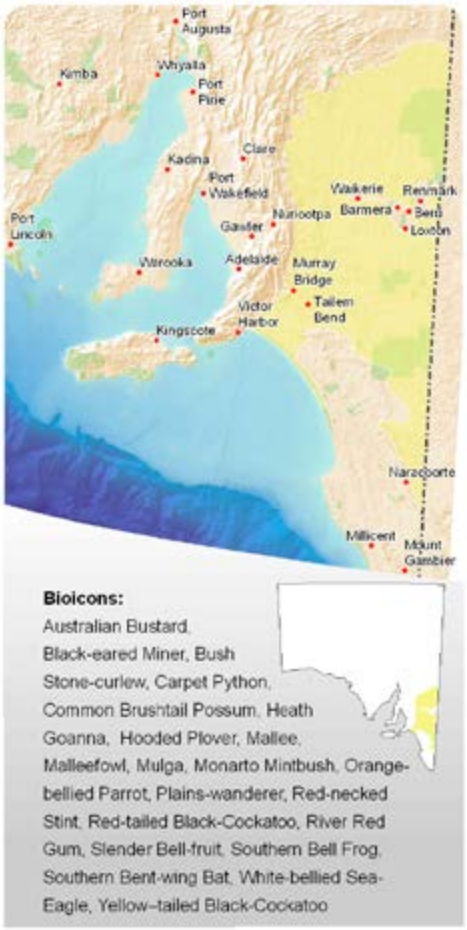
Murray-Darling Depression

Photo ©SATC/ Matt Nettheim



The Murray-Darling Depression bioregion is in south-eastern South Australia, New South Wales and Victoria. About 19% of the bioregion is in South Australia and it includes the River Murray.

The climate is semi-arid in the north which means that it is hot in the summer and mild in the winter. The south experiences a Mediterranean climate with warm to hot summers and cool moist winters. Average annual rainfall in the bioregion ranges between around 200 to 550mm per year and most of the rain falls in winter.

Much of the native vegetation in the bioregion has been cleared. The cleared land is now mainly used for grazing, irrigated horticulture and growing cereal crops.

Biodiversity and habitat

This bioregion has broad, rolling plains, sand dunes and lakes. There are large areas of mallee shrublands and woodlands. There are also open woodlands, tussock grasslands, heath and acacia shrublands.

Fire is important to the bioregion's biodiversity and many plant species in this bioregion have special features which help them survive bushfires. Some even need fire to help them reproduce!

Threatened bird species include the Malleefowl, Black-eared Miner and Redlored Whistler. Threatened plant species include the Jumping-jack Wattle and Hairy-pod Wattle. The Carpet Python is a threatened reptile of the region.

Photo ©SATC/ Matt Nettheim

Threats

Threats to the Murray-Darling Depression bioregion and its dependent species include:

- salinity
- poor fire management
- overgrazing from feral rabbits and goats.

Prior to extensive clearance, the world's largest area of mallee occurred in this bioregion.

Conservation

Less than 15% of the Murray-Darling Depression bioregion is in conservation reserves. Reserves in the South Australian section of the bioregion include Ngarkat Conservation Park, Billiat Conservation Park and Danggali Conservation Park/Wilderness Protection Area. A large area called 'Gluepot' is managed by Birds Australia.

You can help conserve the Murray-Darling Depression bioregion and its dependent species by:

- finding out more about how fire affects biodiversity
- learning about the Murray River system and its problems from Queensland to the mouth in South Australia
- Being water-wise at home.

For further information

Public enquiries

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Eastwood: (08) 8273 9100
Gawler: (08) 8523 7700
Lobethal: (08) 8389 5900
Willunga: (08) 8550 3400

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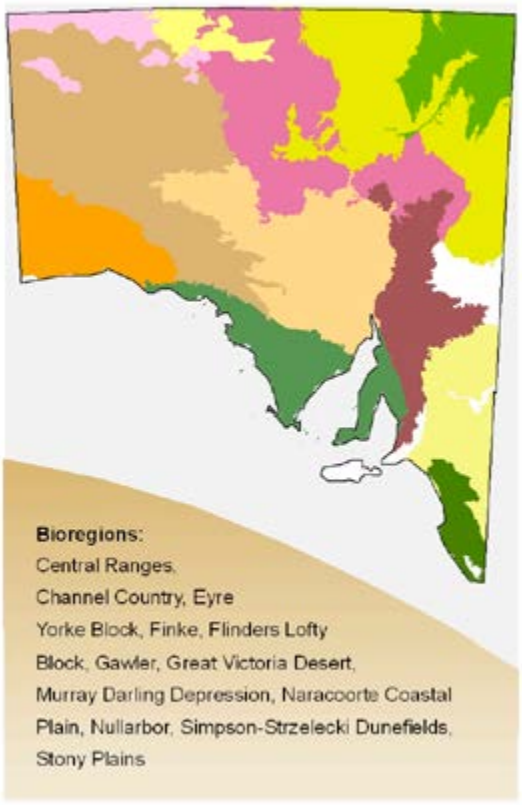
FIS: 92288

Australian Bustard

Ardeotis australis



Map courtesy of Mapping Unit, Customer and Commerical Services.

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

One of Australia's largest birds, the Australian Bustard is up to one metre tall with a wingspan of up to 2.3 metres! Heavy bodied, ground-dwelling birds, males (5-10 kilograms) are up to three times heavier than females (2-3 kilograms). An upright posture, long legs and a black cap of feathers on their heads make them easy to recognise. This bird has the distinction of being Australia's heaviest flying bird. When disturbed these birds walk away slowly (looking quite superior with their heads in the air!). They are strong in flight and sometimes move from one area to another.

Diet

The Australian Bustard is omnivorous, foraging on insects, young birds, lizards, mice, leaves, seeds and fruit. In the arid parts of their range, Australian Bustards are primarily nomadic, tracking rainfall and food sources opportunistically across the landscape.

Breeding

Australian Bustards breed once a year using what is called a 'lek' mating system. This means that when mating, each male uses a 'display site' to try and attract a female. Males put on a show by inflating a large throat sac and strutting around with their tails up making a loud, deep, roaring noise. Females then choose which male to mate with on the basis of their size and display. In the drier arid areas of SA they may not use the lek system, some being more solitary and even monogamous.

From September to November, eggs are laid in a hollow on the ground where the female has a good view of approaching threats while being well camouflaged. Females incubate one to two, rarely three, eggs for around 24 days. After mating males play no further part in raising the chicks.

Habitat

The Australian Bustard lives on dry plains, grasslands and open woodlands, and they favour tussock and hummock grasslands. Occasionally they are seen in modified habitat areas such as farmlands and golf courses.

Fire followers! Groups of Australian Bustards have been seen flocking to fires to eat animals flushed out or killed by them.

Threats

Past hunting reduced their populations and illegal hunting continues. Predation by cats and foxes, habitat degradation from overgrazing rabbits and stock, and habitat clearance and alteration are other major threats to the Australian Bustard. Secondary poisoning from rabbit baiting can also pose a threat to them. These threats have seen a large scale decline in their population in south-east Australia. They are largely now found in northern Australia and southern New Guinea.

Conservation

You can help the Australian Bustard by:

- keeping our wildlife wild! Bustards could become more vulnerable to illegal hunters if they are fed or tamed and if disturbed their nests could fail
- being a responsible pet owner – desex your pets, keep them inside at night and don't take them into national parks.

Photo by Mark Ziembicki — Australian Bustard

Photo by Bruce Doran — Australian Bustard

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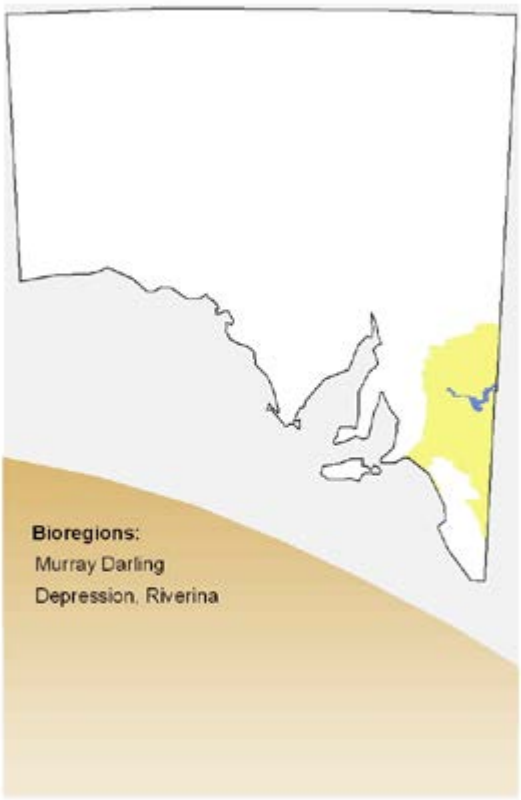
Black-eared Miner

Manorina melanotis



Map courtesy of Mapping Unit, Customer and Commerical Services.

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The Black-eared Miner lives in the Murray Mallee region of South Australia. It is one of four species of honeyeater in the Manorina group, and all of these species can interbreed with each other. A darkly coloured, stocky bird it is dark grey above, paler underneath with a black face mask and orange/yellow bill and legs. It is one of Australia's rarest endemic bird species and is shyer and quieter than other miner species.

The Black-eared Miner is similar in appearance to the more common Yellow-throated Miner *(Manorina flavigula)*, and is threatened as an individual species as it has been interbreeding with them. This interbreeding has become common since human disturbance to and destruction of their habitats has enabled Yellow-throated Miners to access and use the Black-eared Miner's habitat more readily.

Diet

Miners eat mainly invertebrates and lerp (a sugary substance made by tiny sap-sucking insects).

Breeding

Black-eared Miners mate for life, only seeking a new partner if their chosen one dies. Several breeding pairs choose to live close together and form a colony. These colonies of birds help each other with their nests, and act together to scare off predators and intruders.

Black-eared Miners are opportunistic breeders – they wait until conditions are favourable and there are plenty of nectar-bearing flowers and insects to eat and then they breed. This usually happens from September to December in the spring time. They lay clutches of two to three eggs and forage for food close to their nests.

Habitat

Old growth mallee is the preferred habitat of Black-eared Miners; they prefer habitat that has not been burnt for 40 years or more. Unfortunately for these miners the mallee eucalypts they prefer in the Murray region grow on very fertile land which has been selectively cleared for agriculture. For this reason much of their former habitat has been destroyed.

Threats

Habitat clearance and degradation has been the major threat to Black-eared Miners. Yellow-throated Miners moving into their habitat and interbreeding with them is another problem. Isolated colonies which are slow to grow, climate change and drought, and fire destroying old growth trees are other threats to this species.

Mighty helpful! Up to 13 'helper birds', mostly males, will assist the nest of a breeding pair in their colony

Conservation

Recovery plans aimed at preserving what is left of the Black-eared Miner's habitat, establishing captive breeding populations and keeping them separated from the Yellow-throated Miners have had some success. It is hoped this will continue in the future.

You can help the Black-eared Miner by:

- preserving remaining mallee habitat on your property and in your local area
- spreading the word: tell other people about the plight of these unique birds
- doing your bit to help stop climate change – be wise with your energy use at home
- Visit Gluepot Reserve north of Waikerie to see if you can spot a Black-eared Miner.

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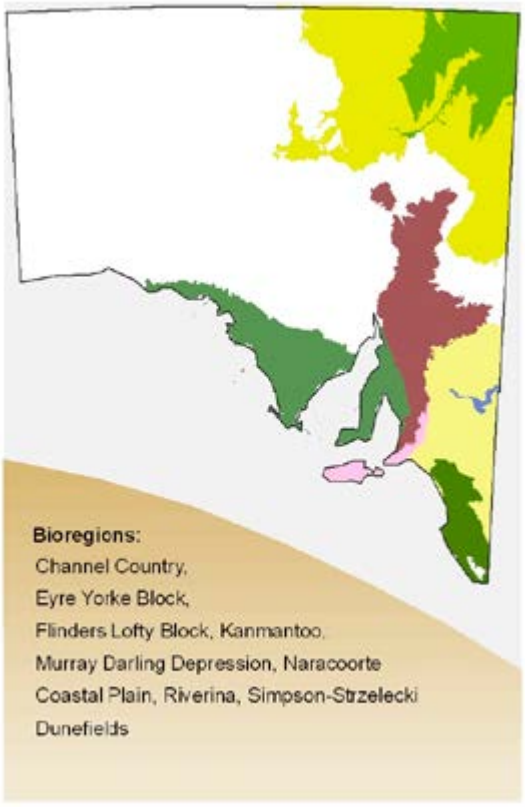
Bush Stone-curlew

Burhinus grallarius



Map courtesy of Mapping Unit, Customer and Commerical Services.

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Bush Stone-curlews are ground-dwelling birds; this means that they roost, feed and nest on the ground. Their big yellow eyes and long legs with knobbly knees allow them to be easily distinguished from other birds. They can live more than 20 years and grow to 50-60 cm tall.

Bush Stone-curlew are nocturnal, and are famous for the wailing sound they make at night. They are such secretive birds that sometimes this call is the only way to know that they are around.

During the day they rest crouching down, head outstretched. When disturbed they tend to freeze instead of flying away, which can make them especially vulnerable to predators. Historically they travelled in groups of 50–100 but it is now rare to see more than four birds together.

Diet

These birds eat insects, small frogs, lizards and snakes.

Breeding

Bush Stone-curlews nest from August to February and usually lay two eggs in a scrape (small bare patch) on the ground. These eggs are mottled brown and grey for camouflage and are incubated by both parents. Unfortunately, only 15 per cent of nesting attempts in the South East of SA are successful.

Habitat

Bush Stone-curlew prefer 'untidy' landscapes covered in fallen timber and debris. The mottled grey-brown colour of their feathers makes them well camouflaged amongst the woody debris of their habitat. These unique birds have disappeared from around 90 per cent of their former habitat on the South Australian mainland.

Threats

Foxes and cats are the Bush Stone-curlew's main predators. The clearance of open woodlands has led to the fragmentation and destruction of suitable habitat. The removal of timber makes them vulnerable to predation from feral animals. Other threats include eggs being trampled by stock and nest disturbance from pets and people.

Aboriginal People associated the curlews with ghosts because of the wailing cries they make at night!

Conservation

You can help protect the Bush Stone-curlew by:

- avoiding taking firewood from woodland environments; these are an important part of the curlew's habitat
- keeping pets inside at night and walk dogs on a lead in woody areas – cats and dogs can kill native birds like the curlew
- trying not to disturb Bush Stone-curlews if you come across them.

Photo by Dan Harley

Bush Stone-curlew

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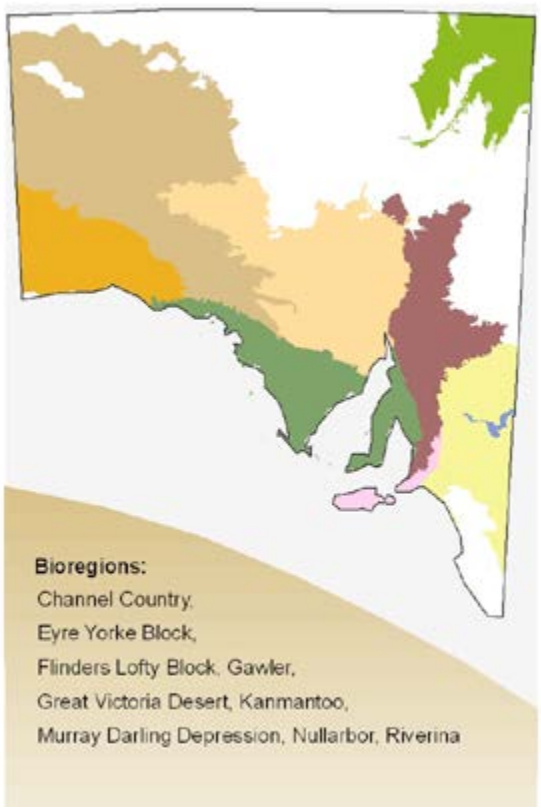
Carpet Python

Morelia spilota



Map courtesy of Mapping Unit, Customer and Commerical Services.

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Biodiversity

Carpet Pythons are semi-arboreal snakes (sometimes spending time in trees) which are non-venomous and popular as pets around the world. They are nocturnal, grow up to three metres long and can weigh up to 5kg. They are very strong and are often the largest predator in their ecological community. The skins of different individuals show many colour variations ranging from black with dark brown spots to a golden colour. Their patterns often help them to remain camouflaged in their habitat. Carpet Pythons feature in many creation stories from different groups of Aboriginal People.

Diet

Carpet Pythons are constrictors, meaning they kill their prey by suffocation. Their diet consists mainly of small mammals, bats, birds and lizards.

Breeding

Carpet Pythons are usually solitary snakes and only group together to breed. Females are oviparous (egg-laying) and lay 10–40 eggs at a time either in a tree hollow or a burrow deserted by another animal. They then coil around them and use muscular contractions to increase their body temperature and keep the eggs warm. Young are around 30 cm long at birth. They can live for up to 20 years and reach maturity at around three years of age.

Habitat

They are found in areas of Australia, Indonesia and New Guinea. Once widespread in south-east Australia, they have steadily declined in number. In the wild they are often associated with River Red Gum habitat, but can also be found in rocky areas and other habitats.

Carpet Pythons sometimes shelter in roof spaces and pump houses and provide a natural vermin control service as they eat rats and mice.

Threats

Carpet Pythons are taken from the wild for the pet trade and if not looked after properly many die in captivity. In the wild they are preyed upon by foxes and dogs. They are also threatened by habitat loss (e.g. loss of River Red Gums along the River Murray) and also by a reduction in their prey.

They have a highly sensitive heat-detecting organ on the scales of the lower jaw (Jacobsons or Vomeronasal organ). This gives them a thermal image of warm-blooded creatures in the dark.

Conservation

You can help the Carpet Python by:

- not disturbing them – if you see a Carpet Python in the wild, just look from a distance
- not killing snakes unnecessarily if you come across one in or around home – call someone to take it away for you
- visiting Cleland Wildlife Park to see and find out more about Carpet Pythons and other native animals.

Photo by Tony Robinson

Carpet Python

Photo by Tony Robinson

Carpet Python

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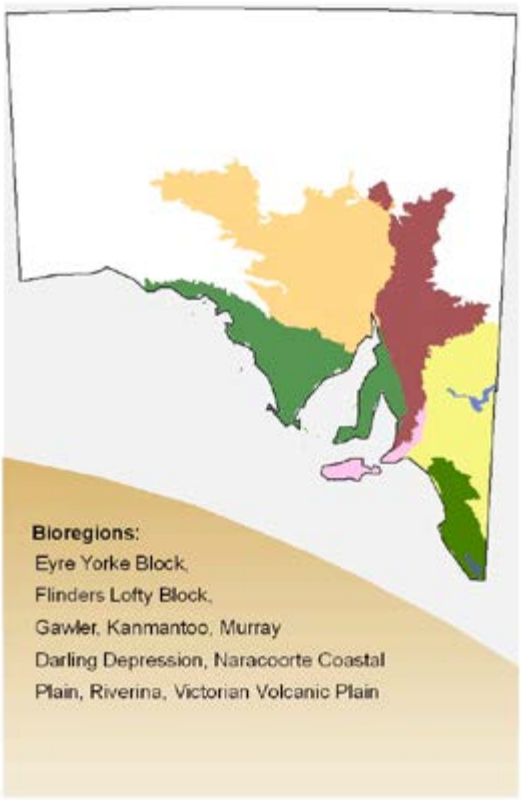
Common Brushtail Possum

Trichosurus vulpecula



Map courtesy of Mapping Unit, Customer and Commerical Services.

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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 signficant 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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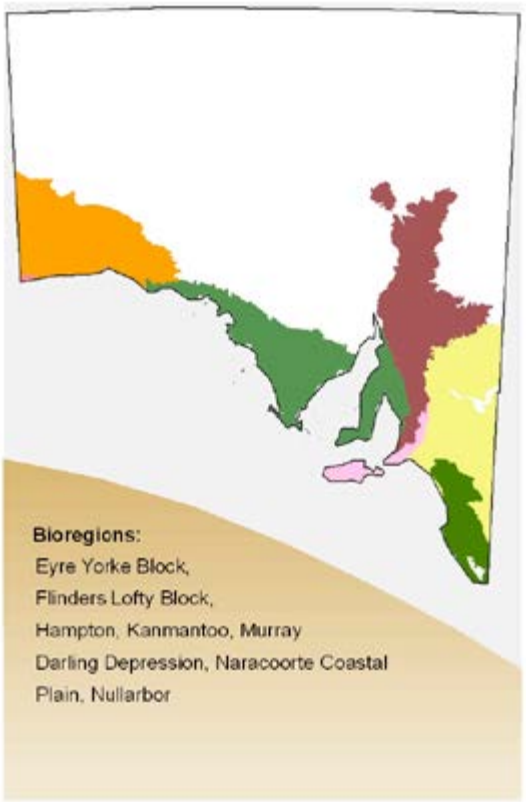
Heath Goanna

Varanus rosenbergi



Map courtesy of Mapping Unit, Customer and Commerical Services.

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Also known as Rosenberg's Goannas, Heath Goannas are powerful reptiles with strong limbs, sharp curved claws and long muscular tails. They reach up to 1.5 metres in length. Large curved teeth make it easier for them to hang onto their prey. Like all reptiles, Heath Goannas have limited ability to control their own body temperatures via their own metabolism and need to bask in the sun for at least half an hour each day before being active.

Diet

Their diet includes carrion, insects, birds, eggs, reptiles and small mammals. They sense prey by flicking their forked tongues and transferring the scent to sensory organs (Jacobson's organ). This organ is a common feature of many reptiles.

Breeding

Heath Goannas lay their eggs in active termite mounds. In mid to late summer the pregnant female will dig a tunnel into their chosen mound and lay 10–17 eggs. They then seal the nest and both the male and female guard the mound to ward of potential predators. Decaying material within the mound and the activity of the termites creates a warm, humid atmosphere, perfect for incubation. The eggs hatch in eight months after which the young slowly dig an escape tunnel. This can take them weeks, and they continue to use the mound as shelter for several months as they grow.

Habitat

Heath Goannas live in a variety of habitats from coastal and desert heaths to humid woodlands and sclerophyll forests. Kangaroo Island is an important refuge for Heath Goanna as they have become quite rare on the mainland. They are the largest land predator on the island. They find shelter in burrows, hollow logs and rock crevices at night. Several goannas might use the same burrow; they usually have connected tunnels and several exits.

Threats

Habitat loss and fragmentation is a major problem for these goannas. The removal of woody debris necessary for termite nesting can impact of their ability to nest. The juveniles especially are threatened by predation by cats, dogs and native predators. Fast moving vehicles, illegal hunting and collection, poisoning/ toxic pesticides, lack of recruitment, and fire are other problems.

Natural Pest Control! Rabbits were introduced to Kangaroo Island early last century and Heath Goannas are credited with eating them all. They are happy to burrow to find prey, and considering the damage rabbits have done to the mainland, KI is fortunate to have these reptiles.

Conservation

You can help the Heath Goanna by:

- being a responsible pet owner – desex your cats and dogs, keep them inside at night and don't take them into national parks
- not collecting fallen timber or destroying termite mounds if you live in the Heath Goanna's neighbourhood, as they need these to survive
- driving slowly if you are visiting Kangaroo Island as goannas may not be able to avoid fast cars.

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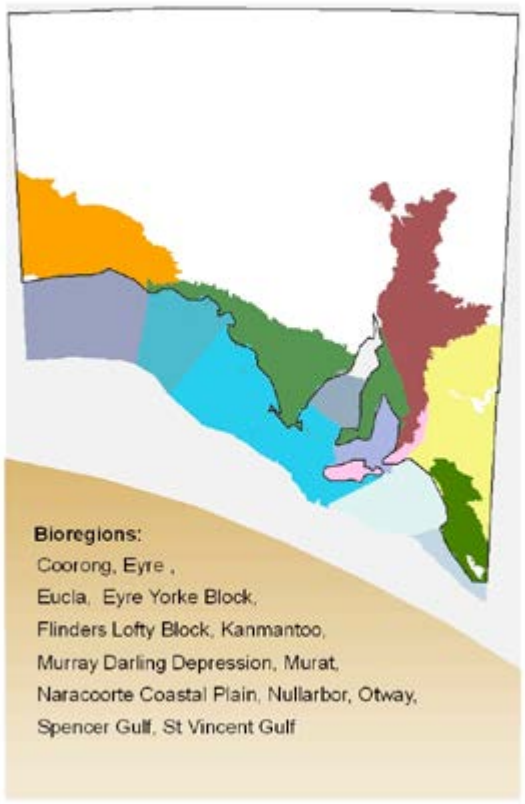
Hooded Plover

Thinornis rubricollis



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Hooded Plovers are small-to-medium sized coastal shorebirds. They can be active during the day and night time, and are non-migratory. Also known as the Hooded Dotterels, these plovers bob their heads continually when alert and standing still. A distinctive black hood and throat give them their name; they also have a red ring around their eyes, a black-tipped orange bill and orange legs.

Pairs of Hooded Plovers establish territories to live and breed in, that they defend from other plovers. When approached by humans they run or fly away and are quite vocal as they do so! They will only leave these areas if they are persistently disturbed.

Diet

They forage on the beach and can usually be seen in pairs or small groups finding food at the waters edge as the waves recede. Some Hooded Plovers also forage around salt water lagoons, saltpans and coastal lakes. They feed on insects, small bivalves, crustaceans, marine worms, water plants and seeds.

Breeding

Hooded Plovers breed from August to March in eastern Australia on wide, sandy, seaweed strewn beaches. They make their nests in small scrapes on the beach between the high tide line and the sand dunes during spring and summer. They line these nests with pebbles, seaweed or other materials they find on the beach. An average clutch size is one to three eggs, and these are incubated by both parents for around 28 days. There is a very low success rate for chicks hatching and making it to maturity.

Habitat

These birds are found along the southern sandy coasts of Australia.

Threats

Coastal development and increased human activity on the coasts is a major threat to the Hooded Plovers, especially as they nest in summer when people like to visit the beach. Vehicles on the beach destroy nests, eggs and chicks. Dogs kill chicks and destroy nests as well as chasing adults away from their nests. This often leads to the death of the chicks. Disturbance and trampling by humans and stock, and predation by foxes are other threats these birds face. Unfortunately, only 700–800 of these birds remain in SA. Nationally, it has been estimated that a population of around 7,000 Hooded Plovers are alive today.

Although they move around during the non-breeding season and sometimes flock with other birds, Hooded Plovers usually return to the same breeding area with the same partner to lay their eggs each year.

Conservation

You can help the Hooded Plover by:

- preferably keeping your dog on a leash (at least) when at the beach - especially during spring and summer
- only walking within the intertidal zone during the nesting season
- refraining from driving on the beach or dune areas
- moving away quietly when you see Hooded Plovers – parents will abandon their nests if they feel threatened.

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Photo by Paul Wainwright Hooded Plover

Photo by Paul Wainwright Hooded Plover

FIS: 92288

Mallee

Eucalyptus spp.

Map courtesy of Mapping Unit, Customer and Commerical Services.

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Mallee comes from an Aboriginal name for a group of eucalypts that grow two to nine metres high. They are multi-stemmed and grow from underground woody bases called lignotubers. Mallee is also the name for the vegetation communities in which Mallee eucalypts grow. These communities usually include several layers of vegetation from large shrubs to small grasses and ephemerals. Mallee support a wide range of biodiversity, including the Malleefowl.

Leaf litter is slow to decompose in Mallee areas because of the dry conditions, so there is often plenty of fuel for a fire. Mallee eucalypts have adapted to cope well with fire. They grow vigorously from dormant shoots under the bark of the branches, the trunks, or the lignotuber. This is called epicormic growth.

Lignotubers store water and nutrients so new branches can grow if they have been damaged or cut to the ground. This has been very annoying for farmers trying to cut them down. They are also very difficult to remove from the ground and used to break a lot of ploughs as they are solid and rock-like. Large-scale clearance started in SA around 1900 when the stump-jump plough was invented. Farmers then conquered the Mallee, but when the trees were gone there were problems with the soil becoming too salty and eroding away. It was realised too late that plant cover is very important for keeping the soil stable and stopping salt water from rising to the surface.

Habitat

Mallee eucalypts grow in the semi-arid parts of southern Australia, and have many adaptations that help them survive the hot, dry conditions. Like most eucalypts, they close the pores of their leaves (stomates) during the heat of the day so they lose less moisture through evaporation.

Threats

Being cleared for agriculture is the biggest threat to Mallees both historically and today. Drought caused by climatic change and too frequent and intense bushfires put pressure on populations of these trees. Their understorey is often grazed on by sheep, cattle and goats. Rabbits also graze on new shoots which can make it more difficult for them to grow. Salinity and habitat fragmentation are other problems Mallee plants face.

Musical Mallees! Didgeridoos are made from the stems of Mallee eucalypts that have been hollowed out by termites.

Conservation

You can help Mallee eucalypts by:

- preserving these trees on your property
- being waterwise at home and helping ease the strain on our limited water sources
- getting involved with revegetation projects like the Million Trees Project.

For further information

Public enquiries

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Eastwood: (08) 8273 9100
Gawler: (08) 8523 7700
Lobethal: (08) 8389 5900
Willunga: (08) 8550 3400

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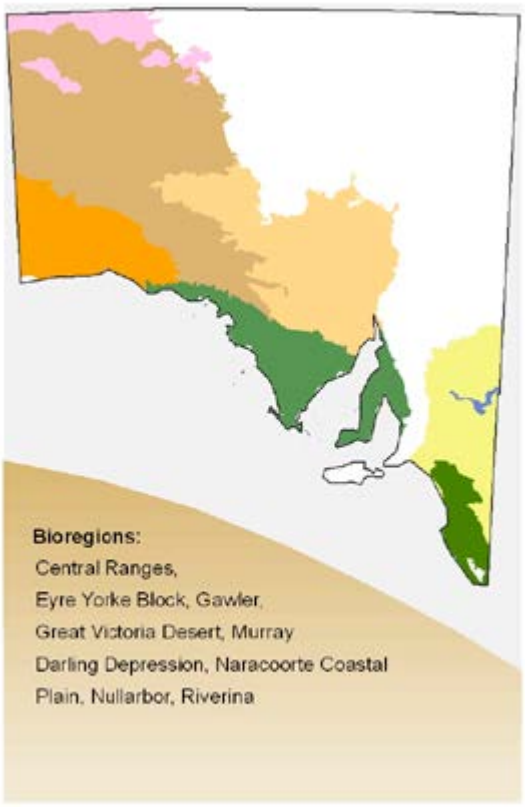
FIS: 92288

Malleefowl

Leipoa ocellata



Map courtesy of Mapping Unit, Customer and Commerical Services.

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Malleefowl are shy, ground-dwelling birds about the size of a domestic chicken. Malleefowl are Australia's largest megapodes and are also known as mound builders.

Diet

They feed on a variety of seeds, flowers, fruits, tubers, fungi, herbs and invertebrates.

Breeding

Malleefowl usually mate with the same partner for life, and pairs spend most of their time together. Nest building and maintenance take about 11 months of the year so they are usually found in the vicinity of the nest. Malleefowl mounds are approximately four metres across and 75cm high, made of leaves and sandy earth. They incubate their eggs inside these mounds, and warmth is produced by the heating of the sand by the sun and the decomposition of vegetation (like compost). They control the temperature of the nest by adding or removing vegetation to the mound. They begin laying their eggs when the nest temperature reaches around 33°C; the female then lays an egg every five to seven days until the end of summer. They can lay up to 30 eggs in one season. Males stay near the mounds, repeatedly checking the temperature with their tongues. Many eggs hatch but few chicks survive as the camouflage of their mottled feathers is their only defence and they are easy prey for foxes.

Habitat

Once common over most of the southern half of Australia, they are now only sparsely distributed from southern Western Australia to central New South Wales. They occupy semi-arid to arid shrublands and woodlands but are found mainly in mallee woodland habitat that has not recently been burnt.

Threats

Malleefowl are threatened by the fact that their population is small and isolated. Habitat destruction is another threat. Being ground-dwelling birds they are preyed upon by foxes and feral cats. Rabbit, goat, deer and stock grazing impacts on their habitat and stock, feral goats and deer can trample their nests. Increased incidences of bushfire destroy leaf litter they need for nest building as well as habitat.

Digging up out of the mound (nest) can take newly hatched chicks up to 15 hours, and they can fly within hours of hatching!

Conservation

Current management strategies for Malleefowl include the fencing of areas of habitat to keep out stock and feral deer, controlling rabbits and foxes, undertaking monitoring surveys and captive breeding programs.

You can help the Malleefowl by:

- being a responsible pet owner – desex your cats and dogs, keep them inside at night and don't take them into national parks
- avoiding taking firewood from Malleefowl habitat areas
- joining a conservation group to help look after Malleefowl habitat.

For further information

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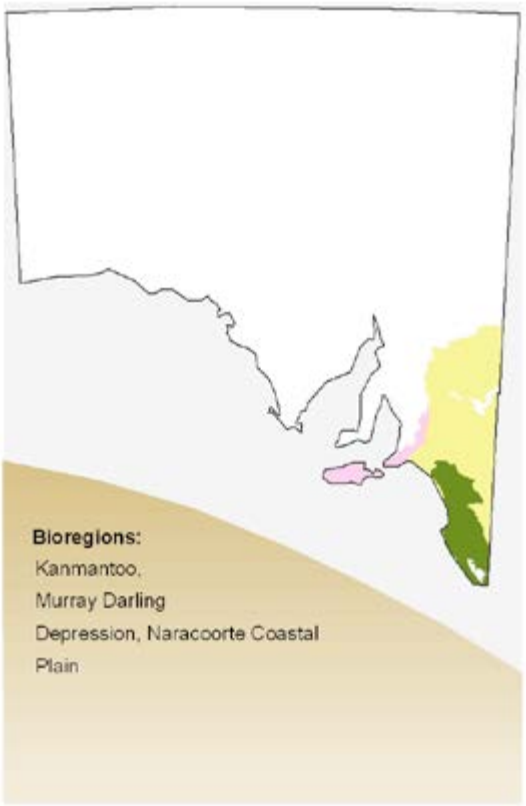
Monarto Mintbush

Prosanthera eurybioides



Map courtesy of Mapping Unit, Customer and Commerical Services.

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The Monarto Mintbush is endemic to South Australia. They are spreading shrubs approximately one metre high, with clustered leaves which are thick and hairless. The flowers of this shrub are green with a red tinge at the base, with light purple petals. The petals are partly fused together, 10–12mm long with dark purple and orange dots on the inside.

This shrub is now endangered and limited to only two areas in South Australia. Fewer than two thousand plants grow naturally in the wild. The population at Mount Monster is healthier than the other at Monarto. This is thought to be because there is less rainfall at Monarto and the area has been affected by drought. There are many other threats to the plants in both populations which are discussed below.

Reproduction

Monarto Mintbushes are in flower from September to November.

Habitat

These plants grow in sandy-loam and loam soils and can be found in tall shrublands or open woodlands associated with rocky granite outcrops. They often grow under mallee shrubs and/or broombush and wattles, while typical understorey plants (ones that grow under it) include native grasses, lilies and herbs.

Threats

Altered fire regimes leading to broad-scale and severe fires are a threat to the survival of Monarto Mintbush populations. Grazing by rabbits, kangaroos and stock may be reducing the number of seeds and seedlings. Weed invasion is another problem as weeds compete for space and nutrients with native plants. Illegal collection of plants from the wild can be a problem, especially due to the small population size and restricted distribution of this plant.

Mount Monster Conservation Park and within the proximity of Monarto, are the only areas in the world you can see this plant growing in the wild.

Conservation

Measures have been put in place to try and help this native survive. These include rabbit and weed control in areas where the Monarto Mintbush is known to still occur; the propagation and planting of seedlings; and the protection of existing sites with heritage agreements. Around 1000 seedlings have been grown by conservation groups and replanted in the wild! The long term storage of seeds can also help to ensure it never disappears completely.

You can help the Monarto Mintbush by:

- not collecting plants from the wild; they could be endangered
- volunteering with 'Mallee Minders' at Monarto Zoo and helping care for the mintbush's native habitat
- contacting a Threatened Species Officer if you see it out of its current range.

For further information

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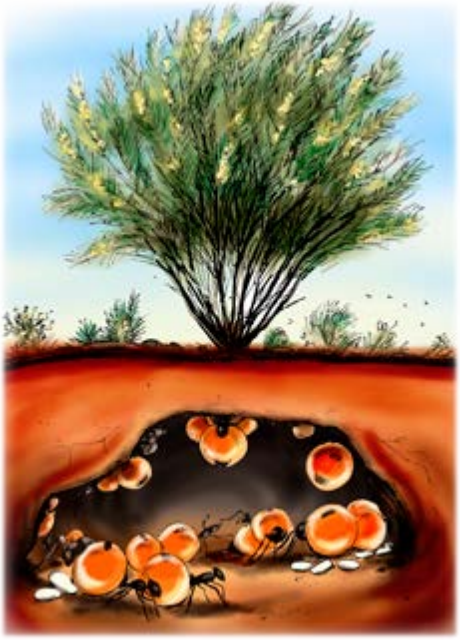
Photo by Manfred Jusaitis — Monarto Mintbush

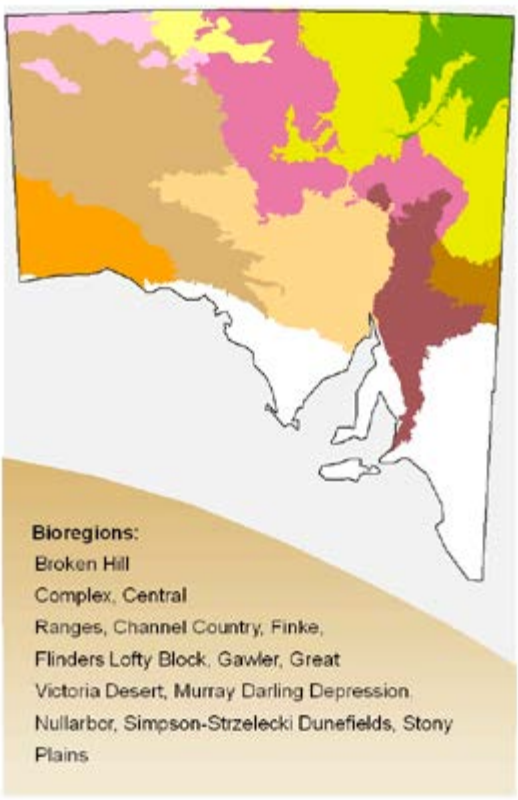
Photo by Manfred Jusaitis — Monarto Mintbush

FIS: 92288

Mulga

Acacia anuera





Map courtesy of Mapping Unit, Customer and Commerical Services.

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Mulgas are single or multi-stemmed acacias. They are classified as a small tree or a large shrub and are the main species in many desert ecosystems, such as Mulga woodlands. Mulgas are also an important food source for stock, especially during droughts.

While most acacias have relatively short life spans, Mulgas are long lived. They can grow to a maximum height of 10 metres. Reduced rainfall or drought conditions can slow or temporarily stop the growth of Mulgas. For this reason, it sometimes takes a Mulga tree 100 years to become mature. It is believed they can live between 300-400 years.

Acacias do not have leaves in a botanical sense, but instead have phyllodes. These are slim, flattened leafstalks. Phyllodes are arranged to avoid full sun and channel rainwater to the roots.

Underground, Mulgas have a taproot which can help the plant access deeper moisture and store water and nutrients. Mulga seedlings which are just 10cm high may have taproots extending three metres into the ground.

Mulga wood is very hard and is popular for use as fence posts and in craftwork. Mulga also had a wide range of traditional uses for some groups of Aboriginal people. These included: food from the seeds, lerps and sap; tools from the wood; resin from the phyllodes; and medicines from the leaflets and twigs. The name 'Mulga' comes from the name one Aboriginal group used for the shields they made from its wood. Honey Ants (*Camponotus inflatus)* make their nests underground beneath Mulga trees. These ants are another popular traditional food as their abdomens are full of a sweet honey-like substance.

Reproduction

Mulgas produce bright yellow flowers at any time of year, usually following rain.

Habitat

Mulgas are common in arid to semi-arid areas of South Australia, New South Wales, Queensland, Western Australia and the Northern Territory.

Threats

The key threats to Mulga are introduced herbivores, such as rabbits and goats, some of which have established feral populations and led to the suppression of the regeneration of arid shrubs such as Mulga and thereby threatening their long-term survival. In some areas, seedlings are eaten and trampled on by rabbits and goats which can be devastating. It is unlikely that there was any successful Mulga regeneration between the 1880's and the 1950s due to the impact of the rabbit!

Mulga trees are also threatened mainly by past and present clearance for agriculture. Changed fire regimes can be another problem – acacias are less fire resistant than eucalyptus.

Climate change also creates a less suitable habitat.

Small insects called Red Mulga Lerp *(Austrotachardia acaciae)* live on the outer branches of Mulga trees. They exude a honey dew to protect themselves from animals. which can be sucked straight off the branch, or soaked in water to make a sweet drink!

Conservation

You can help the Mulga by:

- finding out more about the many ways Aboriginal people use Mulgas and telling your class about it
- getting involved with revegetation projects, like the Million Trees Program.

For further information

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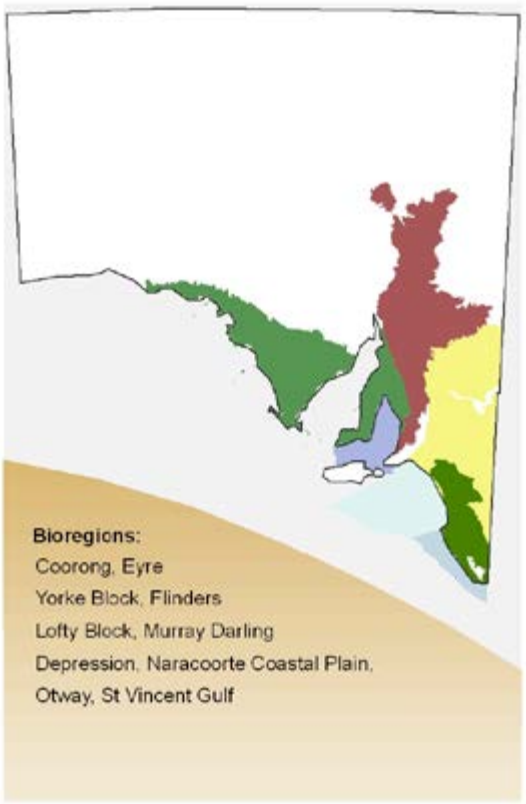
Orange-bellied Parrot

Neophema chrysogaster



Map courtesy of Mapping Unit, Customer and Commerical Services.

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The Orange-bellied Parrot is one of the rarest birds in Australia, with around only 50 individuals left in the wild. They feed on, and near, the ground. As adults the birds reach about 21cm in length. Their distinctive alarm call, an orange spot on their bellies and their bright grass-green colours help to identify them against other *Neophema* parrots like the Blue-winged or Elegant Parrots.

Diet

They forage in saltmarshes on low shrubs and groundcovers. They eat mainly seeds, fruits, flowers and berries of saline vegetation e.g. chenopods (salt bushes), Sea Rocket (*Cakile maritima*) and Bidgee-widgee (*Acaena novae-zelandiae*).

Breeding

These birds breed in November-December only in south-western Tasmania. They nest on a bed of rotten wood chips in the hollows of living eucalypts. They lay four to six eggs each season that are incubated for about 20 days by the female. Young parrots are then fed by both parents.

Habitat

Orange-bellied Parrots live in coastal areas and migrate every year, flying from their breeding grounds in Tasmania to as far west as Gulf St Vincent, though most South Australian records are from the South East and Coorong. When in South Australia, dune systems, coastal wetlands, saline depressions, and sheltered beaches are their preferred habitat areas.

Threats

Loss of habitat (wintering grounds in north-western Tasmania and saltmarshes along coastal south-west Victoria and south-east South Australia including the Coorong) is the major threat to the Orange-bellied Parrot. Predation by cats and foxes of their already small population is a threat, as well as the declining quality of saltmarshes due to water diversion and/or drought.

There are only three species of migratory parrots in the world and the Orange-bellied Parrot is one of them! They are also one of the world's most endangered species.

Conservation

The Orange-bellied Parrot Recovery Project aims to protect and restore foraging and roosting habitat for this endangered bird in SA through a range of on-ground management activities. Some of these activities include weed control, rabbit control, revegetation with foraging/roosting plants, and breeding them in captivity (e.g. at Adelaide Zoo).

You can help the Orange-bellied Parrot by:

- volunteering with a local conservation group to help monitor their population or restore their habitats
- spreading the word about the Orange-bellied Parrot – tell your family and friends all about it or do some more research and give a talk to your class
- being a responsible pet owner – desex your cats and dogs, keep them inside at night and don't take them into national parks.

For further information

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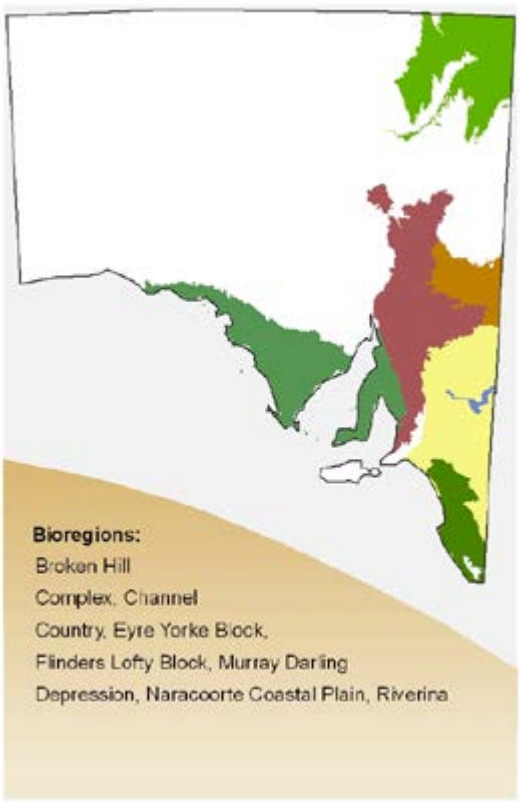
Plains-wanderer

Pedionomus torquatus



Map courtesy of Mapping Unit, Customer and Commerical Services.

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Plains-wanderers are small, long-legged birds. They have an upright alert posture and are about 18cm tall. Females are larger and more brightly coloured than the males. While they look similar to some quail species, Plains-wanderers can be distinguished by the distinctive patterns on their wings, as well as their slimmer necks and longer legs. They are the sole member of a genus of birds found only in eastern Australia.

When disturbed, Plains-wanderers usually run and, if they do fly, they leave their long yellow legs dangling. There are now possibly fewer than 8,000 Plains-wanderers left in the wild.

Diet

These birds are omnivorous and feed on a wide range of seeds, insects and spiders.

Breeding

Plains-wanderers nest in depressions known as scrapes that the female scratches out under bushes or grass tufts and are then lined with grass. They have three to four spotty eggs at one time, and chicks are usually independent after two months. Females lay their first clutch from late August to early November and may lay another in January if summer rain occurs (and ample food is available). The male Plains-wanderer does most of the work incubating the eggs and rearing the chicks, so the female is free to mate with another male.

Habitat

These birds are found in eastern Australia. As ground-dwelling birds, Plains-wanderers live on open plains with sparse lowland native grasses. They prefer areas of around half bare ground and half low, widely spaced plants, and do not require regular access to water as they obtain water from their food, dew and rain.

Threats

Loss and fragmentation of habitat is a major threat to the Plains-wanderer. Much of the lowland native grasslands in which they live have been cleared and used for growing crops or as pasture for stock.

Being ground-dwelling birds they are vulnerable to predation by cats, foxes and birds of prey. In drought years, when overgrazing of their habitat occurs, the population of Plains-wanderers may become more than halved.

The Plains-wanderer is thought to be an ancient bird, present in Australia for more than 60 million years. It may have been in Australia when it was a part of the Gondwanan supercontinent!

Conservation

Nation-wide surveys of the Plains-wanderers have been done and management actions, like reducing stock grazing in their habitat areas, are being developed.

You can help the Plains-wanderer by:

- being a responsible pet owner – desex your cats and dogs, keep them inside at night and don't take them into national parks
- protecting remnant areas of native bush in your area or on your land for native species like the Plains-wanderer
- being careful when bushwalking in spring – don't trample or disturb nests.

For further information

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Red-necked Stint

Calidris ruficollis

Map courtesy of Mapping Unit, Customer and Commerical Services.

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Red-necked Stints are migratory wading birds. When migrating, they travel by the East Asian-Australasian flyway and flocks of thousands of these birds travel together. Their breeding plumage gives the Red-necked Stints their name. After breeding they moult, and throughout the rest of the year their plumage provides good camouflage for their habitat in Australia, with a grey back and white underneath.

The smallest of Australia's migratory birds, the Red-necked Stint weighs just 30 grams and is small enough to fit inside a wine glass. Red-necked Stints are sandpipers; they have short straight bills, short legs and are quite plump in shape. Because of their short legs they can only walk in shallow water, and prefer to forage without getting their legs wet.

Diet

These birds are omnivorous – they eat seeds, worms, insects, small vertebrates, plants in salt marshes, molluscs, and crustaceans. Once they arrive in South Australia these birds start fattening themselves up for the long journey north, and a healthy bird can increase its weight by 50 per cent in the months it spends here. Unlike humans they can instantly convert this fat to energy. Their favourite food at the Coorong is midge (chironomid) larvae, and they find these on the surface of saturated mudflats.

Breeding

Despite their small size they still manage to make the annual journey north to breed, which is a distance of approximately 15,000 km one way. They breed in eastern Siberia and western Alaska and visit Australia only in summer.

Habitat

When in South Australia they choose mudflats within estuarine wetlands, sand flats and inland salt lakes as their habitats.

Threats

The destruction and degradation of their wetland habitats is the greatest threat to Red-necked Stints. This can be caused by coastal development, changed water regimes, drought and pollution. Flocks of migrating birds rely on a series of three to four stopovers so they can rest and find food on the journey from their breeding sites to their 'wintering' sites. If any one of these places becomes unsafe or degraded, it can be disastrous for them. These birds are also sometimes the victims of hunting.

In its lifetime (approximately 20 years) the Red-necked Stint flies further than the distance between the Earth and the Moon!

Conservation

Australia has signed the migratory bird agreements with China and Japan to protect birds crossing international boundaries, and more international agreements are being developed.

you can help the Red-necked Stint by:

- being waterwise at home and helping save our Coorong
- Not polluting – anything washed down a stormwater drain goes straight out to sea
- checking out the book (and link) *Rusty Loses His Loop* and understanding the Murray Darling System and how vital it is for creatures like the Red-necked Stint.

Photo © SATC, Craig Ingramz

Red-necked Stint

Photo by Daniel Rogerts

Red-necked Stint

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Red-tailed Black-Cockatoo (South Eastern)

Calyptorhynchus banksii graptogyne

Map courtesy of Mapping Unit, Customer and Commerical Services.

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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 luehmannii).*

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.

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.

For further information

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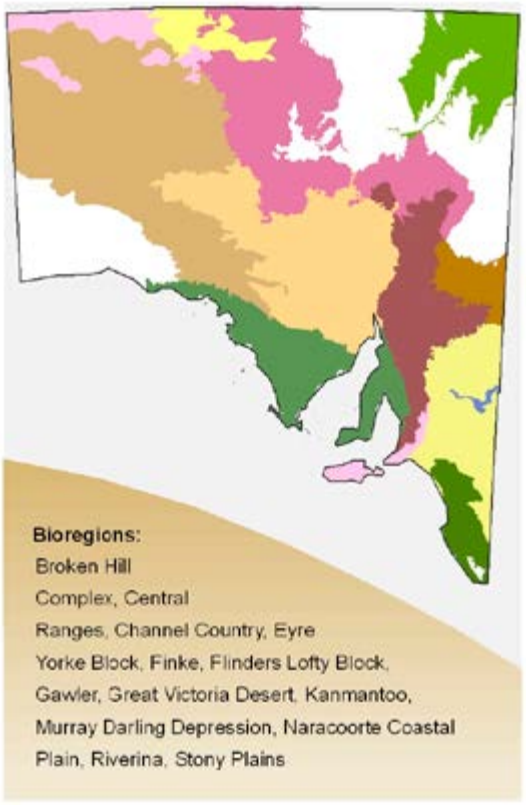
River Red Gum

Eucalyptus camaldulensis



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River Red Gums are large, single stemmed eucalypt trees. They can grow up to 45m tall but usually grow to 20–30m and they can live for 500–1000 years. There are two subspecies; a northern and a southern. The durability of River Red Gum wood and its natural resistance to termites meant it was used heavily by European settlers for railway sleepers, mine shafts and wharves. Today, they are the most commonly planted tree in arid and semi-arid areas of the world (mostly in timber plantations).

Like all eucalypts, River Red Gums have survival mechanisms that can help them through tough times. Seedlings can drop their leaves to save water, and grow new ones when water arrives. If damaged, they can grow a new shoot from the base of the stem.

Red Gum forests and wetlands provide valuable habitat for biodiversity. These trees are important breeding, nesting and feeding grounds for a range of bird species. Native mammals, such as echidnas and kangaroos, make their homes in the shelter of these trees. They also provide homes for rare and threatened species like Sugar Gliders (*Petaurus breviceps*) and Carpet Pythons (*Morelia spilota*).

Reproduction

A forest of River Red Gums can produce 250 million seeds per hectare per year. Ants, and other insects, take most of these, and the ones that are left need to be there at just the right time to germinate. If seeds fall too early, before the floods, they become submerged and die. Fall too late and they don't have enough time to grow before the dry heat of summer arrives.

Habitat

River Red Gums grow near wetlands, and particularly along river plains. Along low flood plains they are often the only tree species present, forming open forests. Their name originates from this habitat as well as the red colour of their timber.

Threats

Changed flood and flow patterns in the River Murray due to irrigation and storage lead to drought or permanent flooding, both of which can kill River Red Gums. Historical and current logging, grazing animals eating seedlings, and changed fire regimes are other threats. Feral pigs disturb large habitat areas by digging and wallowing.

Scarred for life! Aboriginal people used the bark of River Red Gums to make shelters, canoes and shields. They did all this without killing the tree, but the evidence can still be seen today.

Conservation

You can help the River Red Gums by:

- finding out more about the River Murray system and how important it is to life in Australia
- being careful with your water use at home. Check out the SA Water website
- getting involved with revegetation projects like the Million Trees Project.

For further information

Public enquiries

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Eastwood: (08) 8273 9100
Gawler: (08) 8523 7700
Lobethal: (08) 8389 5900
Willunga: (08) 8550 3400

Education enquiries

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Photo by Brian Walters River Red Gum

Photo by Brian Walters River Red Gum

FIS: 92288

Southern Bell Frog

Litoria raniformis

Map courtesy of Mapping Unit, Customer and Commerical Services.

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

Southern Bell Frogs are also called Golden Bell Frogs, Green and Golden Grass Frogs or Growling Grass Frogs because they make loud growling calls. Comparatively large, they grow up to 10cm long and have warty green skin with gold and bronze markings. They have webbed hind feet, but no webbing on their front legs.

They are most active in spring and summer and can be seen basking in the sun or in groups under reeds at the edge of wetlands.

Diet

Southern Bell Frogs feed at night on insect larvae, bugs, beetles and termites. They are opportunistic predators and hunt by being still and waiting for prey to come within their reach.

Breeding

During spring and summer, males call with a repeated 'crawark, crawaaark crok crok' to attract a mate while floating in open water or under vegetation. Females lay jelly-like masses of up to 4,000 eggs usually after a local rain or flooding. Tadpoles hatch two days later and hide in vegetation near the waters edge where it is shallower and warmer, then metamorphose into frogs in summer or autumn.

Habitat

Their habitat includes a variety of still to slow-flowing natural and artificial wetlands, including swamps, lakes, streams, riverine floodplains, farm dams, garden ponds, quarries and irrigation channels.

Threats

Southern Bell Frogs exist mostly in small and isolated populations. This makes it difficult for them to breed. Exotic fish prey on tadpoles and compete for habitat and food sources with this frog.

The drainage and salinisation of wetlands, changes to the flow of the River Murray and prolonged drought have greatly reduced their habitat areas. Disease, pollution, the removal of aquatic vegetation, and trampling by grazing stock are other threats.

Cannibals! Southern Bell Frogs have been known to eat other frogs, even small ones of their own species.

Conservation

The Frog Atlas Program (part of Zoos SA) is helping to improve knowledge of their distribution and abundance in SA. A regional recovery plan is taking action to help the recovery of the species in the River Murray corridor.

You can help the Southern Bell Frog by:

- keeping stock and pollution out of waterways, preserving and replanting native aquatic vegetation and stopping the spread of introduced fish, if you are a landowner
- not polluting our waterways – pick up your litter and remember to recycle
- being careful where you step if you are walking near a waterway!

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Southern Bent-wing Bat

Miniopterus schreibersii bassanii

Map courtesy of Mapping Unit, Customer and Commerical Services.

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One of four critically endangered mammals in Australia, Southern Bent-wing Bats (also known as the Large Bent-wing Bat) can be distinguished from other bats in SA by the long third finger that folds back, creating a 'bent wing' appearance when they fly. They are medium-sized bats with reddish-dark brown fur on their backs and lighter coloured bellies. Populations of Southern Bent-wing Bats have been steadily declining in the last 40 years.

Diet

These bats feed on insects such as moths and beetles and eat whilst in flight, catching insects in their tails and wings (like a baseball mitt!) or directly with their mouths. Like other bats they use echolocation to find their way around in the dark and hunt for insects.

Breeding

Baby Bent-wing Bats are called pups, and females give birth to one pup between October and January. To give birth, females migrate in late August to special maternity caves, which have the right structure and microclimate for nursing the young. There are only two nursery caves that these bats use, and the most popular of these, Bat Cave, is in South Australia. Pups are born naked but soon after grow their fur. They attempt their first flight at four to five weeks.

Habitat

Southern Bent-wing Bats have a highly restricted range across the south-east of South Australia and western Victoria. They hunt in a range of environments, from wetlands to vineyards and woodlands. They are cave dwelling animals and hibernate and rest during the winter months in caves in the south-east, as there are fewer insects around to eat.

Over 50 caves are known to be used for hibernation.

Threats

Drought and the drainage of wetlands are threatening their survival by providing less food and water. Disturbance during hibernation and the degradation of cave habitats are other threats, and possible indirect poisoning from insect spray (eating insects that have been poisoned).

Natural insect control! It is estimated the Southern Bent-wing Bat can consume about 25% of its body weight per meal! One bat may eat two or three meals per night; so a population of 1000 bats could consume several kilograms of insects per night.

Conservation

Bat Cave (their maternity cave) is protected within Naracoorte Caves National Park which has World Heritage status. A recovery plan has been developed for this bat species.

You can help the Southern Bent-wing Bat by:

- taking part in local efforts to preserve habitats for wildlife
- raising awareness of this species in your local community
- visiting the Naracoorte Visitor Information Centre to learn more!

For further information

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White-bellied Sea-Eagle

Haliaeetus leucogaster

Map courtesy of Mapping Unit, Customer and Commerical Services.

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

White-bellied Sea-Eagles are large birds of prey. They are graceful in flight and spend their time soaring over the surface of the sea, or perching on rocks or branches beside the water. They live for up to 30 years in the wild.

Diet

These birds hunt fish, tortoises, sea-snakes, waterfowl, reptiles, nestling birds, rabbits and also eat carrion. They are aggressive and skilled hunters both at sea and on the land. Their large talons and powerful curved beaks help them to grab and kill their prey. Thick scales on their legs protect them like armour. Excellent eyesight makes it easy for them to target their next meal. Occasionally, they harass other birds such as ospreys and terns until they drop their prey which the eagles then collect.

Breeding

These eagles mate for life and share the same hunting range. In the morning and evening they roost and sometimes sing together. When breeding begins, sometime from May to October, White-bellied Sea-Eagles put on great aerial displays. They soar and call, loop-the-loop, drop fish from a height and then dive to catch it in midair. Nests are built on cliffs or in trees, and sometimes on the ground on treeless islands. Both sexes help with the construction and repair of a nest. Nests are made of sticks, and are huge structures up to four metres deep and 2.5m wide. Nests are lined with stems and green leaves and females lay a clutch of two eggs. Eggs are incubated for around six weeks, mostly by the female. One egg is laid several days before the other, and it is usually only the chick with the head start that survives because the parents feed the noisiest, most active chick first. If the first egg is infertile, or the chick is weak and dies, the second chick has a better chance of survival.

Habitat

White-bellied Sea-Eagles are found throughout Australia along coasts and beside lowland rivers and lakes. They also occur in south-east Asia and India.

Threats

The loss of nesting sites due to development is a major threat to the White-bellied Sea-Eagles. Disturbance of nesting pairs by human activity can cause them to abandon their nests. Deterioration of inland water sources and over-fishing in the ocean makes it harder for them to find food. Competition for food and nesting sites with Wedge-tailed Eagles *(Aquila audax)* is a potential problem.

Big birds! White-bellied Sea-Eagles have a wingspan of up to 2.2 metres. Their home ranges can be up to 100 square kilometres.

Conservation

You can help the White-bellied Sea-Eagle by:

- always keeping your distance from eagles and their nests as they are easily disturbed by human activity
- protecting areas of native vegetation in your local area
- reporting anyone you see interfering with nests or disturbing sea eagles.

For further information

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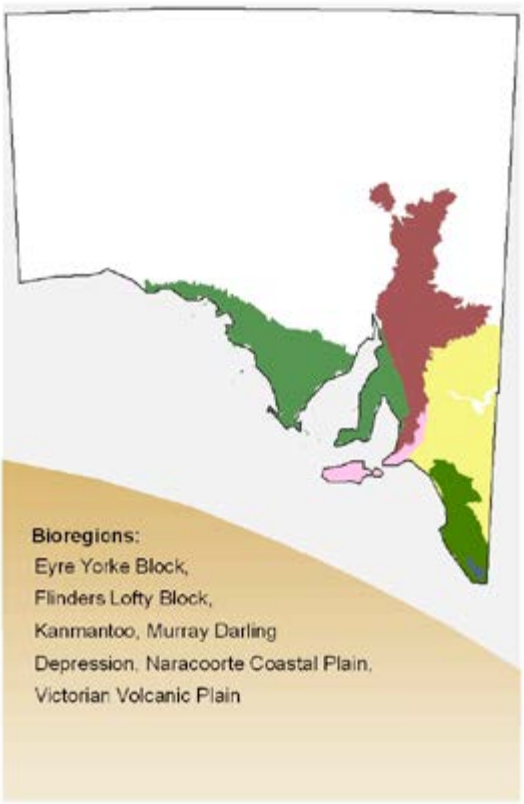
Yellow-tailed Black-Cockatoo

Calyptorhynchus funereus



Map courtesy of Mapping Unit, Customer and Commerical Services.

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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, Xanthorrhea* 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.

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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