

Victorian Volcanic Plain



Photo ©SATC/Adam Bruzzone

Blue Lake



Most of the Victorian Volcanic Plain bioregion is in Victoria, with just a small area around Mount Gambier in South Australia.

The bioregion has a temperate climate with warm dry summers and cool winters with frosts.

Most of the land in the bioregion is used for agriculture including wool, lamb, dairy and beef cattle, and mixed crops. Forestry is also a significant industry in the bioregion. Mount Gambier is the largest town in the South Australian section with a population of around 23,000 people.

Biodiversity and habitat

Most of the region in South Australia has been cleared for agriculture except for small sections of eucalypt forest and woodlands, healthy shrublands and sedgelands. The bioregion has a number of extinct volcanoes, some with large lakes or wetlands in their craters.

Native vegetation in the bioregion is now rare and has been replaced with pine plantations, pastures and crops. Despite this, the bioregion is part of a 'biodiversity hotspot' because of its diverse ecosystems and the significant species they support.

Rare and threatened species in the South Australian section of the bioregion include the Red-tailed Black-Cockatoo (south-eastern), Southern Brown Bandicoot, Blue-winged Parrot, Crested Shrike-tit and Clover Glycine.





Photo ©SATC/Adam Bruzzone

The Valley Lake

Threats

Threats to the Victorian Volanic Plains bioregion and its dependent species include:

- Loss and isolation of habitat and native vegetation
- Introduced species such as foxes and cats
- Invasive weeds such as Blackberry and Bridal Creeper.

The famous Blue Lake near Mount Gambier is actually the crater of an ash cone rising from a volcanic plain.

Conservation

There are small scattered reserves in this bioregion which are all important for the conservation of threatened species. ForestrySA is establishing biodiversity corridors to connect existing patches of remnant vegetation.

You can help conserve the Victorian Volanic Plain bioregion and its dependent species by:

- protecting areas of native bush in your area or on your land
- helping to plant a biodiversity corridor to link areas of native forest
- raising awareness about the impacts that introduced plants and animals are having on your local environment
- reminding others that the water from the streets of Mt Gambier ends up in the Blue Lake
- Finding out more: research the geology of this region and find out why the Blue Lake is so blue!

For further information

Public enquiries

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Lobethal: (08) 8389 5900

Willunga: (08) 8550 3400

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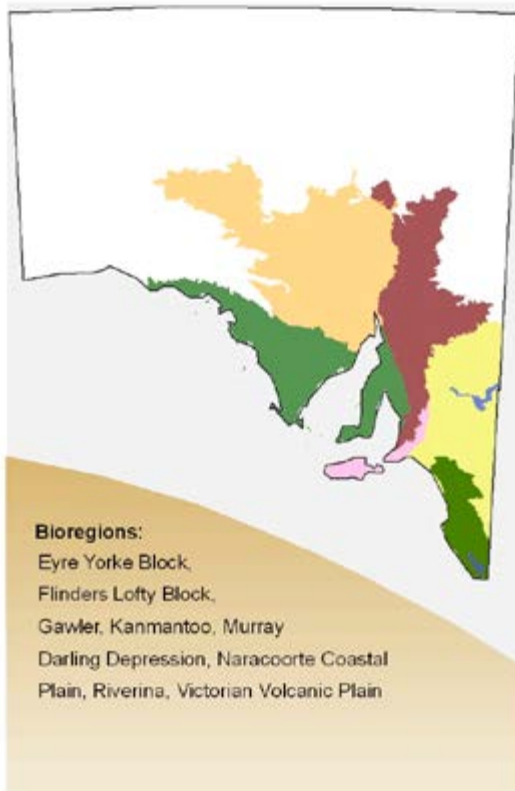
Southern Adelaide: (08) 8384 0176

Southern Fleurieu: (08) 8551 0524



Common Brushtail Possum

Trichosurus vulpecula



Map courtesy of Mapping Unit, Customer and Commercial Services.

Map is not intended to indicate spatial distribution of the species, only the bioregions in which the species is found.

Common Brushtail Possums are nocturnal marsupials. Silver grey in colour, Common Brushtail Possums have pale undersides and dark brown/black brushy tails. They are about the size of a cat and males are bigger than females. These animals live for 10-12 years in the wild. Usually solitary, they communicate with each other with hissing and growling/cough-like sounds, especially when mating or warning off intruders.

While rare and threatened in some parts of their native habitat in Australia, these possums are bothering our neighbours. Common Brushtail Possums were introduced to New Zealand in 1837 to establish a fur trade. They are now one of the most significant feral pests in the country, as they damage the environment and the farming industry.

Diet

They are predominantly herbivorous and much of their diet consists of leaves, flowers and fruit, however they will occasionally eat insects, eggs and meat.

Breeding

Mature at one year of age, Common Brushtail Possums usually have one baby (a joey) at a time in autumn. There is also a smaller breeding season in spring. After birth, joeys spend around 120 days suckling in their mother's pouch. After this, they can be seen travelling on their mother's back and getting in and out of the pouch until they are fully weaned and independent.

Habitat

Common Brushtail Possums are found in Eucalyptus and Sheoak woodlands. As arboreal animals, they make their nests (also known as dens) in tree hollows or other dark confined spaces such as hollow logs, dense vegetation or cork crevices. Some have adapted to life in the suburbs and enjoy eating planted gardens. Some also make their dens in roof spaces. They are territorial animals and mark their home ranges with scent glands located under their chins, on their chests and at the base of their tails.



Threats

In South Australia, Common Brushtail Possums are becoming less common, especially in arid areas where drought conditions have reduced their food sources. They are only common in the Adelaide region and on Kangaroo Island. Habitat fragmentation and loss of tree hollows for nesting are also threats. Changed fire patterns and predation by foxes, dogs and cats are other problems as they are increasingly living in the same areas as these animals. Competition for food and relocation by humans are other problems they face.

Pruning services! When feeding on Mistletoe, the Brushtail Possums break off parts of the plant, having a similar effect to pruning. Mistletoe is a native parasite that can kill gum trees, and possums help keep it under control.

Conservation

You can help the Common Brushtail Possum by:

- conserving native vegetation on your property
- not relocating possums without advice and approval as they are very territorial and many of them die when relocated
- keeping trees with hollows in them even if they are dead
- putting up nest boxes on your property.



Photo by SATC, Richard Smyth

Common Brushtail Possum

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Red-tailed Black-Cockatoo (South Eastern)

Calyptorhynchus banksii graptogyne



There are five subspecies of Red-tailed Black-Cockatoo in Australia and the south eastern variety is the smallest. It is estimated that there are less than 1,500 of this subspecies surviving, which means that they are in real danger of extinction.

Males and females of this species look quite different. The male's feathers are glossy black except for their bright red tail feathers. Females have duller brown-black plumage, yellow spots on their heads and necks and yellow-orange tail panels. Juveniles look like females until they reach three years of age, when males moult to their adult appearance. These birds are 50–60cm long.

Diet

Red-tailed Black-Cockatoos feed on seeds of brown and desert stringybark (*Eucalyptus baxteri* and *E. arenacea* respectively) and buloke trees (*Allocasuarina leuhmannii*).

Breeding

They nest from spring to autumn in deep hollows in large eucalypts. The female lays only one egg per season and incubates it herself while her male partner brings her food. When hatched a chick needs to be cared for at the nest for three months before it can make its first flight, and, in this time, it is fed by the female with food collected mostly by the male. During the nesting season, Red-tailed Black-Cockatoos are usually seen alone or in family groups of two to three birds, but at other times of the year they may gather in flocks of up to 200.

Habitat

They are only found in south-eastern SA and south-western Victoria.

Threats

Loss of feeding habitat is the biggest threat Red-tailed Black-Cockatoos currently face. Hollows for nesting and preferred food trees have been cleared for agriculture, forestry and development. The fact that their feeding and nesting habits are so specialised makes it difficult for them to adapt when their habitat is changed.

Fuel reduction burns can also lead to less seeds being available for them to eat. This means females have to leave the nest to find enough food which leads to higher rates of nest failure. Nest predators (e.g. possums) can also be a danger to these birds.



Map courtesy of Mapping Unit, Customer and Commercial Services.

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Fussy eaters! Red-tailed Black-Cockatoos will only eat the seeds of 3 tree species.

Conservation

The Red-tailed Black-Cockatoo Recovery team are taking steps to protect these birds through actions such as replanting food trees, protecting old gum trees with hollows, and working with fire managers to minimise impact of controlled burns and wildfires on the cockatoo's food resources.

You can help the Red-tailed Black-Cockatoo by:

- getting involved in replanting trees
- protecting dead and live trees with hollows
- planting locally indigenous food plants on your property
- participating in the annual cocky count in May.

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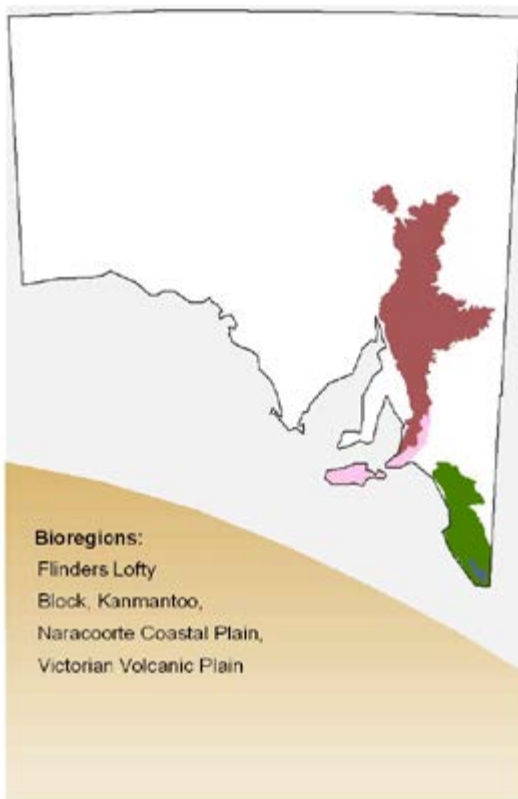
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Southern Brown Bandicoot

Isodon obesulus obesulus



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Southern Brown Bandicoots are medium-sized marsupials with long snouts, small rounded ears and large rumps. They are solitary animals that live for two to three years.

Diet

Southern Brown Bandicoots are omnivorous and forage for food under leaf litter and, in the soil, by digging distinctive cone-shaped holes. They stay close to cover when they search for food and eat ants, insects and worms (both adults and larvae), fungi, fruits and other plant material. When vegetation becomes more mature and fully grown there may be fewer food resources available for the bandicoot, whereas after fire, there are abundant insects in the revegetation areas which provide food, and the new, diverse vegetation provides habitat. Therefore, in some habitats there is evidence that they prefer areas that are burnt from time to time.

Breeding

Breeding takes place from winter through to summer and females usually give birth from two to four young per litter. They can have several litters per breeding season, but less than half of their young survive to maturity.

Habitat

Southern Brown Bandicoots can be found in the Mount Lofty Ranges, Kangaroo Island and the South East of South Australia. This eastern subspecies is one of five subspecies of Southern Brown Bandicoot, two of which live in South Australia. The Southern Brown Bandicoot lives in dense scrubby habitats or areas with dense, low ground cover.

They sleep in nests made of grass and other plant material that may be mixed with earth. These can be very well hidden in dense vegetation or among debris. Dense understorey vegetation is vital to the bandicoots' survival as it protects them from predators.

Threats

Threats to the Southern Brown Bandicoot include: vegetation clearing, inappropriate fire regimes (too many fires are also harmful to their habitat) and predation by foxes and cats. Habitat loss and fragmentation leads to isolated populations which are more vulnerable to chance events and other threats.



Making do! Where their native habitat has been disturbed or destroyed, bandicoots sometimes use the dense cover of weedy blackberry thickets as a substitute.

Conservation

Regional and National Recovery Plans have been developed to maintain, protect and improve Southern Brown Bandicoot populations in Australia.

You can help the Southern Brown Bandicoot by:

- being a responsible pet owner – desex your cats and dogs, keep them inside at night and don't take them into national parks as dogs and cats can kill bandicoots. Keep dogs on a leash in areas where bandicoots live.
- getting involved with a conservation group near you
- educating your community about Southern Brown Bandicoots and other local species, and encourage councils and community groups to protect even small patches of native bush.



Photo by Kirstin Long

Southern Brown Bandicoot



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Southern Brown Bandicoot

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Yellow-tailed Black-Cockatoo

Calyptorhynchus funereus



Yellow-tailed Black-Cockatoos are easy to identify due to their large size and distinctive markings. They are the largest Australian cockatoo and are 55-65cm long. They are black with yellow patches and yellow panels in their tail feathers. These birds have a distinctive call that can be heard as they fly over the tree tops. They are known to gather in large flocks of up to one hundred.

Diet

Their diet is varied but consists mainly of seeds of native trees, particularly the native sheoaks (*Allocasuarina spp.*) but also *Eucalyptus*, *Acacia*, *Banksia*, *Xanthorrhoea* and *Hakea* species. They also strip the bark from the trees to find tree-boring beetles and moth larvae. Yellow-tailed Black-Cockatoos have large, powerful bills for biting into the cones of pines and banksias. The upper part of the beak pierces the cone and hooks in while the lower part cuts through.

They have also adapted to feed on seeds of introduced Radiata (*Pinus radiata*) or Aleppo Pine (*Pinus halepensis*) often in commercial plantations because many of their native food sources have been cleared.

Breeding

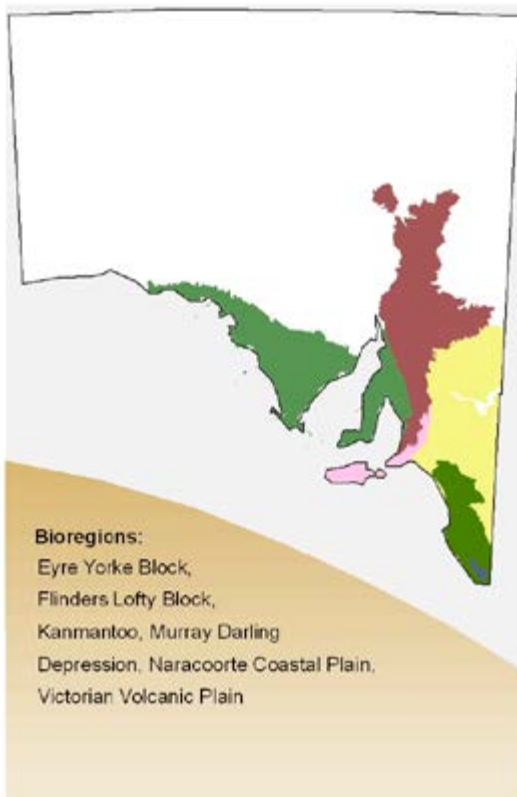
Nests are made in large hollows in old trees. Females incubate the egg(s) and it takes four weeks for the hatchling to emerge. Males provide food while the females are incubating and rearing the chicks. Females usually lay two eggs, but almost always only feed one chick, so that only one chick survives. The nestling fledges in about three months but does not become independent until just before the next breeding season (around six months).

Habitat

Yellow-tailed Black-Cockatoos are found throughout south-eastern Australia, and are not listed as nationally threatened. The population on Eyre Peninsula, is considered critically endangered. This is because it is isolated from other mainland and island populations and has undergone dramatic decline since European settlement.

Threats

Loss of habitat (clearance of food and nesting trees), competition for nesting hollows with bees and other birds and animals and, predation (e.g. by Wedge-tailed Eagles) due to lack of cover, are the major threats to the Yellow-tailed Black-Cockatoo. Predation of eggs by Common Brushtail Possums (*Trichosurus vulpecula*) can also be a problem.



Map courtesy of Mapping Unit, Customer and Commercial Services.

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A distinctive local! Yellow-tailed Black-Cockatoos can be sighted in many Adelaide Hills conservation parks and visit the city parklands.

Conservation

Conservation of the wild population and its habitats, replanting of native food sources and habitat trees in this area, and a captive breeding program, are some of the positive actions being taken to help this population recover.

You can help the Yellow-tailed Black-Cockatoo by:

- keeping an eye and ear out if you go walking in the Adelaide Hills – you might see or hear a group of Yellow-tailed Black-Cockatoos flying around
- finding out about revegetation or other conservation programs in your local area
- helping out on community revegetation activities and projects
- making sure you save food and habitat trees for the Yellow-tailed Black-Cockatoos, and other threatened species, if you live on a property.



Photo by Jason Van Weenen

Yellow-tailed Black-cockatoo

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