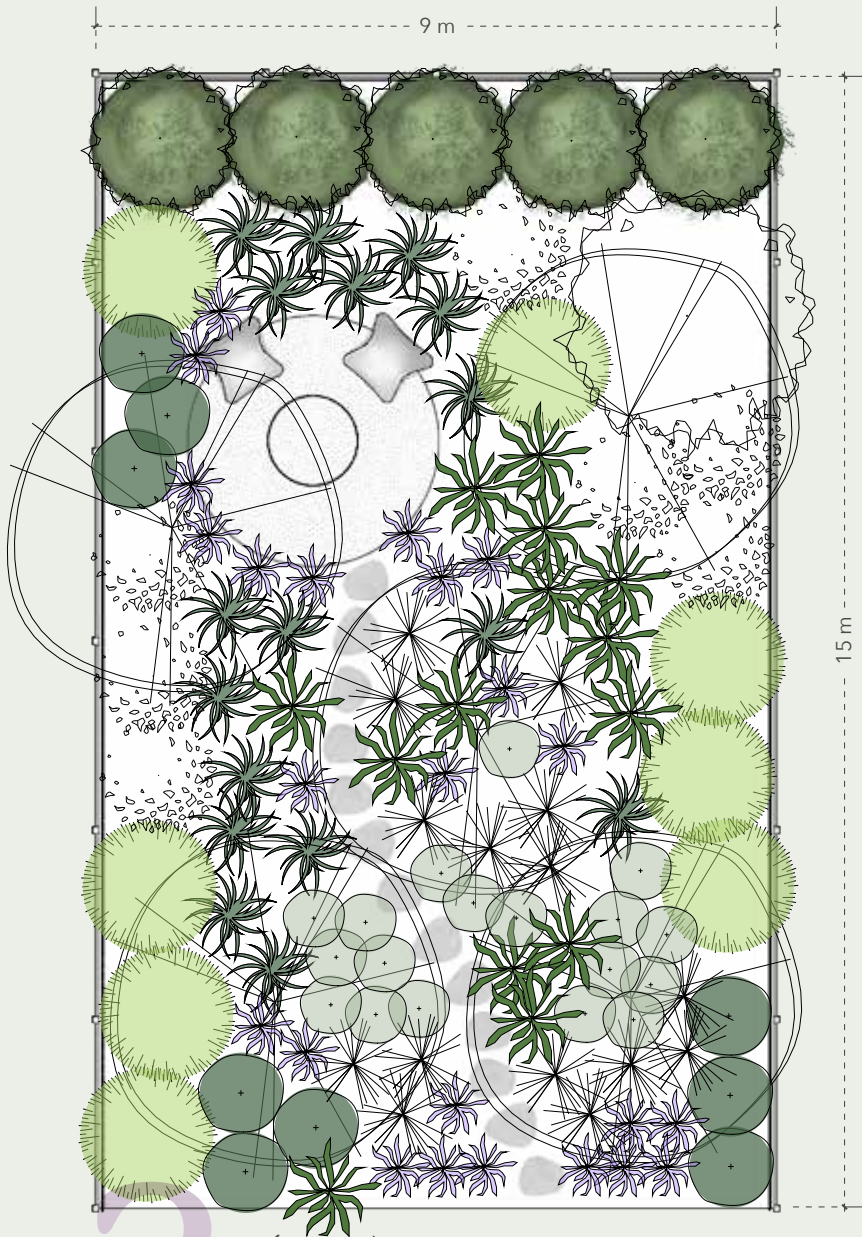
BANDICOOT FRIENDLY GARDENS





*This formal garden retains a casual approach for outdoor living opportunities, featuring a firepit and seating arrangement. It is designed to fit neatly into a section of your existing garden, or in a courtyard-sized space. It is abundant with strappy foliage and wildflowers, and brings structure to the garden with the placement of correa 'balls' in each corner and trees at the entry.*

SYMB	BOTANICAL NAME	QTY
	<i>Allocasuarina littoralis</i>	2
	<i>Correa alba</i>	12
	<i>Lomandra longifolia</i>	7
	<i>Poa labillardierei</i>	10
	<i>Dianella tasmanica</i>	9
	<i>Dianella revoluta</i>	10
	<i>Diplarrena moraea</i>	16



*informal garden (9 x 15 m) 1:100*

# Woodland Hideaway

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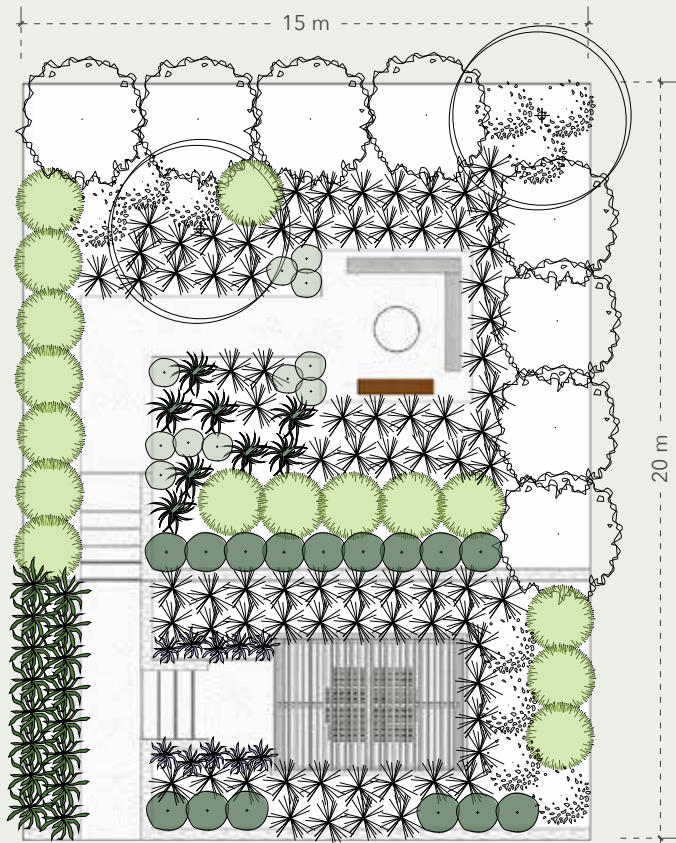
perspective ↑



elevation

This casual woodland garden is centred on an organic path of stepping stones, meandering through a stand of sheoaks. A firepit area towards the rear boundary provides an informal gathering space. The boundaries are softened by small shrubs such as native currant, bottlebrush and correa, infilled with clumps of grassy bandicoot habitat.

SYMB	BOTANICAL NAME	QTY
	<i>Allocasuarina littoralis</i>	5
	<i>Bursaria spinosa</i>	1
	<i>Banksia marginata</i>	5
	<i>Coprosma quadrifida</i>	7
	<i>Callistemon pallidus</i>	8
	<i>Correa alba</i>	9
	<i>Lomandra longifolia</i>	14
	<i>Poa labillardieri</i>	15
	<i>Dianella tasmanica</i>	17
	<i>Dianella revoluta</i>	24
	<i>Diplarrena moraea</i>	18

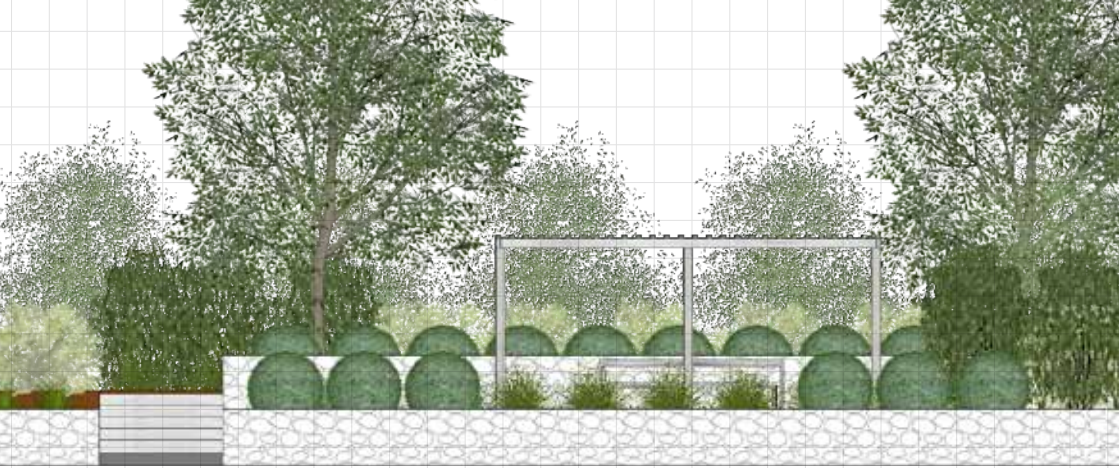


contemporary entertaining garden (15 x 20 m) 1:200

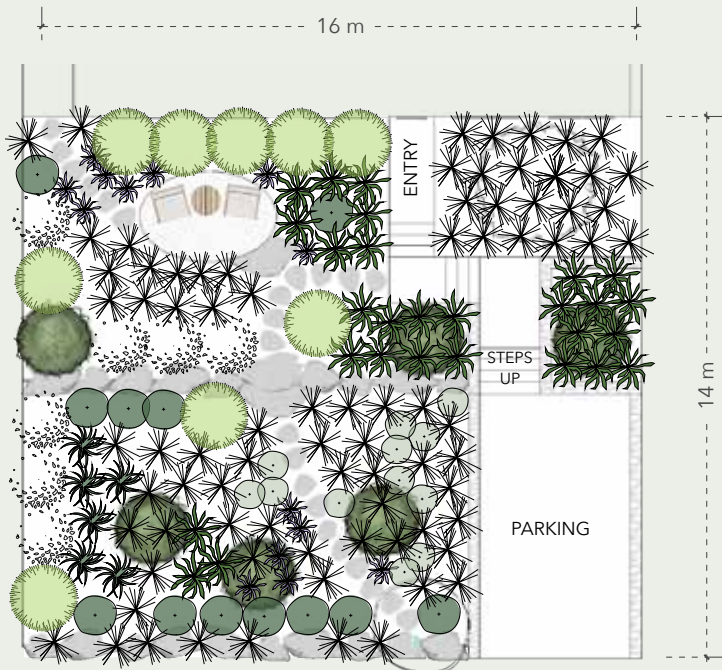
# Suburban 4 Getaway

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*This contemporary garden is designed with family and entertaining in mind, while offering abundant habitat for bandicoots, birds and other wildlife. A structured garden with stone walls creates level areas for outdoor living. Gravel paths connect these zones. Corten steel is used for retaining and garden edging, while hardwood timber is used for step risers, seating and pergola. One terrace could be substituted for lawn or other use to suit your needs.*



SYMB	BOTANICAL NAME	QTY	SYMB	BOTANICAL NAME	QTY
	<i>Acacia melanoxylon</i>	2		<i>Lomandra longifolia</i>	16
	<i>Bursaria spinosa</i>	8		<i>Poa labillardieri</i>	79
	<i>Coprosma quadrifida</i>	10		<i>Dianella tasmanica</i>	8
	<i>Callistemon pallidus</i>	16		<i>Dianella revoluta</i>	10
	<i>Correa alba</i>	15		<i>Diplarrena moraea</i>	11

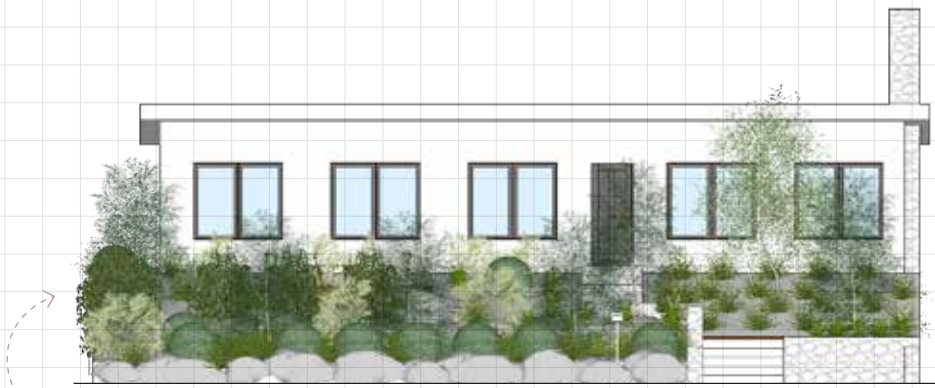


contemporary entry garden (16 x 14 m) 1:200

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# Bandicoot Terrace

*A contemporary take on an Australian native garden, this entry garden provides both privacy and street appeal. The visual structure provided by grouped plantings of tussock grasses, shrubs and trees also offers a diversity of habitat for eastern barred bandicoots. A small seating terrace allows residents to be immersed in the space, while taking in views through the light canopy. An ideal choice if your backyard is home to domestic pets.*
















elevation



perspective

SYMB	BOTANICAL NAME	QTY	SYMB	BOTANICAL NAME	QTY
	<i>Bursaria spinosa</i>	1		<i>Lomandra longifolia</i>	28
	<i>Banksia marginata</i>	6		<i>Poa labillardieri</i>	77
	<i>Coprosma quadrifida</i>	7		<i>Dianella tasmanica</i>	6
	<i>Callistemon pallidus</i>	9		<i>Dianella revoluta</i>	14
	<i>Correa alba</i>	12		<i>Diplarrena moraea</i>	12

# Plant Schedule

BOTANICAL NAME	COMMON NAME	IMAGE	PLANT SIZE	BANDICOOT HABITAT VALUE
<i>Poa labillardierei</i>	<b>Common tussock grass</b>		H: 0.8 m W: 0.5 m	Dense cover and nesting opportunities
<i>Lomandra longifolia</i>	<b>Sagg</b>		H: 0.9 m W: 1 m	Dense cover and nesting opportunities
<i>Dodonaea viscosa</i>	<b>Broadleaf hop bush, sticky hop bush</b>		H: 3 m W: 1.5 m	Shade; shelter from avian predators
<i>Diplarrena moraea</i>	<b>Tasmanian native flag iris, white flag iris</b>		H: 1 m W: 0.9 m	Dense cover and nesting opportunities
<i>Dianella tasmanica</i>	<b>Tasman flax lily</b>		H: 1.5 m W: 2 m	Dense cover and nesting opportunities
<i>Dianella revoluta</i>	<b>Black anther/ blue/spreading flax lily</b>		H: 0.5 m W: 1 m	Dense cover and nesting opportunities
<i>Correa alba</i>	<b>White correa</b>		H: 1.5 m W: 2.5 m	Protection from predators
<i>Coprosma quadrifida</i>	<b>Prickly currant bush</b>		H: 3 m W: 2 m	Protection from predators
<i>Callistemon pallidus</i>	<b>Lemon bottlebrush</b>		H: 3 m W: 2 m	Protection from predators
<i>Bursaria spinosa</i>	<b>Sweet bursaria</b>		H: 4 m W: 3 m	Shade; shelter from avian predators
<i>Banksia marginata</i>	<b>Silver banksia</b>		H: 5 m W: 4 m	Shade; shelter from avian predators
<i>Allocasuarina littoralis</i>	<b>Black sheoak</b>		H: 8 m W: 3 m	Shade; shelter from avian predators
<i>Acacia melanoxylon</i>	<b>Blackwood</b>		H: 20 m W: 6 m	Shade; shelter from avian predators



# Plant Schedule

DESCRIPTION	MAINTENANCE
<p>Very hardy, fast growing tussock-forming grass with greyish, blue-green foliage and straw-coloured flowers. Ornamental, revegetation, butterfly host plant.</p>	<p>Can be cut back near ground level every 2-3 years to initiate fresh growth in spring.</p>
<p>Perennial, rhizomatous herb with long, strappy green leaves. Slender, straw-coloured flower clusters late winter to early spring.</p>	<p>Trimming foliage by half every 3-5 years in spring reduces clump size. Annual trimming can control the growth.</p>
<p>Fast growing screen and shelter shrub with upright habit. Dark green leaves, yellowish green flowers Nov-Dec, followed by brilliant reddish-brown papery fruit capsules. Prefers well-drained soil, tolerates dry conditions, sun/part shade.</p>	<p>Regular tip pruning will promote growth and a bushy habit.</p>
<p>Clumping perennial, useful for revegetation, coastal gardens, or foliage effect in combination with grasses. Abundant, long-stemmed iris-like flowers (white with yellow centres) from spring to summer, held above evergreen foliage.</p>	<p>Minimal: trim off unsightly dead leaves and remove dead flower stalks. Thin clumps or dig up and divide in autumn to provide new plants if too congested.</p>
<p>Spreading perennial forming large clumps with long, strap-like green leaves. Long sprays of blue-violet flowers spring-summer, followed by showy purple berries. Grows well in dry shade (eg. under established trees). Hardy in most soils in part to full shade.</p>	<p>Minimal: trim off unsightly dead leaves and remove dead flower stalks. Thin clumps or dig up and divide in autumn to provide new plants if too congested.</p>
<p>Clump forming perennial with green to blue-green, strap-like foliage and clusters of blue-purple star shaped flowers in spring to summer, followed by glossy blue berries.</p>	<p>Minimal: trim if required to remove older leaves and spent flower stalks.</p>
<p>Bird attracting, evergreen shrub. Grey-green foliage, stunning white star-like flowers autumn-spring. Prefers full sun. Drought and frost tolerant. Suitable in a wide range of conditions, including coastal areas and in pots/containers.</p>	<p>Light prune after flowering to maintain compact habit. Slow release, low phosphorus fertiliser if required.</p>
<p>Upright, open shrub with green leaves and tiny, sharp spines providing shelter for small birds. Pale green flowers in mid-spring. Forms bright red edible berries. Can be grown to use as security hedge.</p>	<p>Pruning will encourage bushier growth. May require water over long, dry periods.</p>
<p>Attractive small, grey-green foliated shrub. Plum coloured new growth with masses of fragrant, creamy/yellow brushes borne from spring-summer. Frost hardy, full sun or part shade. Great habitat for birds and insects.</p>	<p>Periodically trim to shape and to encourage dense, compact habit. May require water over extended dry periods. Mulch in spring and autumn and apply complete fertiliser if required.</p>
<p>Erect, prickly shrub. Sweetly scented, white flowers borne in dense terminal panicles in summer. Distinctive 'purses' (seed cases). Attracts bees, birds, butterflies and other insects.</p>	<p>Responds well to a light prune after flowering to maintain compact habit. Apply a little extra moisture during drier months.</p>
<p>Variable habit, can be a shrub or small tree. Choose specimens for shape. Green leaves with silvery underside, pale yellow flowers late summer-winter. Hardy, favours sun, tolerates part shade. Wide range of soil types, drought and coastal conditions. Attracts birds.</p>	<p>Prune to shape and to maintain compact habit. Apply organic mulch in spring and slow release, low phosphorus fertiliser if required.</p>
<p>Erect, fine-foliated large shrub/small tree. Thin needle-like dark green leaves, red female flowers. Dry, well-drained position, full sun/part shade. Useful in coastal gardens, screening, and in establishing dry areas.</p>	<p>Prune lightly early on for lower, bushy growth. Self-mulching and weed suppressant.</p>
<p>Dense, quick-growing shrub/tall tree. Deep green leaves, pale yellow flowers in clusters late winter-early spring. Windbreak, informal hedge, shade tree. Hardy in most conditions, full sun. Habitat species for birds, and useful honey species.</p>	<p>Prune as required for shape. Will tolerate severe pruning if required.</p>

## How to Plant

1

### GROUND PREPARATION

Spot spray twice prior to planting. Look out for native plants already present such as grasses, herbs and low shrubs and avoid spraying them.

2 **PREFERABLY PLANT IN AUTUMN** thoroughly watering plants a few hours before planting to ensure the potting mix is fully saturated.

3

**MAKE HOLE DOUBLE** the width of pot size and no deeper than the root ball.

4

**BACKFILL, LEAVING A SHALLOW DEPRESSION** which holds some water. Top of root ball should be just below finished ground level.

5

**HOLE IS BACK-FILLED** firmly with loose soil creating good root-soil contact. Water in well.

6

**EXCLUDE GRAZING ANIMALS** with tree guards during establishment phase if necessary.

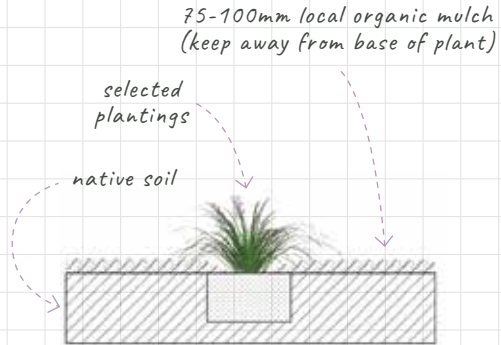
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**MONITOR PLANTS** for water stress, grazing and weed encroachment for the first few years. Maintain browsing guards and replace dead plants immediately.

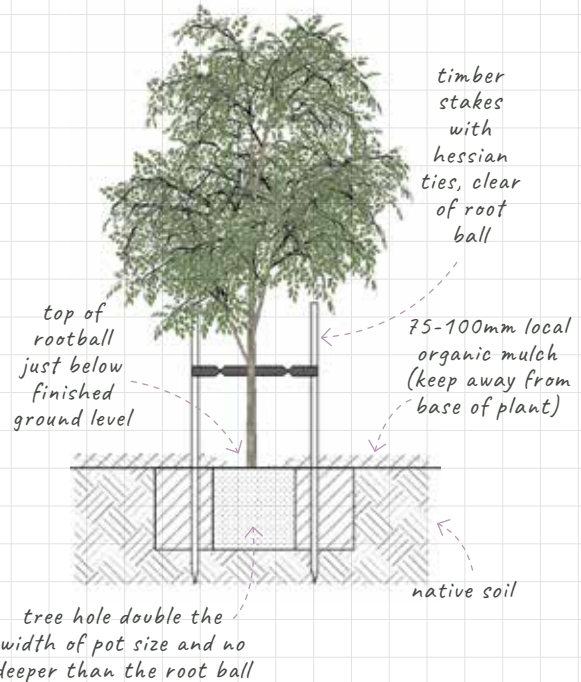
8

**TRIM GRASSES** and other strappy-leaved perennials as referred to in the Plant Schedule. To maintain habitat value, don't trim more than half the plants each year.

### TYPICAL LOW PLANTING DETAIL



### TYPICAL TREE PLANTING DETAIL



**THINK LANDSCAPE SCALE** Help out your local landcare or other community conservation group. Situate your refuge where it will connect with habitat in neighbouring parks, reserves or gardens and talk to friends and neighbours about how you can work together to look after eastern barred bandicoots.

# Other ways you can help bandicoots

## KEEP CATS INSIDE

**For your cat's safety and the safety of our wildlife, don't let your cat roam during the day or at night.**

Cats are an ever-present threat for bandicoots. During the day they are attracted to the scent of bandicoot nests and can attack sleeping bandicoots and their joeys. At night they often stalk foraging bandicoots. Even well-fed cats continue to hunt because it is instinctive.

Many cats also carry a parasite called toxoplasmosis that can cause a deadly disease in eastern barred bandicoots and other marsupials. There is no ill-effect to the cat. Bandicoots get infected when they accidentally eat microscopic eggs of the parasite while foraging where cats have been.

For more information and advice on cat ownership and managing stray cats in your area, check out the TassieCat website.

## KEEP DOGS AWAY FROM WILDLIFE

**If you have bandicoots visiting or living in your garden, consider excluding dogs from areas that provide cover and nesting habitat, and contain dogs in the evening and at night when bandicoots are most active.**

If walking your dog in bushland, don't let your dog wander into the bush. Use an extender lead to safely extend your dog's range.

## BE CAREFUL WHERE YOU MOW

**On large blocks you can also look after bandicoots simply by leaving 'refuge' patches of long grass when you mow. A 'no-mow zone' as small as 5 x 5 metres can provide an area for nesting and for escape from predators, while the mowed areas can be ideal for foraging for food.**

Sadly, many bandicoots are injured or killed by mowers. This is more likely to happen if you mow in a spiral pattern from the outside in – trapping the animals in an ever-decreasing patch in the middle. Instead, start from a central point and work out toward the edges. Even better, plant your own bandicoot habitat and mow from the furthest edge of the grass, flushing any fleeing animals toward the safety that your new garden provides.

## WEEDS CAN BE HABITAT TOO

**In the absence of native plants, weeds such as blackberry, gorse and hawthorn may be providing an important refuge for native species including eastern barred bandicoots.**

If clearing woody weeds, make sure your bandicoots have somewhere else to shelter. Either remove weed cover in stages or kill and leave in situ until you can establish native plants as an alternative habitat.

## POISONS AND WILDLIFE DON'T MIX

**Common household pest control products can be deadly to wildlife. Rodenticides, snail baits, insecticides and glue traps commonly claim the lives of bandicoots and other native animals and birds, either directly or through secondary poisoning.**

Instead of resorting to these lethal but indiscriminate methods, try humane catch and release traps, pest deterrents, or take measures to reduce pest access to food sources. A healthy population of bandicoots, owls and other native predators in your area will go a long way to controlling pests without intervention.



## Directory

### **NRM NORTH**

nrmnorth.org.au

### **TASSIECAT**

tassiecat.com

### **BONORONG WILDLIFE RESCUE**

bonorong.com.au

For 24/7 animal rescue service and advice, phone 0447 264 625

### **TASMANIAN LAND CONSERVANCY**

Wildtracker Project

tasland.org.au/projects/wildtracker/

### **GARDENS FOR WILDLIFE**

gardensforwildlife.dpipwe.tas.gov.au

Images by Margot Oorebeek (cover image), Joanna Lyall, Stephen Izzard, Kate Thorn, Louise Brooker, Karen Johnson, Mark Wapstra, Conservation Volunteers Australia.

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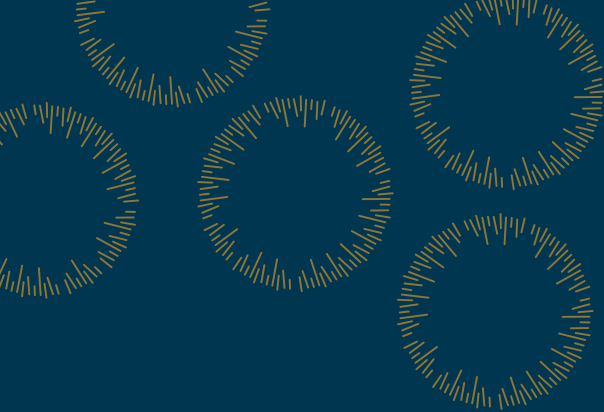
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