

**WILD AUSTRALIA
ON THE DOORSTEP**

BY STEPHANIE JACKSON



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This edition compiled in 2016

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Cover photo: King parrot feeding on a tomato in the author's garden

Previous page: Plumed egret in flight over the botanic gardens in the Queensland city of Bundaberg.

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INTRODUCTION

Almost 90 per cent of Australians live in urban areas, and as modern lifestyles continue to evolve, many people spend an increasing proportion of their days living and working in environments where they're insulated from the realities and the beauty of the natural world.

Television documentaries bring images of the wondrous creatures of distant lands right into our living rooms, and we're mesmerized by the antics of Alaskan bears, enthralled by the hunting prowess of the great cats of Africa, and awestruck by the elegance of an eagle's chick as it steps courageously from its cliff-top nest and takes its first flight on an unseen breeze. These are glimpses of life that most people will never see at first hand, but amazing events are happening in Australia every day, and some of the most spectacular creatures on the planet are literally on the doorstep of everyone who calls this vast country home.

A wealth of scientific and botanical knowledge and a seemingly fearless approach to every aspect of the environment are demonstrated by TV presenters who clamber into the canopy of a forest, scale rugged mountains, and wade through swamps where terrifying creatures lurk below the surface. Similar skills and an ability to cope with the many challenges that nature presents are essential for anyone intending to engage in serious studies of wildlife in their natural habitats, but for those who simply want to see and admire the wild creatures of Australia, there's an alternative recipe for success. And the main ingredients are nothing more than patience and the ability to see beyond the big picture that the landscape presents and to focus on its less conspicuous details.

It's hard to miss the distinctive calls of kookaburras, to avoid magpies that, during their nesting season, swoop on unsuspecting cyclists and pedestrians, to ignore the twittering

of flocks of swallows that set up home under the eaves of urban buildings, or to disregard brush turkeys that, in their search for food and during the construction of their gigantic nesting mounds, redesign the landscape of urban gardens. But anyone who's prepared to open their eyes and peer beyond the cover of Mother Nature's album of delights will soon discover that other less familiar creatures are never far away from where they work, live, and play.

With 386 species of mammals, 828 species of birds, 917 species of reptiles, 227 species of amphibians, more than 55,000 identified species of insects, and 6,615 species of spiders, Australia is home to a greater diversity of wildlife than any other developed country, but this great continent has a less enviable claim to fame. It has the worst rate of mammal extinction in the world.

Since the summer's day in 1788 when European settlers first stepped onto Australia's shores, 18 of the continent's mammal species have become extinct, and when that's put into a more depressing perspective, the sad reality is that almost half of the mammals that have vanished from the face of the Earth in the past 200 years once graced the Australian landscape.

It's not merely mammals that have disappeared however, for some 24 Australian bird species and 78 species of frogs have also become extinct in relatively recent times, and the frightening truth is that most were driven to extinction in the last 40-50 years. And with 40 mammal species and many reptiles, birds, and frogs currently teetering on the edge of the abyss of extinction, the future of Australia's wildlife is far from secure.

Extinction is a slow and natural process that's part of evolution, but it's the actions of the human race that have been responsible for the rapid rate of species extinction in recent years. The clearing of native vegetation

for agriculture and for urban and industrial development has led to the demise of many wildlife communities, with some unique habitats having been completely destroyed, while others have been reduced to mere fragments of bushland that are unable to sustain viable populations of either birds or animals.

When domestic cats were introduced into Australia some 200 years ago, no one had a crystal ball to foretell the role that these carnivores would play in Australia's future, but the future has arrived, and it's a grim one. Today, feral cats pose one of the most serious threats to wildlife, with an estimated 18 million roaming across the country killing and maiming immense numbers of birds and animals every night. They are believed to have contributed to the extinction of several species of small mammals and ground-dwelling birds, and if their attacks on wildlife continue unabated, the prediction that some 100 native species will soon be knocking at the door of extinction is sure to come true.

Foxes, which were introduced in the early days of European settlement, also pose a significant threat to wildlife, as do the huge populations of feral rabbits, goats, buffaloes, pigs, donkeys, and camels that rampage across the landscape and damage the fragile ecosystems that are essential for the survival of many indigenous species. And cane toads, which were introduced into Queensland in 1935 to combat beetles that damaged valuable sugar cane crops, are unwelcome immigrants too, for these silent and stealthy terrorists, which have recently hopped into the wet tropics of the Northern Territory, have the potential to nudge many species towards oblivion.

Opposite page: An olive-backed sunbird sipping the nectar from flowers near Cairns in northern Queensland.

Native animals that eat these repulsive creatures often die from the poison that the toads exude from their skins, and with cane toads consuming a wide range of small animals and insects, their presence has a dramatic impact on the supply of food that's available for less aggressive species.

Invasive weeds are an additional threat to the survival of wildlife, with their vigorous growth allowing them to dominate and eventually displace native plants, and such a dramatic change in the vegetation can seal the fate of birds and animals that are unable to adapt to the changing landscape and that cannot use the alien flora for either food or shelter.

Drought is not a new phenomenon in Australia, but as such events become more frequent and more intense as a result of the changing global climate, the impact on the natural environment and on wildlife is increasingly evident. Drier vegetation and hotter summers have combined, with the unwelcome assistance of arsonists, to create bush fires of greater ferocity and greater frequency than in past decades, and while homes and human lives are lost, so too are the homes and lives of wildlife as bushland habitats are destroyed and creatures large and small that are unable to flee to safety inevitably perish in the inferno.

Some wild creatures have been unable to cope with a changing world, but others have adapted well to new environments and have taken the transformation of the landscape in their stride. Possums now doze in the dark corners of sheds and farm buildings; flocks of seagulls and ibis feast at rubbish tips; galahs and corellas dine on ripening crops and on grain spilt beside silos at railway yards; rainbow lorikeets and bats roost in the trees of urban parklands and scoff the sweet fruits of orchards; reptiles sun themselves in quiet gardens; skinks slither into the shaded crevices of brick walls; geckos and spiders secrete themselves in dark corners of a domestic environment; and frogs make themselves at home in

garden pools.

The threats to Australia's wildlife have not abated however, and although the message that prompt action needs to be taken to protect the nation's biodiversity hasn't always fallen on deaf ears, many people remain blissfully unaware of the fact that the long-term survival of the human race is inexorably linked to the health of the natural environment and to the well-being of all the creatures with which we coexist on planet Earth.

Every wild creature, however insignificant it might seem, has a specific role to play in the environment, primarily as food for other species, as a predator that controls the populations of its prey, or in aiding or regulating the growth of plants. The loss of any species deprives future generations of the opportunity to see one of Australia's unique creatures, but more importantly it fractures the chain of life that binds the environment and its multitude of living beings together into a complex and healthy ecosystem.

If, as a result of some cataclysmic event, *Homo sapiens* became yet another species wiped from the pages of the earth's natural history, Mother Nature would offer only a momentary gasp as the human race passed into oblivion, but she would eventually heal the wounds that mankind has wrought on the landscape, and the environment and its communities of wild creatures would thrive in our absence, for they owe no allegiance to the human species that has spread across the earth in plague proportions.

If our unique species is to survive and prosper, we must accept the undeniable fact that we can only do so by working hand in hand with nature, for we will always be reliant on the staggering diversity of flora and fauna that are essential for the maintenance of the healthy and well-balanced state of the natural environment that ensures the survival of the crops that provide us with food and with many of the materials for the comforts and necessities of life.

The task of caring for the environment that sustains Australia's great diversity of wildlife cannot be left entirely in the hands of governments and organisations dedicated to the cause. It is the responsibility of everyone, and although it's often said that one person's actions can have no significant impact on a situation of national or global importance, that's not always correct. Like a single raindrop that unites with countless others to convert a tranquil stream to a raging river, even the smallest of actions can have an impact on the world around us, and every Australian, and every visitor to this geographically diverse continent can play a valuable role in protecting the natural environment and ensuring the survival of the amazing creatures that are right on the doorstep of each and every one of us.

This book, with its images of more than 200 species of wildlife, including birds, mammals, reptiles, amphibians, insects, and spiders, is not intended to be a field guide to the wildlife of Australia or an educational textbook that provides every intimate detail of the lifecycle and habitat of each creature illustrated. Its primary aim is to encourage readers to open their eyes to the wonders of nature, and to the astounding diversity of wildlife that is never far away.



Opposite page: This old male wallaroo, with his thick fur covered with spiny weed seeds, was on the doorstep of a riverbank camping area near the New South Wales city of Bathurst.

All images are of wildlife in their natural habitat, not in captivity.





WILDLIFE HABITATS

NATIONAL PARKS

Many of Australia's most important wildlife habitats lie within national parks and other protected areas that cover around 910,000 square kilometres, almost 12 per cent, of the Australian land mass. Approximately 600 national parks sprawl across mountain ranges, vast swathes of the outback, and immense deserts. They embrace long segments of the coastline, they incorporate wetlands of international significance together with rainforests, rivers, and lakes, and they protect sites that are of historical and cultural importance to both the aboriginal and non-indigenous populations of the country.

With their astounding diversity of landscapes and vegetation, Australia's national parks are home to an equally amazing diversity of wildlife, including some of the rarest creatures on the continent. The good news is that many parks are only a short distance from the nation's most populous cities, and that means that for 66 per cent of the population, the 16 million people who currently live in a capital city, the residents of some unquestionably wild neighbourhoods are almost on the doorstep.

The immense Lane Cove National Park, where creeks and rivers mutter seductively through dense eucalypt forests, and where nocturnal tawny frogmouths and boobook owls doze in the shadows, is merely 16kms from the throbbing heart of Sydney.

In the Sydney Harbour National Park, part of which was set aside for the enjoyment of residents in 1879, wildlife thrives in an environment that encompasses woodlands, rugged cliffs, and secluded beaches. And only a short distance away from the chaotic centre of the city lie the forests and coastal landscapes of the Royal National Park, which is home to more than 300 species of birds.

It's the Dandenong Ranges National

Park, which is less than 50kms from the hurly burly of Melbourne, that lures that city's residents to the welcoming embrace of the great outdoors. In this 3,500 hectare park, part of which was proclaimed as a protected area in 1882, forests dominated by the world's tallest tree species, the mighty mountain ash, are severed by gullies congested with tree ferns, wombats waddle through lush vegetation, superb lyrebirds scurry nervously from one shaded retreat to another, and goannas hunt for food among the confusion of debris on the forest floor.

For the residents of the Australian Capital Territory, the site of the national parliament, an escape from urban chaos is easy too, for the territory's only national park is merely 30kms away from the cut and thrust of political life. In the 100,000 hectare Namadgi National Park, which covers almost half of the ACT and that's home to 35 species of mammals, high granite cliffs rise among snow gum woodlands, and alpine meadows crowned with mountain peaks rise to almost 2,000 metres.

Further north, the spectacular D'Aguilar National Park is only a 10 minute drive from the centre of the Queensland capital of Brisbane, and that places it right on the doorstep of the 2.3 million people who call this sub-tropical city their home. With hills cloaked with both eucalypt forests and rainforests that toss their cool and welcoming shade over murmuring streams inhabited by platypuses, this 36,000 hectare park is an inviting retreat where numerous species of birds and more than 200 species of animals thrive in an environment congested with some 800 species of native plants.

In Western Australia, John Forrest National Park, one of the country's oldest parks, beckons the citizens of Perth to a wild refuge that's only 24kms from the CBD, and here, where

waterfalls splash among the dense vegetation of tangled forests, it's not hard to spot some of the park's 10 species of mammals, 91 species of birds, and 23 species of reptiles.

The Mount Lofty Ranges rise from the plains on which the South Australian city of Adelaide sits, and here, 13km from the hub of this attractive metropolis, lies the quiet world of Belair National Park. Birds flutter discreetly among the woodland foliage, but it's southern brown bandicoots, which rummage among fallen leaves beneath the canopy of shading trees, that are the most conspicuous wild creatures here.

Beyond the often turbulent waters of Bass Strait, Tasmania's Mount Field National Park, where wildlife thrives among a landscape dominated by spectacular waterfalls, rainforests, and alpine moorlands, lies within easy reach of the residents of Hobart. It's a tiny fragment of the Tasmanian Wilderness World Heritage Area, which covers more than 600,000 hectares, and with Southwest National Park, the hub of the wilderness area, being little more than a two hour drive from the city, anyone who's eager to discover what makes this protected environment so important can camp in the forest or enjoy the comforts of nearby accommodation with the guarantee that the natural wonders of the wilderness will be on the doorstep both day and night.

The city of Darwin, the capital of the Northern Territory, is a long way from Tasmania, and it's a long way from anywhere elsewhere, but with the nearest major town being 300kms to the south, territorians are not intimidated

Opposite page: The vast and spectacular Grampians National Park is on the doorstep of the tiny town that lies in a secluded valley and that can be seen from one of the park's high lookouts.

by the tyranny of distance. In the top end of Australia, where every journey beyond the suburbs is a long one, the 250km drive to reach

Kakadu National Park means that it's certainly not on Darwin's doorstep, but it's definitely in the backyard of the 140,000 people who live in this remote tropical city. Kakadu, which covers an area of 20,000 square kilometres, is Australia's largest national park. This stunning wilderness area, much of which is aboriginal land, has a great diversity of landscapes, from coastal areas with secluded bays, sandy beaches, and mangrove swamps, to vast plains and tropical wetlands hemmed with high rocky escarpments from which waterfalls cascade into picturesque rocky pools.

There's an equally diverse range of wildlife here too, with some 280 bird species, around a third of all the species found in Australia, calling the park home at some time during the year. In the summer wet season almost half of the park is inundated with water, but that's not a problem for the estimated 10,000 crocodiles, three million magpie geese, and immense flocks of other birds that thrive here.

The town of Jabiru is encircled by the park, and that guarantees that visitors who appreciate all the comforts of home can settle into one of the luxury resorts in this isolated wilderness and, like those who opt for a more down-to-earth camping experience in the park itself, can be assured that wildlife will never be far away.

There are no great cities in the Australia outback, but with many national parks located in the country's often arid interior, wildlife is routinely within cooee of the homes of those who live and work on remote and isolated sheep or cattle stations or in remote towns such as Tibooburra.

Tibooburra is the unofficial capital of 'the corner country', an area where the states of New South Wales, South Australia, and Queensland meet, and although the closest major town is more than 330kms away, this sleepy

settlement of around 260 people has some stunning attractions just up the road.

Sturt National Park, which sprawls across 340,000 hectares of this often arid region, is merely six kilometres north of the town, and that ensures that wild Australia is right on the doorstep not only of local residents but also of the many thousands of tourists and grey nomads who make a pilgrimage to the outback every year.

It's not merely creatures of the furry and feathered kind that are on display here however, for although the park is inhabited by vast numbers of kangaroos, large flocks of emus, and many species of birds that take advantage of the man-made oases provided by stock water troughs and dams, it's also the haunt of reptiles, from tiny skinks to large and venomous snakes.

For much of the year the outback shows only its desolate face, but when rains arrive the landscape is revitalised as Mother Nature daubs the red canvas of the soil with a profusion of wildflowers. When waterholes and ephemeral lakes are filled to the brim, vast populations of waterbirds move in to stake their claim to prime outback habitats. And the vast blue waters of Lake Pinaroo, a Ramsar declared wetland within Sturt National Park, become a bustling neighbourhood where threatened species such as freckled ducks live side by side with many other birds, including blue-billed ducks, majestic brolgas, and flocks of emerald green budgerigars that are drawn to this welcoming haven.

With national parks located in the outback regions of every mainland state, travellers with a quiet adventure in mind can set up their temporary home in a humble tent or enjoy the comforts of a motorhome or caravan, knowing that, when they step outside each morning, wildlife is almost certain to be on the doorstep.

Waterbirds wade in the extensive wetlands of Victoria's Hattah Kulkyne National Park. Rock wallabies bound through the rugged hills of South

Australia's Flinders Ranges National Park. Kangaroos dominate the land and wedge-tailed eagles rule the skies at Mungo National Park in New South Wales, and bustards stroll across the plains as pelicans drift idly on permanent waterholes in Queensland's vast Diamantina National Park. With these spectacular destinations and many more scattered across the country, Australians, and the 66 per cent of international visitors who spend some time at one or more of Australia's national parks, will discover that the wild side of this great country is always within close proximity



Opposite page: After the first hint of rain, Sturt National Park, near the New South Wales outback town of Tibooburra, is miraculously transformed from a barren desert into a wild and unruly garden. The swathes of gaudy wildflowers that carpet the landscape attract insects, and in their wake come birds that not only feed on the nectar that Mother Nature has generously provided, but also on the insects that are part of the amazing diversity of outback wildlife.





COASTAL REGIONS

Australians have had a love affair with the coast since the first European settlers set foot on this ancient land in 1788. Today, with the capital cities of every Australian state and territory, with the exception of Canberra, being within 50kms of the ocean, the coast is part of the nation's vast outdoor playground. It's also the favoured habitat of some two million birds, of approximately 50 diverse species, that migrate from the cooler regions of the northern hemisphere to take advantage of the warmer climate and to raise their families.

Despite the fact that Australia boasts a permanent population of some 1.1 million shorebirds of approximately 26 species, there's ample room for the immense flocks of migratory birds however, for the coastline that hems Australia and its numerous islands, many of which are the favoured breeding sites of shorebirds, covers a staggering 59,700kms. And although 85 per cent of Australians, some 19.5 million people, live within 50kms of the coast, it's still possible to find pristine and deserted beaches that are devoid of any hint of the existence of the human race.

Bustling cities, quiet towns, and villages that appear almost comatose are clustered along the coastal fringe where ocean breezes bring a touch of relief on scorching summer days, but the natural environment and wildlife have both paid a hefty price for mankind's passion for coastal living. Homes with an ocean view, tourist resorts offering direct access to beaches, marinas crammed with the symbols of an affluent lifestyle, and ports servicing global industries have replaced many coastal forests, ancient dunes, and tidal mangrove swamps. And sadly the destruction of sand dunes, the draining of wetlands, the removal of mangrove forests, and the clearing of coastal vegetation have all been shadowed by the destruction and fragmentation of wildlife habitats that are vital for the survival of a great

diversity of species.

Insects, reptiles, and birds thrive among the vegetation of coastal dunes. Other species inhabit coastal wetlands, forests, and heaths, but it is mangroves, which rise from the nutrient-rich mud of many river estuaries and that shade the fringes of some sections of the continent, that are home to the most diverse and vibrant communities of coastal wildlife. Their maze of supportive roots provides a sanctuary that is utilised by some 75 per cent of all marine animals at some stage of their lifecycle, and it's here that young fish, crustaceans, and molluscs seek shelter from predators, and thrive and grow in calm and shallow waters. And in the mangroves' branches, birds that require tidal roosts relax in the shade, content in the knowledge that the food that the ocean generously provides is right at their feet.

Despite the continuing loss of wildlife habitats, it's never hard to discover birds and animals on Australia's rocky coastal headlands and cliffs, among its verdant fringing forests, on its scattered islands where many species of birds have established vast breeding colonies, and on the more than 10,000 beaches that divide the land from the sea. Oystercatchers dabble among rocky pools; pelicans clamour for scraps tossed by anglers; battalions of blue soldier crabs march across the wet sand; hermit crabs parade in their newly acquired shell homes; turtles come ashore to lay their eggs in the warm tropical sands; and majestic brahminy kites snatch their unsuspecting prey from azure waters.

Anyone who's prepared to peer into the ocean will discover a staggering diversity of wildlife here too, and the Great Barrier Reef, a World Heritage listed area off the Queensland coast, is as good as it gets, for here, dugongs and marine turtles, dolphins and whales, and more than 1,500 species of fish inhabit the world's largest coral reef ecosystem that's right on Australia's

doorstep.

Social progress, commercial development, and employment opportunities are often cited as justification for the destruction of coastal environments and their wildlife habitats, but Mother Nature refuses to sit idly by as mankind's heavy hand takes its toll on the landscape. She enlists her allies, the wind and the sea, that send waves, wiped up by storms, rushing in from the ocean to rip at coastal land that, with its cloak of vegetation long gone, is left naked and defenceless. Mighty trees topple into the sea that, in its wildest moods, threatens to sweep away waterfront buildings constructed on fragile sand dunes, and raging waters roar into river estuaries, battering the coast that was once hemmed with forests and mangrove trees.

Human activities have left Mother Nature with many wounds to heal, but despite the detrimental impact that modern civilisation has had on the coastal environment, many resilient creatures continue to thrive in the varied habitats that can still be found on the doorstep of every coastal settlement.



Opposite page: Forests that cloak the sand dunes and the rocky headland at Grassy Head in New South Wales provide an inviting habitat for many species of birds and animals. They provide protection for the Pacific Ocean's blustering winds and offer a diversity of food sources for creatures both large and small.



RIVERS, LAKES, AND WETLANDS

Australia is a very dry continent, but despite that fact, it has substantial rivers, lakes, and wetlands, all of which support diverse communities of wildlife.

The country's most important waterway is the Murray River that, together with its main tributary, the Darling River and minor streams that feed this iconic waterway, forms the country's longest river system that mutters, and occasionally roars through the outback, through agricultural regions, and through forests congested with wildlife as it makes its contorted 3,672km journey from south-western Queensland to its wide coastal estuary in South Australia.

Sprawling cities, bustling towns, and sleepy villages lie on the banks of this and other river systems, and with parklands, native woodlands, and residential areas lining many of these picturesque waterways, wildlife is never far away from the doorstep of urban residents, for where there's permanent water, Mother Nature generously provides everything else that wild creatures need to sustain their lives.

Wrens and finches twitter and insects flutter among low reeds and grasses that hem rivers, lakes, and wetlands and provide the smallest of wild creatures with safe havens from predators, from inclement weather, and from the scorching rays of the summer sun. A confusion of riverbank shrubs with dense foliage offers shelter and nesting sites for larger birds, including honeyeaters that feast on the nectar produced by flowering plants that dabble their roots in the water. Parrots, owls, and possums raise their families in hollows in the gnarled trunks of the eucalypt giants of riverine forests. Butterflies and dragonflies drift past on subtle breezes, and at the water's edge, wading birds probe the dark mud for their prey, frogs hide among damp vegetation, and lizards and turtles demonstrate that life was definitely meant to be easy as they lazily soak up

the day's warmth on sunlit logs.

Humans, over the brief period of European settlement of this immense island continent, have changed the course of many rivers, stemmed their flows with weirs and dams that have created vast lakes where none, without man's intervention, would ever have existed, sucked them dry for the irrigation of crops, and polluted them with chemicals and with agricultural and industrial runoff. And some species of wildlife have paid a heavy price for the deteriorating quality of the water and the dramatic changes that humans have imposed on the landscape.

With river flows reduced or diverted, many of the country's major rivers, minor streams, lakes, and wetlands have been deprived of water. Add the impact of droughts, which have increased in frequency and intensity in recent decades, and the clearing of wetland vegetation for agricultural and urban development to the mix and it's easy to comprehend why some populations of wildlife have struggled to survive or been forced to find new habitats.

Many man-made lakes, including those that lie in the valleys of the Snowy Mountains of New South Wales, in the forested ranges of the Tasmanian wilderness, and in Western Australia fought their way into existence in the face of vigorous public opposition. And although their creation came at great cost to the environment, with valleys permanently inundated and wildlife habitats obliterated, the passing years have brought new life and healed the scars of progress that once blighted the landscape.

The damming of the Ord River in the 1970s had a dramatic impact on the semi-arid Kimberley region of north-western Australia, for the project gave birth to Lake Argyle, the largest man-made lake in the southern hemisphere. With its calm waters covering almost 1,000 square kilometres, it has gradually evolved to become a Ramsar protected wetland that's teeming with wildlife,

including 270 species of birds and an estimated 35,000 freshwater crocodiles.

Such large bodies of water, extensive wetlands, and mighty rivers are all of great importance for many communities of wildlife, but so too are the less imposing sources of water that are scattered across the continent. Streams that are often little more than a series of muddy waterholes, the shallow ephemeral salt lakes of arid inland regions, which only occasionally fill with water, and secluded reed-choked swamps all provide vital natural habitats for countless species of wildlife.

In Australia, water frequently plays a role in recreational activities, with fishing and boating, together with camping and picnicking beside a picturesque waterway or lake, all being traditional components of the great Australian way of life. And with water, even in this dry continent, frequently on the doorstep of urban areas and holiday destinations, a close encounter with some of the many species of wildlife that call the aquatic world their home is almost guaranteed.



Opposite page: The forested hills, gigantic sandstone boulders, and vast wetlands of Dunn's Swamp, in the Wollemi National Park in New South Wales, are home to countless species of birds and animals. And with camping areas located in the heart of this spectacular wilderness, some of Australia's most amazing creatures are literally on the doorstep of visitors both day and night.



OUTBACK AND DESERT REGIONS

The outback is an immense area that encompasses the remote and sparsely inhabited inland regions of Australia. It's often viewed as an environment that's dominated by deserts, that's barren, arid, and inhospitable, and that's home only to reptiles and a few other hardy species of wildlife, but that's far from the truth, for a great diversity of wildlife thrives here - from majestic red kangaroos, emus, and immense flocks of birds to diminutive creatures such as the reclusive bilby that is teetering on the brink of extinction.

Australia is the driest continent in the world, after Antarctica, with some 70 per cent of the country classified as arid or semi-arid land. Vast deserts exist in all mainland states, with the 10 largest desert areas covering approximately 18 per cent of the continent with a desolate landscape where summer temperatures routinely reach 40°C and the mercury occasionally soars to a scorching 50°C. But even in the Great Victoria Desert, the largest of the continent's deserts that sprawls across Western Australia and South Australia and covers a staggering 424,400 square kilometres, there's life to be found.

The creatures of the outback are well adapted for survival in this harsh environment, and so too are many species of plants, for there's more to the outback than swathes of sand and barren stony plains that stretch to every distant horizon.

Triodia grasses, commonly known as spinifex or porcupine grass, are the dominate species of vegetation in many inland areas, and large clumps of this viciously spiny plant offer an inviting habitat for small mammals, reptiles, and ground dwelling birds that require not only shelter from the summer's heat and the intensely cold nights of winter, but also protection from predators. Carpets of saltbush provide wildlife with food and a place to call home. Mitchell grass, which cloaks vast inland plains, supports large mobs of grazing kangaroos that utilise

woodlands dominated by acacia and eucalyptus trees as shady retreats. And the mayhem of tangled vegetation that lines the banks of isolated waterholes and meandering rivers and streams provides food and shelter for a menagerie of small creatures that call the Australian outback home.

Sadly, the outback includes many far from pristine environments, for even here, in some of the continent's most remote locations, the delicate balance of nature has been dramatically altered by human activities. Permanent supplies of water in stock troughs and dams have allowed vast mobs of kangaroos and huge flocks of emus and other birds to thrive in areas where their populations would once have been reduced as the weakest of their populations succumbed to thirst during periods of intense drought.

The increased availability of water has also benefited feral animals, which have had a significant and detrimental impact on the fragile ecosystems of the outback. Rabbits devour vegetation that, in pre-European times, would have provided sustenance for native animals. Feral cats and foxes are implicated in the demise of many communities of small birds and animals, and feral camels, with their population estimated to be in excess of one million, roam across central Australia where they foul waterholes that are utilised by native wildlife, and feed on more than 80 per cent of all plant species.

During times of drought the outback grimaces with the face of despair and death, but it's also a time of plenty when birds of prey and other carnivores, such as dingoes, pick the landscape and its sun-bleached corpses clean. But when rains eventually fall, and when water fills every dry river bed and lake and spills out over vast floodplains, Mother Nature calls for wildlife to return, and new life blossoms with a profusion of wildflowers that attract insects and nectar-feeding birds. And every now and then, when the great expanse of

glinting white salt that is Lake Eyre is transformed into a spectacular inland sea that covers some 9,690 square kilometres, some six to eight million water birds, of around 60 species, make the pilgrimage to the South Australian outback to gorge themselves on an abundance of food, to breed, and to raise their young.

For the residents of the often isolated towns of the outback, wildlife is never far away, in fact, in some small settlements it's not uncommon for kangaroos to graze on urban lawns, for emus to wander along the main street, and for koalas to doze in eucalyptus trees that toss their welcome shade over dusty homes. And travellers who are in the right place at the right time can enjoy the enviable experience of having an abundance of wild creatures on the doorstep as they soak up the wonders of the outback from a campsite beside a desert waterhole, among shady woodlands, beside a tranquil stream, or on the shores of a glittering lake or of the spectacular inland sea that is Lake Eyre.



Opposite page: During a severe drought, death had visited this outback region of central Australia, and a kangaroo had succumbed to the harsh environment, but even during such dry times many species of wildlife thrive here.



ALPINE REGIONS

When it comes to alpine regions Australia is not in the same league as continents where great mountain ranges spear into the skies, for the country's highest peak, Mount Kosciuszko, which rises to a height of merely 2,228 metres, is a midget in comparison to the world's greatest mountain, the 8,848 metre Himalayan giant of Mount Everest.

The continent's only truly alpine region is in the Australian Alps, a mountain range that covers almost 233,000 hectares and that straddles eastern Victoria, south-eastern New South Wales, and the Australian Capital Territory. It's part of the Great Dividing Range, the 3,000km long jagged spine that divides the eastern coast of Australia from the lowlands of the interior, and consists of the Snowy Mountains, the Brindabella Range, and the more southerly Victorian Alps that are often referred to as 'the high country.'

Much of this alpine region lies within the Kosciuszko National Park in New South Wales and Victoria's Alpine National Park, and it's the protection that this status has offered, in addition to the region's harsh climate and rugged terrain, that have ensured that much of the landscape and its amazing diversity of flora and fauna has remained untouched by the punishing hand of human activities.

Although there are several towns in the valleys below the foothills of the Australian Alps, there are few permanent settlements in the highest regions, other than ski resorts and the New South Wales town of Cabramurra, which is the highest permanently inhabited town in the country. With minimal development, the biodiversity of the alpine region remains in relatively good health, and more than 40 species of mammals, 200 species of birds, 30 species of reptiles, and 15 species of amphibians continue their lives here as they have done for millennia.

At the first hint of winter's approach, many birds and animals retreat to lower

areas of the ranges and others migrate to warmer regions, but some small animals know exactly how to cope when the icy hand of winter strikes their world.

Swainson's antechinus, a tiny marsupial, survives the harsh climatic conditions by living under the snow, while other diminutive creatures, such as the mountain pygmy possum, the only mammal species that lives nowhere other than in the alpine zone, settle down to hibernate throughout the winter months.

With the climate of the highest areas of the alpine region being too cold for all but a few hardy avian residents, such as flame robins, nankeen kestrels, and grey currawongs, the majority of birds opt for the easy life and inhabit the grasslands and forests of lower areas where the climate is more amenable and where food is more abundant. And the great diversity of unique and beautiful species that are at home here include yellow-faced honeyeaters, gang-gang cockatoos, superb lyrebirds, and emus.

Reptiles, which are among the most resilient and versatile members of the alpine region's wildlife community, can be found throughout the mountainous terrain, even on the highest peaks. But when winter hints that its return is imminent, some migrate to lower and warmer regions, while others seek out a secluded haven that will provide them with adequate protection from the worst of the winter's icy weather. They slither into deep and narrow rocky crevices, and venture outside only occasionally to catch a snack of the insects that, as their major source of food, allow reptiles to survive in a hostile environment. And when sunshine glitters on the winter wonderland, cold-blooded reptiles laze on rocks or weathered logs and soak up the welcome warmth of the sun's golden rays.

Reptiles play another important role in the alpine environment, for they are a major component of the diet of other carnivorous creatures, of

birds, marsupials, and larger reptiles, for in wild Australia there are hunters everywhere.

When spring inevitably returns and temperatures rise, wildflowers blossom and the wild creatures of the Australian Alps return, and although their varied habitats might be right on the doorstep of holiday accommodation and popular camping areas, many of the wild residents of the mountains are far from easy to see.

Wombats quietly emerge from their cavernous burrows and possums scamper among the branches of trees only under the cover of darkness. Koalas sit motionlessly in lofty eucalyptus trees, their thick silvery grey fur ensuring that they're well camouflaged on the silvery grey trunks of the trees that provide them with the leaves that are their only food. The grey-headed flying fox, a large fruit-eating bat, and several species of insect-eating bats are well hidden too as they spend their days hanging around and dozing in the trees of the region's forests. But kangaroos and wallabies are more conspicuous as they bound across grasslands and rush through woodland vegetation before disappearing from sight in little more than the blink of an eye.



Opposite page: When winter slaps the alpine landscapes of the Snowy Mountains region of New South Wales with her icy hand, many species of wildlife retreat to a warmer climate, but some highly adapted creatures know exactly what to do to survive the harsh climatic conditions.



URBAN PARKS

As far back as 1810 Australian town planners recognised the need to establish public parks in urban areas. It was then that Lachlan Macquarie, the autocratic governor of the fledgling colony, dedicated an area for “the recreation and amusement of the inhabitants of the town”, and Sydney’s first public park was born. With almost 600 trees, including old and majestic fig trees, eucalypts, and lofty palms that cast their shadows over the 16 hectare landscape, Hyde Park has evolved into a welcoming retreat for more than merely the city’s human population.

Nocturnal brush-tailed possums, rowdy colonies of fruit bats, owls, and ibis have all set up home in the park, which is within sight of luxurious hotels, major department stores, and streets bustling with traffic. It provides a hint of wild Australia in the heart of urban chaos, and there are similar colonies of wildlife in many of the public parks that have been incorporated into the urban landscape in almost every city and town in Australia.

The survival of wildlife was probably of little, if any interest to early town planners, who regarded public parks and gardens as nothing more than recreational precincts for the burgeoning human populations of urban areas. Parks were, and continue to be, environments that offer people a chance to escape from the noise, the congestion, and the pollution of cities and towns. They are idyllic locations for children to play, for lovers to meet in secret assignations, and for families to stroll or enjoy a picnic in a healthy and tranquil environment.

If a park’s designers have selected the most appropriate species of trees and other plants and have incorporated a permanent source of water into the landscape, birds, with the lure of food that the plants provide, will be happy to take up residence or to drop in for a snack on their way to somewhere else. And in sprawling parklands and botanic gardens, where there are large stands

of trees and extensive areas of water, aquatic birds will make themselves at home too, and may even feel so content in the new habitat they’ve discovered that they’ll settle down to build their nests and raise their families right on the doorstep of suburbia.

A close encounter with some of the most beautiful creatures of wild Australia can be on the agenda of every visitor to an urban park or garden where nature routinely puts on an entertaining display with a diverse cast of performers. Parrots flutter and squawk as they feed on the seasonal flowers and seeds of trees and shrubs. Honeyeaters, with acrobatic antics, silently sip at the nectar of delicate blooms. Wrens twitter among grasses and dense vegetation, flycatchers dance as they snatch a feast of insects from the air, and waterbirds parade across verdant lawns and drift lazily on the calm waters of ornamental lakes. But birds are not the only entertainers that grace the stage of urban parks.

Insects, which proliferate when flowers bloom, crawl, hop, and slither among petals and foliage, and provide food for lizards and other reptiles that sun themselves on pathways and on the boulders of rockeries. And crickets and cicadas play their repetitive melodies as families of possums, sugar gliders, and other nocturnal creatures doze in their secluded arboreal habitats.

No matter how well designed they may be, urban parklands rarely replicate every detail of the varied natural habitats in which birds and animals thrive in the wild, but many creatures enthusiastically take advantage of urban development and readily adapt to life in a man-made environment.

With their fear of humans diminished by years of living in close proximity to urban residents, they eagerly accept any food that’s offered, and when they plead, with staring eyes, for a free handout, it may be hard to resist their supplications.

Unfortunately, human generosity

often comes with adverse consequences for wildlife. A readily available supply of food can encourage them to develop an increasing dependence on the food provided by their well-intentioned benefactors, and can encourage them to breed in far greater numbers than the environment that they have adopted as their habitat can support. This, in turn, can lead to conflicts among the birds and animals themselves as their man-made habitats become excessively congested. And with high levels of noise, with pollution resulting from huge numbers of birds defecating on cars and buildings in the vicinity of an urban park, and with excessive populations of wildlife spilling out to feed in nearby home gardens and agricultural areas, the unbalanced state of nature can guarantee that some people are far from happy when wildlife arrives on their doorstep.



Opposite page: Urban parklands, particularly where there are substantial water features, such as in the Japanese gardens in the Queensland city of Toowoomba, attract large numbers of birds and other wild creatures.



HOME GARDENS

Every home garden can become a habitat for wildlife, but if it's a bland environment with little more than a carpet of manicured lawn it will attract few creatures other than insects that are blown in on the wind, and a magpie that might be the early bird that gets the worm as it passes by on its way from one more alluring garden to another. But don't despair, for it's easy, even in the smallest of outdoor spaces, to create a unique ecosystem that birds and other wild creatures will find irresistible.

There are many ways to attract wildlife to a garden, and although the simple option of providing artificial food, such as bowls of seed and platters of bread and honey, will bring results almost overnight, such practices can have detrimental effects on the long-term health of wildlife and lead to a dependence on a welfare system, which may result in problems when a free handout is no longer available to hungry birds and animals.

A balanced garden ecosystem with natural sources of food, with permanent water, and with a variety of vegetation will encourage wildlife to drop by occasionally or to set up home in the garden on a permanent basis. And the creation of such an environment begins with the establishment of plants that will attract insects, many of which feed on the nectar of flowers.

Insects are a major source of food for many species of birds, frogs, reptiles, and spiders, and a continual supply of food is essential to maintain a healthy population of insects. They'll enthusiastically feed on the nectar produced by the flowers of a wide range of herbs, including lavender, basil, fennel, dill, and borage, and by the gaudy flowers of many species of annual plants such as sunflowers, alyssum, marigolds, and zinnias. And in addition to being a source of food for other creatures that visit the garden, they'll also pollinate the flowers among which they silently flutter.

With a wide range of flowering trees

and shrubs, such as Australian native grevilleas and callistemons that will produce flowers with copious amounts of nectar, melaleucas that will also provide the bark that many birds use in the construction of their nests, and other plants with dense foliage that will offer small birds shelter and a safe haven from predators, the garden will eventually be buzzing with activity. And when a wide selection of other plants, including grasses and acacias that produce an abundance of seeds, lilly pillies that provide succulent berries, and taller species that offer shade and roosting areas for birds are established, wildlife will inevitably drop by for a feast.

Among the first birds to arrive will be honeyeaters that will not only appreciate the garden's flowers, but that will also feed on the insects that have been attracted to the welcoming environment. Spiders will inevitably move into the garden too, and although they're either loved or hated, these amazing creatures play a vital role as fearless warriors in the ongoing battle against insect pests. Many of the species on which spiders enthusiastically dine, such as grasshoppers and sap sucking beetles, should be viewed as an integral part of the wild community of a balanced ecosystem too, rather than the enemy, for they provide nutrient-rich food for many species of birds, reptiles, and frogs.

If there's no water available, birds will be little more than itinerant visitors to the garden, but with a water feature, which can range from a simple and inexpensive bird bath to a large and complex pond, mankind's feathered friends will claim the area as their own domain. They won't be too impressed if a bird bath is merely plonked in the centre of an extensive lawn however, for on summer days the shallow water will become too hot to drink, and when they've quenched their thirst or washed their feathers, the birds will be hoping to settle down among the foliage of a

nearby shrub or tree where they can relax in the shade and preen their feathers.

A water feature that has a thriving community of aquatic plants will also attract frogs that play a vital role in maintaining the health of any garden, primarily by feasting on insects. And if logs and rocks are included in the garden landscape, lizards and other reptiles might take up residence in these cosy retreats and play their own unique role in maintaining a balanced environment.

Nesting boxes or hollow logs attached to the trunks of tall trees will persuade some species of birds to raise their families there, while possums, sugar gliders, insect-eating micro bats and other wild nocturnal creatures will appreciate the shelter and protection from the elements and from predators that such artificial retreats offer, and will gratefully call the garden home.

It's far from difficult, with minimal effort and minimal expense, to design a garden that will provide a haven of tranquillity for both its human owners and for wildlife, and although some not so welcome creatures such as scrub turkeys might occasionally appear on the scene, the good, the bad, and the ugly will all thrive and go about their daily lives in a unique and harmonious ecosystem that can be created right on the doorstep of every home.



Opposite page: This water feature in the author's garden attracts many species of birds that come to quench their thirst and to bathe before settling down to preen their feathers or to feed in the adjacent dense vegetation.



BIRDS

Australia is a bird watcher's paradise, for more than 828 species call this great country home, and although some are migrants that come and go with the changing seasons, an estimated 600 species, the majority of which are found nowhere else on earth, flutter or stroll across the nation's varied landscapes each and every day of the year.

The first major published work to introduce Australian birds to an awestruck audience was a hefty tome by the British naturalist and artist John Gould. It included 681 spectacular and highly detailed coloured illustrations, and during his time in Australia, from 1838-1840, the talented Mr. Gould added 300 new bird species to the long list of those already documented.

Today, the main ingredients for a successful feast of bird watching remain the same as in Gould's era, and include nothing more than a hefty serving of patience and a generous helping of silence blended with a little knowledge of the varied environments that birds inhabit and garnished with a sprinkling of good luck. Anyone who utilises this simple recipe will be able to satisfy an appetite for glimpses of the great diversity of wildlife that's right on the doorstep, and although the majority of the birds illustrated in the following pages are relatively common species, their familiarity doesn't detract from their appeal, for many are among the most beautiful creatures in the world.



PARROTS

RAINBOW LORIKEET

Trichoglossus haematodus

Australia has its share of famous characters, but in 1771 it was a rainbow lorikeet that earned a place in history when it became the first of Australia's 56 species of parrots to spread its wings over British shores. The bird's epic adventure had begun the previous year when it was captured in Botany Bay

and became the pet of a Polynesian man named Tupaia who shared James Cook's celebrated voyage on board the Endeavour. Sadly, Tupaia died on the return journey to England, but the bird, which survived and was given to Marmaduke Turnstall, a wealthy ornithologist, was destined for immortality.

In 1774, Peter Brown, an illustrator who was later appointed as the Botanical Painter to the Prince of Wales, was awestruck by the bird's beauty, and included a portrait of the avian celebrity in his book, "New Illustrations of Zoology". This guaranteed the rainbow lorikeet another claim to fame as the first Australian parrot to be introduced to the world in a coloured illustration within a commercial publication.

Only someone with the vision of a fossilised amoeba could fail to be dazzled by his or her first sighting of a rainbow lorikeet, for its plumage includes all the hues of the brightest of rainbows. Both males and females have a blue head and neck, a vivid orange-red breast, a blue lower body, emerald green wings, a red bill, and piercing red eyes. With careful observation, males can be distinguished from females that have a smudge of yellow bleeding into the orange plumage on their breasts, while juvenile birds can be readily recognised by their black bills.

Rainbow lorikeets inhabit woodlands and forests in eastern Australia, from Queensland's tropical Cape York to southern Victoria and northern Tasmania, and thrive in coastal areas as far west as the Yorke Peninsula in South Australia. A relatively small population, the descendants of captive birds that were released into the wild in the 1960s, exists near Perth in Western Australia, and in this corner of the continent these unwelcome interlopers, which compete with indigenous species for food and nesting sites, are justifiably classified as a pest species.

It's not only the vivid plumage of rainbow lorikeets that attracts attention,

for with their raucous chattering and argumentative screeching these gregarious birds, which are often seen in the company of scaly-breasted lorikeets, are impossible to ignore. Two or three birds, particularly when disputing ownership of a feeding area, can sound like a rampaging crowd, and when immense numbers flutter among the foliage of trees to sip on nectar-laden flowers, any concept of the bush as a place of peace and quiet is immediately obliterated.

Rainbow lorikeets, which have a brush-like tip to their tongue to enable them to feed efficiently on nectar, dine on the flowers of a wide range of native trees and shrubs, including eucalypts, grevilleas, banksias, and melaleucas, in addition to many introduced plant species. With amazing agility and acrobatic antics they clamber from flower to flower, often hanging upside down to reach blooms on fragile stems, and erupt into a screeching frenzy when the need to defend their territory from other birds arises. During times when flowers are scarce they'll eat seeds and insects, but their craving for the sweet treats of life regularly lures them to orchards and urban gardens where a single bird pecking at soft fruit, such as mangoes, papaws, and grapes, is of little concern, but it's a different story when a large flock descends on fruiting trees. The result can be disastrous, and the battle to protect crops from hordes of rainbow lorikeets remains an ongoing dilemma for orchardists.

Rainbow lorikeets are commonly seen in urban parks and in the heart of cities and towns where flowering trees hem congested roadways, and are often attracted to home gardens with the offer of a feast of bread and honey. This provides an opportunity for a close encounter with these beautiful birds, but bread and honey do not include the essential nutrients that the birds

Opposite page: A king parrot feeding on a tomato in the author's garden.



A rainbow lorikeet at a caravan park at Repton in northern New South Wales.



A rainbow lorikeet feeding on the flowers of a silky oak tree, *Grevillea robusta*, in the Queensland city of Gympie.





require and may be harmful to their long-term health. The better option to encourage these and other nectar-feeding birds to a garden environment is to plant trees and shrubs that will not only provide them with a natural and healthy source of food, but that will also create a welcoming habitat for other native species.

Rainbow lorikeets, like the majority of parrots, require hollows in old trees for nesting sites, and if these, together with ample sources of food and water are available, these glorious birds will survive and bring pleasure to the human race until the end of time.



SCALY-BREADED LORIKEET

Trichoglossus chlorolepidotus

It doesn't require the intelligence of Einstein to understand why scaly-breasted lorikeets are often referred to simply as 'green lorikeets' or 'greenies', for the plumage of their heads, bodies, and wings is primarily emerald green. With a smattering of yellow feathers, which appear like scales on the bird's breast, and the vivid red-orange patches under its wings only visible when in flight, it's well camouflaged among the foliage of trees, and it's often only the bird's subdued chattering and a glimpse of its red eyes and bright red bill that provide a clue to its presence.

Scaly-breasted lorikeets are often seen in the company of rainbow lorikeets, which generally greatly outnumber their less gaudy relatives. They thrive in the woodlands and forests of eastern Australia and, in their continual search for food, these appealing small parrots are regular visitors to urban parks and gardens.

They, in common with rainbow lorikeets, have a brush-like tip to their tongue that enables them to extract nectar from the flowers of a wide range of trees and shrubs, with grevilleas, eucalypts, and melaleucas being among

Left: A rainbow lorikeet feeding on the flowers of a corkwood tree, in the author's garden.

their favoured sources of food. They often feed in the same trees at the same time as rainbow lorikeets, but it's the scaly-breasts' colourful cousins that are at the top of the pecking order, and as the socially dominant and most aggressive species, they'll often chase the scaly-breasts away from what they regard as their personal domain.

Nectar is the favoured food of scaly-breasted lorikeets, but they also eat seeds, including those of native casuarina trees, which are commonly known as 'she oaks'. Anything sweet is always at the top of the menu for these attractive birds, and although they consume a variety of native fruits and berries, they're more than happy to feast on the abundance of fruit that's produced in orchards and vineyards. The damage that the birds inevitably cause makes them a species that's despised not only by orchardists, but also by farmers who cultivate crops of sweet corn. The sweet white juice within each kernel of the ripening cobs of corn is something that scaly-breasted lorikeets find irresistible, and in no time at all a flock of these ravenous invaders can make a once valuable crop completely worthless.

These attractive lorikeets require aging trees with hollows in their trunks and branches for nesting sites, and although some farmers and orchardists might consider that the removal of such trees is an effective way to limit the populations of birds that threaten their crops and thus their livelihoods, the solution to the problem is far more complex. By providing birds with an abundance of food and water in areas where, in the distant past, such resources would have been limited and varied with the seasons, humans have altered the balance of nature, and it is farmers who often pay the price of progress. The solution, if there is one, begins by ensuring that there are adequate natural food sources available

Right: A scaly-breasted lorikeet feeding on the seeds of a she oak tree in the Queensland city of Hervey Bay.







for birds, such as the scaly-breasted lorikeet. And by planting native vegetation and protecting existing woodlands and forests, the dream of wildlife and humans co-existing in harmony dawdles one step closer to reality.



BUDGERIGAR

Melopsittacus undulatus

There are few people who could honestly say that, in their childhood years, they never had a budgerigar as a pet. These appealing little birds are the most popular pets in the world, after dogs and cats, and anyone who is unfamiliar with this humble parrot,

which is commonly known as a budgie, must be as rare as an elephant in a rhubarb tree.

Budgies, which are classed as parakeets, a category of small parrots with long flat tails, are attractive and amiable birds, but one of the characteristics that have made them so popular is their ability to mimic the human voice. Many will mutter “who’s a pretty boy” and other simple phrases, but a budgie named Puck had a lot more to say, and according to the 1995 Guinness Book of World Records, this tiny chatterbox was an avian master of the English language, with a vocabulary of 1,728 words.

Flocks of budgies fluttered across the Australian landscape long before

modern humans strode onto the scene, but it was George Shaw, an English zoologist, who officially described the budgerigar in 1805, and in 1840 the renowned naturalist and illustrator John Gould brought live budgies to Britain when he returned from a voyage to Australia. And, like those that followed in their wake, these diminutive birds enthralled all who saw them, and within a decade a captive breeding programme had begun.

The name ‘budgerigar’ is thought to have been derived from the aboriginal word ‘betchegara’, which refers to something that’s good to eat, and although indigenous Australians might have regarded the bird as tasty bush tucker, Europeans saw it in a



different light. They christened it with the scientific name *Melopsittacus undulatus*, which hinted that the budgie had more than culinary appeal, for the first part of its name comes from a Greek word meaning 'melodious parrot', while the second part is a Latin word that translates as 'like waves', a reference to the ornate pattern on the bird's wings and the back of its head.

Budgies bred in captivity have plumage in a wide range of dazzling colours, from white and yellow to green, mauve, and blue, but their wild relatives, which are slightly smaller, are invariably green with bright yellow faces, and have wings with attractive yellow and olive green patterning. There's little visible difference between males and females, other than the colour of the cere, the area surrounding the bird's nostrils, which is blue in males, brown or white in females, and pink when the birds are immature.

Budgerigars are among the most numerous of all Australian parrots, with an estimated five million thriving in the

wild. They're usually seen in relatively small flocks, but in good seasons, when there's an abundance of food, it's not uncommon to see hundreds or even thousands of birds wheeling through the skies, twisting and turning in perfectly synchronised flight, or fluttering unexpectedly from trees like a deluge of falling leaves tossed into the air by the invisible hand of the wind.

They're most at home in semi-arid and arid inland areas of mainland Australia where they congregate in woodlands and grasslands, and although they inhabit much of the continent, they are not found in the far south-west, in the northern part of the Northern Territory, or on the eastern coast.

The main component of the budgerigar's diet is seeds of drought tolerant grasses such as spinifex and Mitchell grass, and of herbaceous plants such as saltbush that carpets vast areas of the outback. They also dine on succulent foliage and on any fruit that may be available, and will gorge

themselves on ripening crops of grain.

Budgies are a nomadic species, with their survival during droughts reliant on their instinct to move closer towards coastal areas where food and water are more readily available. They never travel far from a source of water however, and it is believed that aboriginal people and early European settlers followed flocks of budgies and utilised their ability to locate water as part of their own survival strategies in an often harsh and arid environment.

Budgerigars are monogamous and although they're extremely gregarious characters, they remain faithful to their one and only mate, and when it's time to start a family, the female lays her eggs in a hollow in a tree, or occasionally in a log on the ground.

Quiet twittering among shading foliage during the heat of the day is a clue that budgies are taking it easy, but

Opposite and above: Budgies on the doorstep of an outback camping area near Boulia in Queensland.



the best time to see these endearing little birds is at dawn when they flutter down from the skies to the muddy edge of a tranquil waterhole or stream to quench their thirst before, with joyful twittering, heading off to enjoy their first snack of the day.



MAJOR MITCHELL COCKATOO

Lophochroa leadbeateri

Both the scientific name of this spectacular parrot and its common name of 'Leadbeater's cockatoo' honour Benjamin Leadbeater, an 18th century English naturalist and taxidermist who supplied specimens of wildlife to the British Museum. But this stunning bird, which is often referred to by the bland and unimaginative name of

'pink cockatoo', owes its most popular common name of 'Major Mitchell cockatoo' to another historic figure. And it's an enduring reminder of the exploits of Major Thomas Mitchell who, in the early days of European settlement, was one of the young nation's most daring adventurers.

"Few birds more enliven the monotonous hues of the Australian forest than this beautiful species," Mitchell wrote of the bird that would later immortalise his name, and no one who has had the privilege of seeing this cockatoo in the wild would disagree with his statement.

To the Arrernte people of central Australia, the Major Mitchell cockatoo is known as 'kakalhalha', a reference to one of the calls of a bird that played an important role in the lives of indigenous

tribes. It feeds on seeds that were once included in their diet, and when they noticed the birds eating the seeds, they knew that it was time for them to harvest this important bush tucker too.

Land clearing and the resultant destruction of the habitat of the Major Mitchell cockatoo began in the first years after European settlement, and by the 1950s the species had disappeared from most of South Australia. Populations of Major Mitchell cockatoos have also declined in western New South Wales

Above: Budgies on the doorstep of an outback camping area near Boulia in Queensland.

Opposite page: A Major Mitchell cockatoo near Wanaaring in New South Wales.





and in north-western Victoria where, although still found in the mallee region, this beautiful bird is now listed as a threatened species. The good news however, is that its future is secure in many other areas.

With its salmon pink under parts and face, white wings and head, dark pink colouring under its wings, and a crest that, when raised, displays vivid red and yellow stripes, the Major Mitchell cockatoo is instantly recognisable. Males and females are almost identical, with the only conspicuous variation between the sexes being the fact that mature females have reddish brown eyes, while those of males are black.

These highly distinctive birds, which are usually seen in pairs or small groups, inhabit open woodlands in arid and semi-arid areas in south-western Queensland, New South Wales, the Northern Territory, and Western Australian. In some parts of their range, where there's permanent water and an abundance of food, they occasionally

gather in flocks of 50 or more, and there can be few more stunning performances on nature's outback stage than that of a chorus of these stunning birds, which often feed on the ground before taking to the air with a dazzling display of the gaudy plumage beneath their outstretched wings.

The diet of the Major Mitchell cockatoo consists of nuts, insects, and fruit, but it's the seeds of acacias and cypress pine trees (*Callitris* species), both of which are dominant species in many of the outback regions that these beautiful birds call home, that are among their favourite foods. They're also partial to the flesh and seeds of native melons, and wherever these wild cucurbits are growing, there's a good chance that one or more attractive pink cockatoos won't be far away, but the optimum time to see Major Mitchell cockatoos is at dawn or dusk when they arrive on the banks of waterholes and streams to sip the cool and life-giving water.

Human activities have unquestionably had a negative impact on populations of these attractive cockatoos, but in one respect the birds are their own worst enemies. They lay their eggs in hollows, lined with bark, in old and gnarled river red gums, coolabah trees, and cypress pines, and while many parrots will vigorously defend their territories and nesting sites from other birds that come too close for comfort, Major Mitchell cockatoos assert their rights to more than a single tree. Battle commences whenever another bird hints of its intention to claim a hollow as its own nesting site, and the region's dominant pair, with aggressive screeching, voice their disapproval and refuse to allow others of their species to nest within a two kilometre radius of their selected site. Nesting hollows are often as scarce as cockatoo's teeth, and with some unable to be utilised due to the reluctance of Major Mitchell cockatoos to accept new neighbours on their doorstep, there's little chance that these beautiful birds will experience a dramatic increase in their population.



SULPHUR-CRESTED COCKATOO

Cacatua galerita

The sulphur-crested cockatoo is a popular caged bird in many countries far beyond its homeland, and with captive birds being very long-lived, and some individuals reputed to have reached the ripe old age of 100, these large parrots, with their ability to mimic human speech, will be entertaining their owners for many years to come.

The most conspicuous characteristic of this predominantly white cockatoo is the pale yellow crest that's raised when the bird is excited or agitated. Males and females, which have pale yellow plumage on the underside of their wings and tails, are almost identical in appearance, with the only visible difference being their eyes, which are reddish brown in females and dark



brown in males.

They thrive, often in immense flocks of hundreds of birds, in northern and south-eastern areas of mainland Australia and in northern Tasmania, but not everyone is happy when sulphur-crested cockatoos arrive, uninvited, on their doorstep.

In recent years a small population, the descendants of captive birds that were released into the wild, has become established in Perth in Western Australia and, with the increased competition for nesting sites, there's concern about the impact that the new arrivals might have on existing populations of other parrot species, including white-tailed and red-tailed black cockatoos. Farmers, justifiably alarmed about the damage that increasing numbers of cockatoos could inflict on their crops, are concerned too, and sulphur-crested cockatoos have been officially declared as agricultural pests in some areas of the state.

The birds are unwelcome in

agricultural regions in other states too, despite the fact that, before mankind stripped the land of its protective cloak of trees, it might have been the habitat of sulphur-crested cockatoos for thousands of years. The seeds of grasses and herbaceous plants, native fruits, nuts, leaf buds, and insects all remain on the menu that Mother Nature has presented to the birds for eons, but when a feast of grain and of cultivated fruit, vegetables, and nuts is laid out before them, the temptation proves irresistible, and who would expect these appealing birds to ignore such a sumptuous smorgasbord or the sweet treats on offer in vineyards, where they enthusiastically feast on grapes and the succulent young shoots of vines?

Sulphur-crests spend much of their time feeding on the ground, with one or more members of the group remaining in a high tree to keep an eye out for danger. At the first hint of any threat, the sentries sound the alarm, and the entire flock flees to the safety of the trees

and the sky with a raucous screeching that would have been loud enough to stir the legendary Rip Van Winkle from his slumber.

These beautiful cockatoos often congregate in trees in urban areas, but their primary habitat is in open woodlands, with their preference for roosting and nesting sites being in trees that border rivers or other permanent sources of water. When they're not feeding, merely resting or sheltering from the heat of the day, they rip leaves, twigs, and bark from the trees and drop them onto the ground below, and although this activity might be regarded as avian vandalism, it's believed that it might help the birds to keep their bills trimmed.

As the day comes to its inevitable

Opposite page: Major Mitchell cockatoos near Alice Springs, N.T.

Above: A sulphur-crested cockatoo at Emerald in Queensland.





conclusion, sulphur-crested cockatoos settle down to roost, and it's then, when large numbers of birds jostle for positions and squabble among themselves, that the vocal mayhem really begins. Their argumentative screeching resumes again at dawn, and for anyone with a flock of sulphur-crested cockatoos on their doorstep, there's no chance of being able to sleep in for even a moment after sunrise.



LITTLE CORELLA

Cacatua sanguinea

Anyone whose education has provided them with a basic knowledge of Latin will find a clue to the little corella's appearance in its scientific name, for '*sanguinea*' is a reference to the blood-stained appearance of the feathers between the bird's eyes and its bill. This, together with the blue-grey patch of skin around each eye, provides a subtle contrast to the white plumage of the bird's head, its body, and its wings. And when in flight, there's a subtle surprise in store as the pale yellow plumage lining the underside of the bird's wings and broad tail is revealed.

The little corella, which inhabits semi-arid and arid regions across much of mainland Australia, is a species that elicits either love or hate. Watch it gently cooing with its life-long mate, quietly sipping on the nectar of the golden blooms of a silky oak tree, clambering among clusters of eucalyptus flowers, or nibbling on the seeds of grasses and legumes, and it's hard not to admire this attractive cockatoo. But there's a flip side to its life however, and it's one that's not particularly appealing.

Little corellas are gregarious birds that often congregate in flocks of hundreds or even thousands of birds, and when roosting in large trees, often beside a river, a stream, or a lagoon, their population may be so dense that they completely obscure any foliage and, from a distance, the trees appear to

Left: Sulphur-crested cockatoos at Eildon in Victoria.



Little corella at a camping area on the doorstep
of the outback town of Innamincka in South
Australia.



Little corellas in parklands in the
Queensland city of Maryborough.





Little corella in parklands in the
Queensland city of Maryborough.





be cloaked with masses of white blooms. They're a raucous and argumentative mob as they squabble over roosting sites in trees where there's limited space for the vast numbers of birds that are ready to settle down for the night. Their chattering and screeching does not endear them to anyone who finds these rowdy cockatoos taking up residence right on their doorstep, and when, during severe droughts, large flocks of birds invade urban areas, it's not only their noise that makes them unwelcome. Thousands of birds defecate on pathways, buildings, and parked cars, and when they're in a destructive mood, they chew the stems and leaves of trees and reduce the foliage to tatters, with some trees eventually dying as a result of the persistent behaviour of these urban terrorists.

The darkness of the night brings a welcome silence, but disputes among little corellas resume at dawn, and when they finally head off to find a source of food, the screeching commotion continues as they launch themselves into the air from their lofty perches. Like falling leaves hurled before a gale, they take to the skies in a fury of white plumage and vocal mayhem to feast, if other food is unavailable, on crops of ripening grain. And their insatiable appetite for cultivated crops ensures that they're far from popular with farmers.

As the breeding season approaches, each pair of little corellas selects a hollow, usually in a eucalyptus tree that's close to water, where the female will eventually lay her eggs. There's plenty of aggression on display as the birds defend their chosen hollow from others that come too close or threaten to hijack the nesting site that a pair may have used for several years. With all disputes eventually concluded and their ownership no longer under threat, birds affectionately preen their mates with little sound other than subdued chattering, and it's then that corellas, with their Jekyll and Hyde personalities, are among the most admired of all Australian parrots.



LONG-BILLED CORELLA

Cacatua tenuirostris

Take a close look at one of these attractive birds and it's easy to see how the long-billed corella acquired its common name, for the top section of its bill is far longer than that of its close relative, the little corella. The extended bill is not the only distinctive feature of this species however. With a dash of fiery red plumage on its forehead and between its eyes and its bill, a similarly coloured collar across the top of its breast, blue-grey eye patches, and predominantly white plumage, it's not hard to recognise this attractive bird that, when in flight, reveals yellow plumage beneath its wings.

Long-billed corellas are less common than little corellas, and have a far more limited range. Their natural habitat is only in the south-eastern corner of the continent, in an area stretching from south-eastern South Australia and western Victoria to southern New South Wales, but other populations, which are believed to have been established after the release of caged birds, also exist in some other parts of eastern Australia and in Western Australia, where they thrive in areas with open woodlands and grasslands that have adequate trees for roosting and nesting.

These gregarious birds are often seen foraging on the ground where they use their long bills to probe the soil for succulent insects and edible roots, with the small bulbs of the introduced weed onion grass providing one of their favoured snacks. The bill is also a useful tool to pry fragments of bark from trees to reveal arboreal insects, but it's seeds, particularly those of introduced and cultivated plants, that form a major part of the birds' diet. While the majority of the flock are feasting, a small number of their mates remain on sentry duty in nearby trees from where they give a raucous warning screech the moment

Left: A little corella feeding on grevillea flowers in the Queensland city of Gympie.



Long-billed corella in parklands in the Queensland city of Maryborough.







any threat appears on the horizon. But as far as farmers are concerned, it's the birds themselves, with their insatiable appetite for grain and sunflower seeds, which pose a very real threat

The size of flocks is dependant on the availability of food, water, and nesting sites, and in areas where there's an abundance of these three major requirements, long-billed corellas have made themselves very unpopular, not only with farmers but also with urban residents, particularly those in wheat growing regions in Western Australia.

In recent years, when flocks of up to 10,000 long-billed corellas invaded both urban areas and farmlands, the noise caused by such massive numbers of birds, together with their faeces that were routinely plastered on cars, buildings, and footpaths, was more than most people could tolerate, and

authorities were forced to contemplate the unpalatable option of culling the invading hordes. In their hunger for grain, the birds destroyed tarpaulins covering huge mounds of wheat at grain receival depots and gorged themselves on the treasure they unveiled. They stripped every skerrick of vegetation from riverbank gum trees, and commandeered every hollow in every suitable tree for their nesting sites, leaving none vacant for other species of birds.

These attractive cockatoos form monogamous pairs, and if a hollow within the embrace of a large tree is unavailable, they'll look for alternative nesting accommodation that might be an abode as simple as a hole in the face of a stony cliff. While populations of long-billed corellas have soared in Western Australian, their numbers are

thought to be declining in other areas of their range, but despite the fact that human activities continue to redesign the landscape, long-billed corellas will undoubtedly thrive to be admired or despised for many centuries to come.



KING PARROT

Alisterus scapularis

It was 1818 when German zoologist Martin Lichtenstein became the first to describe one of Australia's most beautiful native residents, and he was probably speechless with wonder as he

Opposite page: A long-billed corella in parklands in the Queensland city of Maryborough.

Above: A male king parrot in the author's garden.



A male king parrot in
the author's garden.



An immature male king parrot feeding on the seeds of an acacia tree near the NSW town of Scone.





gazed at the vividly coloured bird, for few wild creatures are more spectacular than his highness the king parrot.

With his brilliant red breast, head, and under parts, emerald green wings, long dark green tail, red bill, and piercing dark eyes surrounded by a golden yellow ring, the regal male of the species dramatically overshadows his queen whose plumage is predominantly green, with only her belly being red.

Despite their gaudy plumage, king parrots are surprisingly well camouflaged among the foliage of the eucalypt woodlands and sub-tropical rainforests that are their primary habitat. And the first hint of their presence may be a high pitched squeak, like the sound of an uncoiled wheelbarrow wheel, or a flash of green or red plumage as a bird flies past, momentarily adding a dash of brilliance to the shadows beneath the canopy of its forest home.

They can be seen, in pairs or small family groups, throughout eastern Australia, from northern Queensland to southern Victoria, where they forage among the outer branches of trees and feed on fruit, nuts, nectar, flowers, and leaf buds, and dine on the seeds of acacias that are high on their list of favoured foods.

King parrots utilise hollows in old trees, primarily eucalypts, as nesting sites, but without specialised equipment we humans have no hope of being able to take an inquisitive peek at the nest, at the bird's eggs, or at any developing chicks. The entrance to the hollow is usually several metres above the ground, but the parrot's nest is right at the bottom of the cavity, almost at ground level, and thus well hidden not only from prying eyes, but also from predators, such as feral cats and reptiles.

These are inquisitive and confident birds that frequently visit urban parks and gardens if the food they require, as well as large trees in which they can roost, are available. They enthusiastically hop across manicured

Left: A male king parrot eating a tomato in the author's garden.





lawns and scoff fallen seeds and fruit; they feast on acorns in southern areas of their range where these introduced European trees have been widely planted; and they eagerly tuck into tomatoes and cultivated fruit in home gardens. And it's not uncommon to see one of these dazzling birds, which are among the nation's greatest natural treasures, peering down at the world from a gutter, a clothes line, or a power cable that's right on the doorstep of some human habitation.



GALAH

Cacatua roseicapilla

In the unique Australian lingo the word 'galah', which is an adaptation of the aboriginal word 'gilaa', refers to someone who's playing the fool, but the real galahs that flutter and hop confidently across the landscape are pink and grey cockatoos. Galahs, which are also known as 'rose-breasted' or 'roseate cockatoos', are among the most familiar of all Australian parrots and were occasionally on the menu of early rural settlers when more conventional food was in short supply. And for those who have never cooked galah stew, the perennial joke is that the bird should always be cooked with a stone, and when the stone is soft, the galah is ready to be eaten.

Galahs can be found throughout Australia, with the exception of the furthest tip of the Cape York Peninsula in Queensland, and the south-western corner of Western Australia. They thrive in arid and semi-arid regions and are frequently seen in urban areas, but the largest flocks, which may include hundreds of birds, inhabit open woodlands and grasslands where there are scattered trees in which the birds can shelter and roost.

With a deep pink head, neck, and breast, a pale pink crown and crest, and a grey back, wings, and tail, the galah is unquestionably an attractive bird. Bare grey skin surrounds its eyes, and the only conspicuous difference between the sexes is that males have brown eyes

while those of females are dark red.

Seeds are the main course on the menu for hungry galahs, and large numbers of birds often feed together on the ground, and stroll in search of ripened seeds that have fallen from grasses and from overhanging trees and shrubs. Any grubs they discover will also be devoured, but like most Australian parrots, galahs can't resist the lure of cultivated grain crops, and are frequently seen gorging themselves near silos and in fields where grain is easy picking. And it's no surprise to learn that many farmers regard galahs as nothing more than another pest species that threatens their livelihood.

During the hottest part of the day, galahs shelter among the foliage of trees and shrubs from where they travel to and from their favourite feeding areas. They can fly at speeds of almost 50kms an hour and may travel for up to 15kms in search of food before returning, at dusk, to their nocturnal roosting site where, in a noisy and agitated throng, they jostle for prime positions, with the entire flock, every now and then, taking to the air with communal screeching before fluttering back down to the trees once again.

The trees that are a focal point of their lives have hollows in which the birds can nest, and galahs, which are monogamous, will return to the same nesting site year after year. When the precocious fledglings finally flutter from the nest, they congregate with other young birds and wait patiently, among the shading foliage, for their parents to return with food. And although they rapidly gain some semblance of self-reliance and independence, they won't breed until they are 3-4 years of age, and during this phase of their development the immature birds remain part of a flock of other young birds.

Left: Galahs beside an outback camping area near Charleville, Qld.

Above: A galah at dawn at a camping area in the East Macdonnell ranges in central Australia.

Galahs kept in captivity have been known to live for up to 80 years, but life is far from easy for those that retain their freedom. Approximately fifty per cent of fledglings die within their first six months of life, and only around 10 per cent reach maturity, but with adults that survive the many perils of life living for some 20 years, galahs will continue to bring a smile of pleasure to all who see them and who appreciate their undeniable beauty.

MALLEE RINGNECK

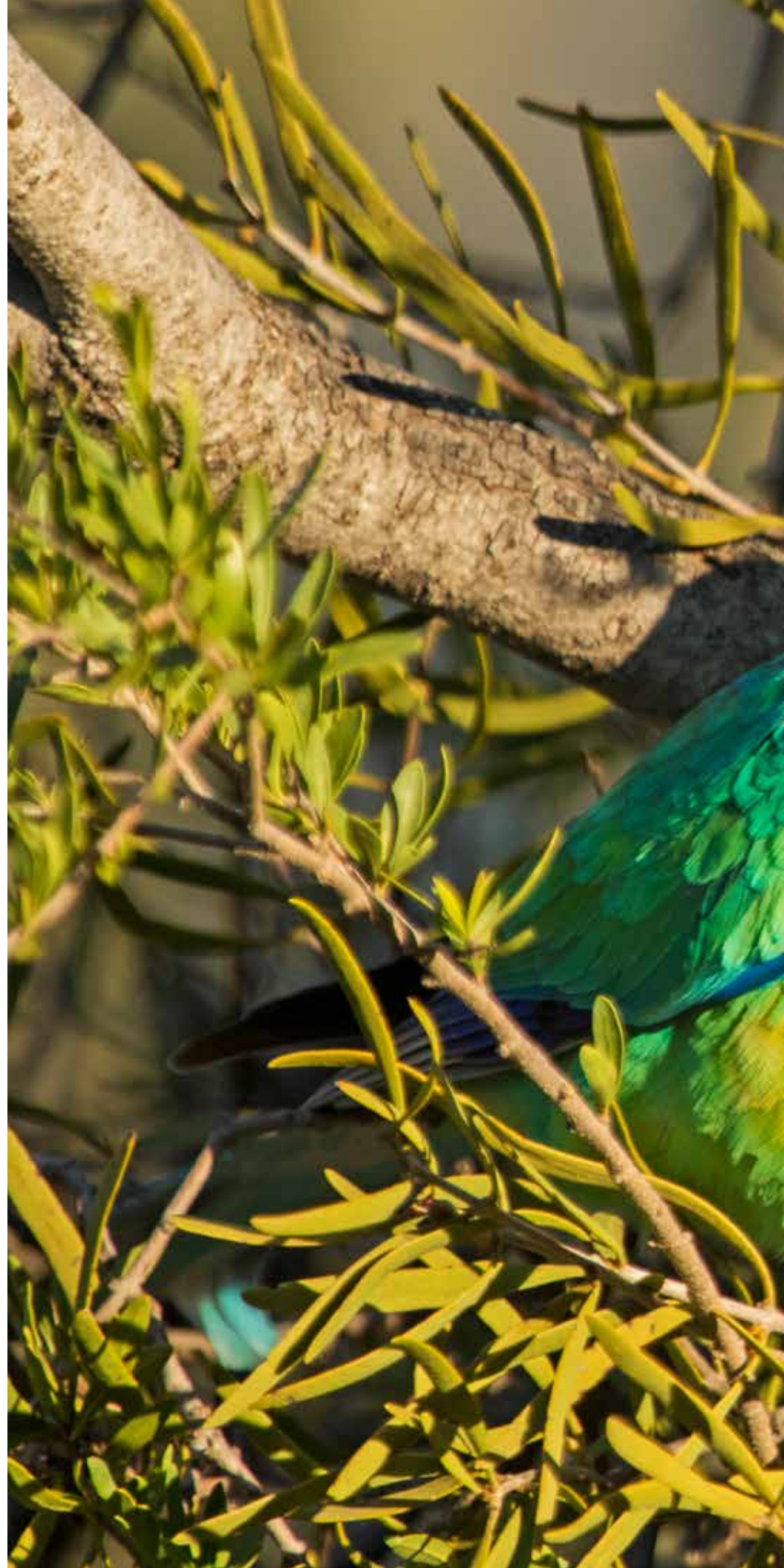
Barnadius barnardi

There's considerable confusion regarding the identification of Australian ringneck parrots, with the mallee ringneck, which is also known as 'Barnard's parakeet', often confused with its close relatives, the Cloncurry, Twenty-eight, and Port Lincoln parrots, all of which are of similar size and colouring.

The dominant hue of this beautiful bird's plumage, like that of other ringnecks, is a vivid turquoise blue-green. With a green head, grey cheeks, a blue throat, orange-yellow plumage on its belly, a deep blue back, and blue and green wings, it wears a coat of many colours, but there's one distinctive feature that sets the mallee ringneck apart from the crowd. In addition to the yellow neck band that gives all ringnecks their colloquial name, it has a red band above its pale grey bill. And females of the species have something to twitter about too, for although the feathers on their backs are slightly darker than those of males, they're almost as dazzling as their mates.

Mallee ringnecks are found in arid and semi-arid regions of south-eastern Australia, with small populations thriving in south-western Queensland, central and western New South Wales, northern South Australia, and north-

Right: A mallee ringneck at a camping area in the Flinders Ranges in South Australia.





western Victoria. But despite their brilliant plumage, these gaudy parrots are not always easy to spot, for they're well camouflaged in their natural habitat, which includes mallee scrub, open woodlands, and the forests of tall eucalypts that line many meandering watercourses.

They feed, in pairs or small family groups, among the foliage of trees and shrubs where they sip at the nectar of flowers, forage for tasty fruit, leaf buds, and mistletoe berries, and scoff any small insects that come their way. Their preference however, is to feed on the ground or in low vegetation where they eat the seeds of grasses and herbaceous plants, with wild melons featuring among their favourite bush tucker. There's often a hint of muted chattering among the group when they're feeding, but if they're disturbed or sense a threat, one or more will utter a harsh shriek to warn their companions of the perceived danger and the need to seek safety in higher vegetation or to take to the air to evade a predator.

As a new day dawns and the sun peers over the horizon and casts its first rays of light across the landscape, mallee ringnecks leave their roosting sites, drink from a nearby source of water, and head to their favoured feeding areas. During the hottest part of the day they shelter among the dense foliage of trees or forage in the shade, and as the day's heat dissipates, they become increasingly active again until, at dusk, they settle down to roost in trees that, when the time comes to start a family, will provide them with the secluded hollows that they require for their nests.



RED-RUMPED PARROT

Psephotus haematonotus

The red-rumped parrot, which is also known as a 'red-backed parrot' or a 'grass parrot', is a bird that frequents semi-arid regions of south-eastern Australia, including those in New South Wales and Victoria, with lesser populations of these attractive small



parrots also existing in north-eastern South Australia and south-western Queensland. They inhabit lightly wooded grasslands and mallee scrub, and although they're rarely seen in either coastal areas or dense forests, they're happy to make themselves at home in urban parks and gardens

within their range.

Male and female red-rumped parrots have dramatically different plumage, and as in many species, it's the male that's the most colourful character. He has a vivid green head, a red rump, a bright green breast that merges into yellow on the belly, and dark blue tips



on his wings and tail, while the female is clothed in drab feathers that would excite no one other than her mate. With olive green-grey plumage, a green rump, faint yellowish green flecks on her belly, and dull green wings with dark blue tips, females and immature birds that are of similar appearance

become almost invisible when foraging among low grasses. And for birds that spend much of their time on the ground, where skilful predators such as foxes and feral and domestic cats hunt, camouflage is the key to survival.

The seeds of varied species of grasses make up a large proportion of the

diet of red-rumped parrots, and one of their simple tricks when feeding is to land on the fragile stem of a plant until it bends to the ground. Then, with

Above: A male red-rumped parrot at its nesting site at Innamincka in South Australia.

their feet firmly on the soil, the birds can simply peck off individual seeds and collect those that have fallen to the ground. Feeding in pairs or small flocks, often in close proximity to other parrots, including eastern rosellas and galahs, these attractive birds also enjoy the fruits and flowers of some shrubs and trees, and will eagerly feast on the leaves and flowers of several species of thistles.

Like most other parrots, red-rumped parrots, which mate for life, nest in hollows in tree trunks or branches, or in other sheltered places, such as holes in decaying tree stumps, with a preference for a site that's close to a source of water. It's the fastidious female that selects and prepares the nesting site, with her eggs, which are laid on a bed of slithers of wood and bark, eventually hatching to produce a new generation of these glorious birds that are living proof that small can be very beautiful indeed.



MULGA PARROT

Psephotus varius

There's no prize for guessing why this bird has been endowed with the common names of 'many-coloured parrot' and 'varied parrot', for one look reveals that, although the primary colour of the adult male's plumage is a brilliant turquoise green, it's daubed with almost every colour of an artist's palette. With a narrow yellow band across its forehead, a yellow streak on its wings, a red patch on both its head and its rump, yellow and red feathers on its under parts, and a dark blue-black tail and wing tips, the male of the species is certainly a dazzling character. The same can't be said of female mulga parrots however, for with their drab olive brown to green plumage adorned with little more than a red patch on the top of the head and shoulders, they

Right A pair of red-rumped parrots bathing in the Darling River at Wentworth in outback New South Wales.







rarely attract a second glance when their decorative mates arrive on the scene.

Mulga parrots inhabit arid and semi-arid inland regions in central and south-western Queensland, and similar areas west of the Great Dividing Range

in New South Wales, in north-western Victoria, in much of South Australia, and in southern Western Australia. In pairs or in small groups consisting of parents and their young, they flutter across grasslands with sparse vegetation of low shrubs, spiny spinifex

grass, succulent samphire, or saltbush, and feed on or close to the ground. They also inhabit open woodlands dominated by acacias, eucalypts, native cypress pines, or casuarinas where, in addition to flowers, fruit, and insect larvae, they feast on seeds as they



chatter quietly and keep in contact with other members of their group with

Above: A mulga parrot feeding on the ground in woodlands on the edge of the Queensland outback town of Eulo.

repetitive whistling calls.

The small but resplendent male mulga parrot is faithful to the same mate year after year, and when the time comes to start a family, the pair nests in a hollow in a large tree that's close to water. In areas where suitable trees

are unavailable, mulga parrots have learned to be adaptable and will nest in holes in cliff faces and will occasionally utilise man-made structures.



RED-WINGED PARROT

Aprosmictus erythropterus

The red-winged parrot's species name, '*erythropterus*', is derived from the ancient Greek words '*erythros*', meaning red, and '*pteron*', meaning wing, for bright red wings are the most prominent feature of this colourful bird, which is also known as a 'crimson-winged' or 'blood-winged' parrot.

The first glimpse of this stunning bird is often little more than a flash of red among a blur of green as this gaudy creature takes to the skies, but a closer look reveals its true beauty. The male of the species, in spectacular contrast to his red wings, has a bright lime green head, neck, and under parts, a black back, a dark blue rump, a dark green tail with a yellow tip, and a bright red-orange bill. The female is of similar appearance, although the green colouring of her body is of a less vivid hue, and she has a dark green back, a smaller red wing patch, and a lighter blue rump than her male counterpart.

The red-winged parrot's range, which includes arid and semi-arid regions of the continent, extends from northern Australia, throughout Queensland, and as far south as north-eastern South Australia, where these spectacular birds inhabit a great diversity of wooded environments, including riverine forests, acacia scrub, open woodlands, and mangrove forests that line meandering waterways.

They forage among the foliage and feed on seeds, flowers, nectar, fruit, and insects, with the seeds of eucalyptus and acacia trees and the berries of parasitic mistletoe being among their favoured foods. If fallen seeds or fruit are on offer, they have no qualms about feeding on the ground, and although they're often only in the company of a mate or a small group of companions, in good seasons, when there's an abundance of food and water, large flocks are not uncommon.

Male red-winged parrots, when

Right: A pair of red-winged parrots on a garden lawn near the Queensland town of Gin Gin.





they're feeding on open ground, are as conspicuous as a mob of foxes in a hen house, but when they're going about their daily lives in higher vegetation they're often heard before they're seen, for their presence is betrayed by an array of sounds that range from quiet twittering and whistling as they communicate with others of their flock, to a piercing screech of alarm at the approach of a predator or a human who has wandered into the red-wing's territory.

Breeding pairs, being well aware of the dangers that they and their offspring may face, select a nesting hollow with an entrance high in the trunk of a tree and its base far below, often close to ground level, and lay their eggs and raise their family well out of sight of any predators that, if the birds had opted to nest in a more exposed location, would lead the red-winged parrots' efforts to raise a family to a gory rather than a successful conclusion.



CRIMSON ROSELLA

Platycercus elegans

The crimson rosella was first described in 1781 by John Latham who named it the Beautiful Lory, and there can be no disputing the fact that it's worthy of its original common name, for this is undoubtedly one of Australia's most spectacular parrots.

Australia is home to six species of rosellas, which are parrots within the genus *Platycercus*, a name sourced from ancient Greek and that refers to the broad flat tails of these dazzlingly colourful birds.

Crimson rosellas thrive in the damp forests and woodlands of eastern Australia, from south-eastern Queensland to south-eastern South Australia and Tasmania, with an isolated population with slightly darker plumage established in north-eastern Queensland.

A distinctive feature of all rosellas is their cheek patches, with those of the crimson rosella being bright blue, a dramatic contrast to the vivid red



plumage of the bird's head, its back, and its breast. With blue and black wings and a blue tail, the crimson rosella certainly stands out from the crowd and is instantly recognisable, but juvenile birds are far less conspicuous. Their plumage is predominantly

olive green, and although they bear the distinctive blue cheek patches of their parents, young crimson rosellas are often erroneously thought to be a separate species. In time, however, like the Cinderellas of the avian world, they shed their drab attire and, cloaked in



their gaudy plumage, they finally take their place among the glittering stars of the natural world.

Satin bowerbirds, which often inhabit the same region as crimson rosellas, admire their avian neighbours' vivid plumage too, and frequently use

their blue tail feathers to decorate the bowers that they create to impress their mates.

Fruit, nectar, insects, and seeds, particularly those of eucalyptus and acacia trees, feature prominently in the diet of crimson rosellas that dine both

in the forest canopy and on the ground. They frequently hold larger items of food with one of their feet while eating it, but when they get their claws on the

Above: A crimson rosella feeding in a garden at Rushworth in Victoria.



A juvenile crimson rosella feeding on berries in a garden in the Victorian town of Rushworth.



succulent fruit of commercial orchards, farmers are far from impressed, although few people complain when these attractive birds make themselves at home in urban parks and gardens.

Rosellas are monogamous birds, and during the breeding season they forage for food only with their mate. When they eventually decide to set up home together, they may occasionally nest in a hole in an earthen embankment, but they usually opt for a tree trunk hollow with an entrance high above the ground. They line the base of the hollow, which is generally well below the entrance, with scraps of wood and bark, aggressively defend their territory from intruders, and vigorously attack other birds that attempt to nest nearby.

Although they're usually seen only in pairs or small groups, there's change in the air at the conclusion of the breeding season when juvenile crimson rosellas congregate in large flocks and chatter noisily as they forage together on the ground.

These eye-catching parrots communicate, when in the treetops, with a wide range of sounds, from subtle bell-like calls to raucous screeching, but anyone who sees one of these glorious birds is sure to respond with little more than the silence of awe-struck wonder.



PALE-HEADED ROSELLA

Platycercus adscitus

Pale-headed rosellas, which are found in north-eastern and eastern Australia, inhabit forests, riverine woodlands, and lightly timbered woodlands that are dominated by eucalyptus and acacia trees, cypress pines (*Callitris* species), she-oaks (*Casuarina* species), and paperbarks (*Melaleuca* species).

They're commonly known as 'blue rosellas' or simply 'bluies', due to the predominantly blue plumage that covers the chest and wings, and although they're the poor cousins when it comes to good looks and are far less colourful than other species of Australian rosellas, they have a subtle

beauty to their appearance. They have cheek patches, like all rosellas, but those of the pale-headed rosella vary considerably in colour and can range from white to pale blue that, against the light plumage of the bird's head and upper breast, are relatively inconspicuous facial features. The top of the bird's head is yellow, and its back is yellow with dark blue to black flecks, but its most vivid characteristic is the



Above: A young crimson rosella at a nesting site in a creek bank near the town of Hill End in New South Wales .

Opposite page: A pale-headed rosella at a camping area at the town of Hill End in New South Wales.





bright red patch under the tail. And the female of the species has similar plumage to that of the male, although her colouring is generally a little lighter.

Pale-headed rosellas, which are usually seen in pairs or small groups, are relatively quiet and timid birds that often feed on the ground, seeking out shaded areas where they search for the seeds of grasses and low herbaceous plants, in addition to the succulent leaves of Scotch thistles that are among their favoured foods. They also forage in trees and shrubs in the

hope of discovering the flowers, fruit, and insects that are also an important part of their diet, and when trees in commercial orchards and home gardens bow down under the weight of ripening fruit, the sweet treats on offer prove irresistible.

In common with other rosellas, they routinely nest in hollows in the trunks and branches of lofty eucalyptus trees that are close to water, but if such sites are unavailable, they have no complaints about raising a family in a hole in a tree stump or a decaying fence post if that's the best accommodation that's on offer.

EASTERN ROSELLA

Platycercus eximius

When early European settlers discovered a spectacular multi-coloured parrot at Rose Hill in New South Wales they called it, without too much imagination, the 'Rose Hill parakeet'. The name evolved to become the 'rosehiller' and finally the name 'rosella' became the accepted term for the group of six Australian parrots, including the eastern rosella, which are included in the genus *Platycercus*.

Ask anyone to identify the colourful bird that's portrayed on packets of Arnott's biscuits and most will insist that it's an eastern rosella, but that's a long-held misconception. The company's prominent logo, which has been in use for more than 100 years, was created from a painting of

Above: Pale-headed rosellas at a camping area at the town of Hill End in New South Wales.

Opposite page: An eastern rosella feeding on the lawn of a caravan park at Repton in northern New South Wales.



a Mexican parrot that was given to the company's founder, William Arnott, by the captain of a coal-carrying ship that docked at the New South Wales port of Newcastle.

The eastern rosella's true claim to fame comes from its association with another long established Australian company, for its image was adopted as the trademark of the Rosella Preserving & Manufacturing Company. And since the company's genesis in 1895, this beautiful bird's portrait has graced bottles of Rosella tomato sauce to become an iconic part of the nation's culinary history.

The eastern rosella is found in south-eastern Australia, from Queensland to Victoria, in south-eastern South Australia, and in Tasmania where it not only inhabits open woodlands and grasslands that have adequate trees for roosting, but is also a common and

welcome visitor to urban parklands and home gardens.

There are few birds that can boast of having plumage in such a wide range of colours, and with distinctive white cheek patches set against the brilliant red of its head, neck, and breast, a bright yellow belly, a turquoise blue-green rump, red under its tail, sapphire blue wings, and a yellow and black patterned back, the eastern rosella is as gaudy as any bird could possibly be. Females have similar colouring to males, although of less intense hues, while juvenile birds have slightly lighter plumage. Young birds can also be distinguished by the colour of their bills, which are yellow or orange before becoming the light grey to white exhibited by adults.

Small groups or pairs of these spectacular rainbow-coloured birds are often seen on the ground where they eat the seeds of grasses, low growing

shrubs, and herbaceous native plants. They're happy to feed in trees too, using one of their feet to securely grasp their food, and with flowers, fruit, nectar, and insects all forming part of their varied diet, eastern rosellas routinely find that the best things in life are free.

In common with other parrots, eastern rosellas, which mate for life, nest in hollows in trees, with the female selecting the site, usually in a eucalyptus tree, and preparing the nesting area. Occasionally a fallen log will be claimed as an alternative residence during the breeding season, but this leaves the birds increasingly vulnerable to attacks by predators, such as foxes and feral and domestic cats and dogs that have a devastating impact on the populations of many defenceless ground dwelling species.





Eastern rosellas bathing in
a puddle after rain near the
NSW town of Scone.





Eastern rosellas bathing in
a puddle after rain near the
NSW town of Scone.







HONEYEATERS

BLUE-FACED HONEYEATER

Entomyzon cyanotis

Honeyeaters, with 70 unique species, are the largest family of birds in Australia, and few are more recognisable than the blue-faced honeyeater that, with its penchant for snacking on the flowers and fruit of banana trees, is often known as a 'banana bird'.

This attractive bird is a resident of the humid tropical, sub-tropical, and temperate regions of northern and eastern Australia, and its range also extends from the Kimberley region of Western Australia to southern areas of South Australia. Eucalypt woodlands and forests, melaleuca swamps, and mangrove wetlands are among its favoured haunts, and when there's food to be had, the blue-faced honeyeater will visit both banana plantations and urban parks and gardens.

It's one of Australia's largest honeyeaters and, with a patch of vivid blue skin around each of its pale yellow eyes, it's also one of the most distinctive. Adult birds have a black head, face, and neck, a white streak across the back of the neck, and a dark grey throat and upper breast, while the upper parts of their bodies and wings are olive green, and their under parts are white. The plumage of juvenile birds is almost identical to that of their parents, but they have one feature that sets them apart, for their facial skin, rather than being blue, is bright yellow or lime green.

"This bird is fond of pecking traverse holes in the bark between which and the wood it inserts its long tongue in search of small insects, drawing them out with great dexterity", 18th century naturalist John Lewin wrote of the bird that, in his day, was known as the 'blue-cheeked honeysucker'. Insects certainly form a major part of the bird's diet, but

Left: A blue-faced honeyeater at a cafe in the Queensland city of Gladstone.



A juvenile blue-faced honeyeater
on a cafe table at the Queensland
city of Hervey Bay.



it's the blue-faced honeyeater's passion for anything sweet that occasionally gets it into trouble, for these colourful birds will confidently descend onto the tables of outdoor cafés to peck at jam or at any momentarily unattended food, and will even lift the lid off a sugar bowl to feast on its contents.

The natural diet of these beautiful birds includes nectar and fruit from a wide range of native and exotic plants, and they demonstrate considerable acrobatic skill and agility in their efforts to reach flowers that are at the tips of fragile stems. They feed in pairs or in small flocks and aggressively, and with considerable noise, chase most other birds from their feeding area, although they sometimes allow other honeyeaters, such as little friarbirds, to share a tree that has an abundance of nature's sweet bush tucker.

When the time comes to lay their eggs, blue-faced honeyeaters are not particularly energetic birds, and although they occasionally construct a cup-shaped nest of bark that they line with grass, they rarely waste any time on such mundane domestic duties. They're happy to commandeer any nests that have been abandoned by other birds, and after a quick makeover with a few strips of bark added here and there, the female gives it her approval and settles down to the serious business of laying her eggs.



BROWN HONEYEATER

Lichmera indistincta

The small and slim brown honeyeater is almost as indistinct as its scientific species name '*indistincta*' suggests, and although this relatively timid bird blends quietly into the landscape, it has some features that make it more than just the drab character it might initially appear to be.

It's a species that's widespread

Right: A blue-faced honeyeater feeding on melaleuca flowers in the botanic gardens in the Queensland city of Gladstone.



in Australia, and that can be found throughout the mainland, with the exception of south-eastern Australia and arid inland regions. It makes itself at home in a wide range of habitats, including eucalypt woodlands, forests that shadow meandering waterways, damp rainforests, and swathes of mangroves that dip their toes in the mud

of river estuaries. In semi-arid regions, providing there's a source of water nearby, this diminutive honeyeater will flutter contentedly among mallee scrub, through woodlands carpeted with spinifex grass, and among the low vegetation surrounding saline marshes. And if there's food on offer, the brown honeyeater has no hesitation in taking



up residence in an urban park or a home garden.

With a yellow tinge to its brown wings, a brown upper body, creamy brown under parts, and a curved black bill, the brown honeyeater is certainly not the most glamorous of birds, with its only dash of colour being a small pale yellow splash of feathers behind

each eye. But despite its rather dull appearance, it's a charismatic little character that has a cheerful song, and that's fascinating to watch, whether it's alone, with a mate, or in a small group.

The name of its genus *Lichmera* comes from a Greek word meaning 'to lick' or 'to dart the tongue', and that's exactly what the brown honeyeater

does when it feeds on nectar and scoffs any small insects that cross its path. It's an extremely agile and almost hyperactive bird as it forages among the foliage and flowers of trees and shrubs, and although it often shares its habitat with other honeyeaters, its more aggressive neighbours, such as white-throated honeyeaters and friarbirds,

will frequently chase it away from clusters of flowers and from the edge of water, and being an easy going and generally non-aggressive neighbour it usually takes the hint and forages or drinks elsewhere.

When it's time to start a family, the male brown honeyeater alerts the community to the news with his song, and stands guard while his mate constructs a small cup-shaped nest using melaleuca bark and grass that's held together with cobweb, but life wasn't meant to be easy for brown honeyeaters. Their nests are often commandeered by parasitic cuckoos that callously toss out the honeyeater's eggs and replace them with their own, and when the cuckoo's chicks eventually hatch, the unassuming brown honeyeaters, in blissful ignorance, raise the impostors as their own. Fortunately, many nests evade the attention of cuckoos, and thus ensure that another generation of these bland yet personable little birds will thrive and continue to grace the world with their presence.

LEWIN'S HONEYEATER

Meliphaga lewinii

This honeyeater has a scientific name that adds little to the description of its species, for *Meliphaga*, which is derived from two ancient Greek words, means nothing more than 'honey eater'. The bird's species name has a more fascinating story behind it however, for it honours John Lewin, an Englishman who arrived in Australia in 1800 and became the country's first professional artist. The 1813 edition of his book, 'Birds of New Holland With Their Natural Histories', which featured a stunning portrait of *Meliphaga lewinii*, was the first illustrated book to be engraved and printed in Australia.

The Lewin's honeyeater, which is also occasionally known as the 'yellow-eared honeyeater', inhabits the lush rainforests, damp eucalypt forests, and

Right: A brown honeyeater at a bird bath in the author's garden.



coastal woodlands of eastern Australia in an area that stretches from northern Queensland to central Victoria. And with solitary birds and small groups being regular visitors to city parklands and suburban gardens that offer adequate food, water, and trees for roosting, many people will find this

delightful honeyeater right on their doorstep.

With its plumage almost entirely olive green-brown in colour, the Lewin's honeyeater is well camouflaged among any vegetation, but once spotted it's easily recognised by its yellow gape (the fleshy corners of its mouth), and



the pale yellow patches of feathers that adorn the sides of its face, with males, females, and juvenile birds all having a similar appearance.

Insects, which are occasionally caught in flight, form part of the bird's diet, as does the nectar produced by flowers, and although Lewin's

honeyeaters prefer to feast on small fruits and berries, they'll also peck at larger soft fruit such as pawpaws, much to the dismay of gardeners who were themselves looking forward to a feast of this delicious tropical fruit.

They often share their territory with other species of honeyeaters, but Lewin's

honeyeaters are usually at the top of the pecking order and will aggressively chase other birds away from sources of food and water that they regard as part of their territory.

When they get the instinctive urge to breed, they, in common with many other Australian honeyeaters, construct



A Lewin's honeyeater at a bird bath in the author's garden.







a cup-shaped nest of strips of bark, often sourced from melaleuca trees, which are bound together with spider web and lined with soft materials such as grass and moss. And it's from here that the next generation of these drab but cheerful little honeyeaters will eventually take their first glimpse of the wild world that awaits them.



NOISY FRIARBIRD

Philemon corniculatus

The noisy friarbird was first described by ornithologist John Latham in 1790, with its species name derived from the Latin word '*corniculum*', meaning a little horn, a reference to the prominent lump, known as a casque, that's on the bird's bill.

It's the astounding array of curious calls emitted by this large honeyeater that gave birth to its common name, but the noisy friarbird is also known as a 'leatherhead' and a 'four-o'clock bird', with the latter name relating to one of its calls that sounds as though it's declaring the hour at various times of the day.

Noisy friarbirds are found in eastern and south-eastern Australia, from north-eastern Queensland to north-eastern Victoria, but the cooler climate in southern areas of their range is not always to their liking, and many birds migrate north in autumn and return south as winter comes to an end. Forests and open eucalypt woodlands, coastal heathlands, and the forests that fringe wetlands and rivers in semi-arid and arid regions are the favoured habitats of noisy friarbirds that give their presence away as they engage in vociferous and often aggressive disputes with other birds. And even when they're on their own or with a mate they're rarely quiet for more than a minute fragment of the day.

With a naked black head, the casque on its black bill, and dark red eyes, the noisy friarbird is a very distinctive character, but with dull greyish brown wings and back, and creamy white

plumage on its neck and under its body, it's certainly not the most colourful of birds.

Noisy friarbirds are far from welcome in some agricultural areas where they satisfy their appetites for the sweet treats of life by feeding on fruit, including pears and grapes, but although some farmers may see them as the enemy, these large honeyeaters are not always the bad guys. Their varied diet, in addition to fruit and nectar, also includes insects, and they're particularly partial to a feast of grasshoppers, and that makes them invaluable allies of farmers and gardeners who continually fight the battle to control insect pests.

These large honeyeaters rarely come down to the ground, and spend much of their time feeding on the nectar-laden flowers of trees, with the colourful blooms of grevilleas being among their favourites. And they demonstrate great agility, put on entertaining acrobatic performances, and find themselves in contorted poses as they reach for flowers at the tips of slender stems that bow beneath their meagre weight.

Noisy friarbirds stake their claim to a source of food with an astounding array of curious sounds, and chatter on incessantly as though indulging in a lengthy conversation, the main statement of which is undoubtedly "This is MY tree". With intense aggression, they chase away other birds, including those of their own species that have the temerity to consider that there might be enough sweet floral nectar for all to share, but when food is involved, noisy friarbirds rarely have any concept of sharing.

They form long-term mating pairs, and as the breeding season approaches, they set to work and laboriously rip long strips of barks from the trunks of melaleuca trees, for this is the basic material with which they construct their cup-shaped nests. The bark, together with grass, is bound with

Left: A noisy friarbird with callistemon flowers in the author's garden.



A noisy friarbird collecting bark for its nest from a melaleuca tree in the author's garden.



A noisy friarbird feeding on the flowers of a bottlebrush (*Callistemon*) in the author's garden.



Noisy friarbirds cooling off at a bird bath in the author's garden.



sticky strands of cobweb, and when the eggs are finally laid in the nest that's well camouflaged among the thick foliage of trees, the bush becomes a quieter place as noisy friarbirds, for a brief period of time, have very little to say.



SCARLET HONEYEATER

Myzomela sanguinolenta

The scarlet honeyeater is unquestionably a bird that once seen is never forgotten, and anyone who fails to be awestruck by his or her first glimpse of this small but spectacular bird would have to be as emotive as an inebriated weevil. Its stunning red plumage has earned it the alternative names of 'blood bird' and 'crimson honeyeater', but such simplistic descriptions fail to do justice to the scarlet honeyeater's true beauty.

Being one of Australia's smallest honeyeaters, and the fact that it spends much of its time foraging for food in the foliage of tall trees are two good reasons why the scarlet honeyeater is not always easily seen, but its musical song provides a clue that it's in the vicinity.

Its range extends from Cooktown in northern Queensland to the Gippsland area of Victoria, but when the icy winds of winter begin to whip across the landscape, the scarlet honeyeater abandons the southern section of its range and heads north to a warmer climate where it makes itself at home in coastal and hinterland forests and woodlands.

It's the male of the species that makes the greatest impression on anyone fortunate enough to see him darting through the vegetation, and with his vivid red head, black back, dark wings, and red chest that blurs into the light brown plumage of his under parts, he's a very handsome character indeed. Females are far less colourful however, with their dull brown plumage enhanced by little more than a dusting of red across the throat, but juvenile

Right: A male scarlet honeyeater at a water feature in the author's garden.







males, while initially as drab as females, can be seen with varying amounts of red feathers as they gradually don the stunning attire that will guarantee that, as adults, they will make a memorable impression on all who see them.

The scarlet honeyeater's relatively long curved bill is the perfect tool for accessing the nectar hidden within

Above: A female scarlet honeyeater in the author's garden.

Opposite page: A noisy miner feeding on the flowers of an aloe in the Bundaberg botanic gardens in Queensland.

the flowers of native trees, such as melaleucas and eucalyptus that are at the top of this tiny bird's menu, and although nectar is the main focus of its feeding activities, it also dines on small fruits and insects.

This diminutive bird prefers to forage, either alone or with a mate, in the upper levels of the forest canopy where it flutters quietly among flowers and foliage, but life isn't always harmonious in the treetops, for these glorious birds routinely attract the attention of the neighbourhood bullies and are frequently attacked by larger and more aggressive honeyeaters, such as friarbirds, with whom they compete

for often limited sources of food.

The scarlet honeyeater's small cup-shaped nest, which is created from bark and grass bound together with cobweb and suspended from a horizontal branch or concealed in the fork of a tree, can be the nursery for up to three broods of chicks in a single season, and that means that, with the species being far from rare, anyone who's in the right place at the right time and has their eyes wide open will be treated to a glimpse of one of Australia's most spectacular wild residents.









NOISY MINER

Manorina melanocephala

The noisy miner's common name is most appropriate, for this is a bird that's rarely quiet for more than the fleeting moment that passes as it flutters from one branch to another. These predominately grey birds are also known as 'happy family birds', but when in a group their repetitive and rowdy disputes shatter any concept of social harmony.

It's one of the most common honeyeaters in eastern Australia, and inhabits open woodlands in an area that stretches from northern Queensland to Tasmania and west to south-eastern South Australia.

The plumage of the noisy miner is far from colourful, and with mottled dark grey to brown plumage on its back and wings, a neck and under parts that are a lighter grey fading to white towards the tail, and dark grey feathers on its crown and cheeks it wins no prize for glamour. But Mother Nature has bequeathed a bit a bling to brighten its attire, and with a bright yellow bill, bright yellow legs, and an equally vivid yellow patch of bare skin behind each eye, this relatively small bird is unmistakable.

Noisy miners are bold and aggressive birds, and will come together as a raucous mob to attack predators, such as snakes, goannas, or domestic dogs and cats that offer even a veiled threat. And if other birds inadvertently intrude into their territory, they have no hesitation, either as a group or as individuals, in launching a vigorous and unprovoked attack, and will frequently chase away much larger birds, including kookaburras and birds of prey. The message is soon passed around, and the domineering attitude of noisy miners ensures that other birds steer well clear of areas that are inhabited by a far from welcoming group of these common honeyeaters.

In keeping with their highly social nature, they usually feed in groups rather than on their own. The nectar-

rich flowers of grevilleas are among their preferred food sources, and with the birds having become well adapted to urban life, there's a good chance that they'll appear in any city park or garden where flowering trees and shrubs are grown.

Noisy miners are confident and cheeky characters, and will fly into houses with open doors to seek out sweet foods, or snatch a meal of bread or jam from a picnic table, but like many honeyeaters, they'll also devour insects, particularly during a drought or at other times when there's a limited supply of fruit and flowers.

They breed in colonies, and while it's the female who constructs the nest from twigs, grass, and leaves, and then lays and incubates the eggs, it's during the breeding season that the birds finally begin to work together as a cohesive family unit. Several of the males within the group share the essential chore of feeding the chicks, thus ensuring that the young birds have an optimum chance of survival, and with more than one brood frequently reared during a single season, it's one time when the name 'happy family bird' seems quite appropriate.



NEW HOLLAND HONEYEATER

Phylidonyris novaehollandiae

The New Holland honeyeater is an attractive small bird that's found throughout southern Australia, from southern Queensland to north of Perth in Western Australia, and also in Tasmania, where it inhabits coastal heaths, open woodlands, forests, and thickets of vegetation that border wetlands.

It's a hyperactive bird that rarely sits still for more than a microscopic speck of time, but a quick glimpse of the New Holland honeyeater is usually enough to see that it has a white breast that's

Left: A noisy miner feeding on grevillea flowers in the Bundaberg botanic gardens in Queensland.



streaked with dark brown to black, and vivid yellow patches on its lower wings and tail. A more detailed view reveals that it has brown upper wings and back, a black head with white patches, a curved bill, and white eyes, and although both sexes are of a similar appearance, juvenile birds have lighter brown plumage and grey eyes.

The New Holland honeyeater is a master of the skies and feeds on airborne insects that are usually caught while this skilful hunter is in flight. It can quickly snatch and devour a single victim, but when the opportunity arises, this agile honeyeater will dive into the midst of a swarm of minute insects, catch several in little more than the blink of an eye, and grasp them all

securely in its bill until it settles down to enjoy its feast.

Insects and spiders form a major part of the diet of New Holland honeyeaters, but these attractive birds, which usually feed in small groups, also sip the copious nectar donated by flowers, and will invite themselves to dine in any garden where native plants, particularly grevilleas, banksias, and eucalyptus trees, are blooming.

They breed whenever adequate supplies of food are available and, using bark, soft grasses, and strands of cobweb, they construct their cup-shaped nests in shrubs or low trees. The male energetically defends the nest and his favoured food sources while his mate incubates the eggs, and in good

years a pair may raise two or three broods of chicks, thus ensuring that the future of their species is guaranteed.



WHITE-PLUMED HONEYEATER

Ptilotula penicillatus

The white-plumed honeyeater, one of Australia's smallest honeyeaters, has been christened with the Latin species name of '*penicillatus*', which means 'having tufts of fine hair', but rather than hair, this attractive bird has a streak of white feathers across its neck, and it's this feature that has given this tiny creature its colloquial name.

It's a species that's common



throughout mainland Australia, except in the tropical north, in the far south-west, and in the most arid regions. River red gums are a prominent feature of its favoured haunts, which include forests and woodlands that are close to waterways or wetlands, and this diminutive bird can also be found in urban parks and gardens, and in the remnants of native bushland that border many city and suburban areas.

Both males and females are almost identical in appearance, with each having a brown back, a similarly coloured tail and wings that are edged with yellow, creamy brown under parts, and a yellow head with distinctive white neck plumes. And while juvenile birds have plumage that's similar in many

respects, they're easily distinguished from adults as they lack the white plumes of their parents and have a pink to orange bill, as opposed to the black bill of mature birds.

White-plumed honeyeaters might initially be viewed as the quiet, inoffensive, and meek and mild members of the neighbourhood, but that's certainly not a true representation of their character, for these are gregarious and hyperactive birds that, whether alone or in a small group, are always on the go. They flit from tree to tree, constantly jiggle around when perching, and perform acrobatic antics as they search among the foliage of trees and shrubs for flowers that will provide them with a feast of nectar.

And when the need arises to defend their territory and their sources of food, they demonstrate a surprisingly aggressive and fearless nature as they ensure that other birds, including those of far greater size, are well aware that these humble little birds rule the roost.

They're often the first to raise the alarm and to alert the wildlife community to a potential threat from a predator, such as a reptile or a raptor

Above: A white-plumed honeyeater at an outback camping area in Queensland.

Opposite page: A New Holland honeyeater near the Wombeyan caves in New South Wales.



that may be intent on snatching eggs or chicks from a nest. And when danger arrives on the doorstep, the soft chirping voices of white-plumed honeyeaters become loud alarm calls as they group together to repel the enemy and prove that there's safety in numbers.

They feed on nectar and fruit, on insects that they often catch in the air, and on seeds that they discover as they forage on the ground, and when the time is right, males put on an entertaining aerial performance to attract a mate. They flutter and sing above the treetops before vanishing among the foliage of the acacia or casuarina trees in which the females

will build their nests that, like those of most Australian honeyeaters, are created from fragments of grass, bark, and cobweb.

A female may lay two or three clutches of eggs each year, but with several species of parasitic cuckoos commandeering the nests of white-plumed honeyeaters, the story of this attractive bird doesn't always have a happy ending as its eggs are often destroyed and replaced by those of the cuckoo, with the tiny honeyeater unwittingly becoming a foster mother to the chick of one of her greatest enemies.



SINGING HONEYEATER

Lichenostomus virescens

The singing honeyeater, despite its common name, has a repertoire of calls that are far from melodious, and it welcomes a new day, often before sunrise, with a noisy dawn chorus that goes on interminably.

Although it inhabits most mainland areas, with the exception of eastern and northern coastal regions, this charismatic little bird has a preference for arid inland areas, but it's far from fussy about where it lives, with low bushland, open woodlands, especially those dominated by acacia trees,



vegetation bordering wetlands and creeks, and shrubs in urban parks and gardens all being quite acceptable habitats for this endearing character.

With a brown head and back, brown wings tinged with yellow, a white throat, and a chest that's white streaked with brown, the singing honeyeater is not the most ornate of birds, but a black streak above each eye, from the bill to the neck, and a yellow streak below each eye ensure that it stands out from the crowd. And although young birds have similar plumage to adults, the colouring of their heads and face stripes is less vivid.

Singing honeyeaters, which are

happy to feed on their own or in a small family group, forage on the ground and are continually coming and going among the foliage of low shrubs and trees in their search for nectar-producing flowers, and for the native fruits, insects, spiders, and caterpillars that are also important components of their diet. They're also quite partial to the seeds of *Asparagus medeoloides*, and are believed to have played a role in the spread of this introduced plant that's commonly known as Bridal Creeper and that has become one of the worst weeds in Australia due to its invasive nature and its detrimental impact on the environment. They've developed

a taste for other foods too, and will gorge themselves on the sweet grapes of vineyards, and these bold little birds, which often appear as uninvited guests at a picnic or camping area, have no hesitation in scrounging for food and stealing a snack from an unguarded

Above: A singing honeyeater at a camping area near Alice Springs, Northern Territory.

Opposite page: A singing honeyeater among the flowers of a native shrub, *Templetonia retusa*, at a camping area on the Yorke Peninsula in South Australia.

table.

They're not aggressive towards humans, but if they sense any hint of danger from other birds or animals, they'll attack as a mob and will also vigorously chase other birds away from any food sources or territory that they regard as their personal kingdom.

Like most other honeyeaters, the singing honeyeater builds a cup-shaped nest from grasses and bark woven together with strands of cobweb and lined with animal hair. Unfortunately such a cosy nest is exactly what pallid cuckoos require for their eggs, and singing honeyeaters often find themselves raising the chicks of this parasitic bird instead of their own.

SPINY-CHEEKED HONEYEATER

Acanthagenys rufogularis

Spiny-cheeked honeyeaters can be found across much of mainland Australia, with the exception of northern tropical and eastern coastal regions, and the extreme south-eastern and south-western corners of the continent. Woodlands that hem meandering rivers and that provide a shaded retreat in arid inland regions, bushland dominated by mallee and acacia scrub and that are carpeted by porcupine or spinifex grass, and orchards are among the varied habitats of these attractive birds.

This is no gaudy rainbow-coloured honeyeater, but it displays a subtle beauty with distinctive features and delicate hues that contrast with the mottled grey-brown plumage of its head, back, and wings, and its cream under parts that are streaked with brown. It owes its common name to the spiny cheek patches that are white with a dash of yellow, and with a reddish orange throat and upper chest, a pink bill that's tipped with black, and pale blue eyes, it's a bird that's certainly worth more than a casual glance.

It's a shy character that's often heard before it's seen, and it's usually the bird's

quiet twittering as it forages among the foliage of trees, together with a cacophony of strange sounds and whistling noises, that gives its presence away.

Like most honeyeaters, it feeds on the nectar of flowers, but with fruit forming the major part of its diet, the spiny-cheeked honeyeater is routinely on the move in search of seasonal banquets. It's very partial to the berries of mistletoe, but when its favoured foods are unavailable these attractive honeyeaters will feast on insects, which they often catch in mid-air, and they have no qualms about eating small lizards or the tiny chicks of other birds, and it's their varied diet that allows populations of spiny-cheeked honeyeaters to thrive in a wide range of habitats.

When they're ready to breed, they gather fragments of grasses and other plants to build a deep cup-shaped nest that's held together with sticky strands of cobweb, and begin the task of raising the next generation of their species that will continue to bring visions of beauty to the Australian bush.

OLIVE-BACKED SUNBIRD

Nectarinia jugularis

The first glimpse of a male of this species is a memorable moment for anyone with a passion for nature's wild beauty, for it's a far more spectacular creature than its common name suggests.

This is a bird of the tropics, with its range limited to the north-eastern coastal region of Queensland, from the tip of Cape York south to around Gladstone. And although its natural habit is among the trees and shrubs of wetlands and mangrove swamps, the olive-backed sunbird is also a regular visitor to urban parks and gardens

Right: A spiny-cheeked honeyeater at a camping area in Currawinya National Park in outback Queensland.





that offer adequate sources of food and water, together with vegetation where this gorgeous bird can roost and find shelter.

When the male of the species comes into view, it's impossible to ignore his presence, for with a gleaming swathe of metallic dark blue to purple plumage extending from the chin to the upper breast, and the rest of his under body being bright yellow, he's a dazzling creature indeed. His back and wings are a more subdued yellowish brown, and he has a dark curved bill that allows him to effortlessly reach the nectar of a wide range of flowers. The female of the species has a similar appearance in most respects, but lacks the iridescent colouring of her mate, with all her under parts being yellow.

Olive-backed sunbirds not only feed on the nectar-laden flowers produced by a wide range of native trees and shrubs as well as exotic garden plants, but also feast on insects that they frequently catch in flight, and on spiders that the birds, while hovering, skilfully pluck from their sticky webs. And these confident little birds, which display minimal fear of humans, will take advantage of open doors and windows and fly into houses and sheds in search of any insects or spiders that might be lurking in dark or dusty corners.

Breeding pairs vigorously defend their territory and ultimately create a highly distinctive nest that's hung from a tree or, when constructed by birds that have taken up residence in an urban area, can be suspended from a man-made structure, such as the exposed beam of a verandah, the edge of a gutter, or even a power line. The nest, which is made of bark, grass, and leaves that are held together with cobweb, is of a long and complex design with a roofed entrance on one side and a central nesting chamber, and is as unique and distinctive as its colourful occupants.



Right: A male olive-backed sunbird near the Queensland city of Cairns.







WHITE-THROATED HONEYEATER

Melithreptus albogularis

Populations of white-throated honeyeaters inhabit a wide coastal strip that stretches from the Kimberley region of Western Australia, into the Northern Territory, and down the eastern side of the continent as far as northern New South Wales. They make themselves at home in open woodlands and forests, particularly those close to permanent sources of water, and will happily take up residence in urban parks and gardens if water and an adequate supply of food, provided by flowering shrubs and trees,

such as grevilleas, melaleucas, and callistemons, is available.

The white-throated honeyeater has white plumage from the throat down to the underside of the tail. Its back is olive green to brown with the wings being slightly darker, and the head and neck are as black as ebony. A narrow white band of feathers wraps around the nape of the neck, and there are small white skin patches above the bird's eyes. And although males and females are of similar appearance, juveniles are easily distinguished by the drab brown plumage on the crowns of their heads.

These gregarious birds are usually seen in small flocks, but they can be

argumentative among their group and aggressive towards birds of other species that come too close to a source of water or food that the white-throated honeyeaters are reluctant to share with anyone.

Nectar is high on their list of favoured foods, followed by fruit, insects, and spiders, and when it's time

Above: A female olive-backed sunbird at a camping area near Cairns in northern Queensland.

Opposite page: A white-throated honeyeater feeding on callistemon flowers in the author's garden.





A white-throated honeyeater
in the author's garden.







for a snack they put on an entertaining performance as, with acrobatic antics, they clamber among foliage and flowers, often hanging upside down from fragile stems to reach almost inaccessible blooms.

They have a passion for water, and not merely to quench their thirst, for they love to bathe, and on chilly winter days and in searing summer weather they will enthusiastically and repetitively dive into the water of a natural pool or garden bird bath until their feathers become saturated. And in such situations they are usually at the top of the pecking order, with other birds having to wait their turn until the white-throated honeyeaters temporarily relinquish ownership of the water and retreat to the shelter of a nearby shrub or tree to preen their feathers and ensure that they look as glamorous as ever.

When they're ready to breed, they construct the typical honeyeater style of nest, a cup-shaped structure of bark that's woven together with strands of cobweb, and settle down to produce the next generation of what must be the cleanest birds of wild Australia.



RED WATTLEBIRD

Anthochaera carunculata

The red wattlebird, which is one of Australia's largest honeyeaters, was first described by John White who, in his 'Journal of a Voyage to New South Wales', which was published in 1790, referred to it as 'the wattled bee-eater'. Today, its many common names include gillbird, barkingbird, muttonbird, and wattled honeyeater, but red wattlebird remains its most accurate and descriptive name.

Its species name '*carunculata*' is a derivation of a Latin word meaning 'a piece of flesh', and the flesh to which it refers is the bird's distinctive red wattle, or caruncle, that hangs from each side of its neck and that is believed to play a role in attracting a mate.

The red wattlebird's range extends throughout the southern areas of the Australian mainland and includes

south-eastern Queensland, New South Wales, Victoria, South Australia, and south-western Western Australia where it lives among forests and woodlands, particularly those where eucalypts are the dominate tree species. Like many native birds, it's taken advantage of the changes that human habitation has wrought on the landscape, and has made itself at home in orchards and vineyards, and with urban parks and gardens being among its favoured haunts, the red wattlebird has become one of the most common honeyeaters in Perth, and is a species that's also very familiar to residents of urban areas in south-eastern Australia.

It has dark brown to grey plumage with prominent white streaks on its back and its wings and similar, though lighter colouring, on most of its under parts, with the exception of its belly that is daubed with yellow. Its long tail is greyish brown with a white tip, the crown of its head is dark brown, and it has a black streak above each of its dark red eyes, with white patches below the eyes. The most distinctive feature of this honeyeater however, is the red wattle on either side of its neck. Both sexes have similar plumage, but that of juvenile birds is lighter, and they display less prominent wattles and have brown eyes.

Anthochaera, the name of the genus to which the red wattlebird belongs, is derived from two Greek words, '*anthos*' meaning 'flower', and '*khairo*' meaning 'to enjoy', and there's no doubt that these large honeyeaters enjoy the flowers that Mother Nature has generously provided for their survival. In common with other honeyeaters, the red wattlebird has a specialized tongue that enables it to extract the nectar from flowers. It can be extended well beyond the point of the bird's bill, and is divided at the end to form a brush-like tip that has more than a hundred tiny bristles that efficiently soak up every minute drop of nectar.

Left: A red wattlebird at the coastal town of Mallacoota in Victoria.

Native eucalypts, banksias, bottlebrushes (*Melaleuca* and *Callistemon* species), grass trees, (*Xanthorrhoea* species), and emu bushes (*Eremophila* species), are at the top of the red wattlebird's list of must-visit plants when it's searching for nectar and, like most honeyeaters, it's every gardener's and farmer's friend, for although it routinely dines on berries and fruit, it also feasts on a wide range of insects, including many pest species, most of which it catches either while in flight or as it forages on the ground.

Red wattlebirds aggressively defend both their territory and the most desirable food producing plants from other honeyeaters, but during the breeding season, after having constructed their bowl-shaped nests in the forks of eucalyptus trees, they're the easy victims of the neighbourhood con artists. Any pallid cuckoo that's looking for a cosy nest in which to lay her eggs will have no hesitation in taking over the nest of a red wattlebird and replacing the existing eggs with her own. Newly hatched chicks, whether those of a parasitic cuckoo or the wattlebird's own offspring, inevitably have a ravenous appetite, and the parent birds know exactly how to satisfy their seemingly insatiable hunger. They frenetically search for spiders, which they snatch from their sticky webs, and thus provide their young with a healthy and nutritious diet in the critical early phase of their lives.



Right: A red wattlebird feeding on the nectar of flowers of a eucalyptus tree at the coastal town of Mallacoota in Victoria.



