



### **Aerial view of Creek's Bend and the Toonumbar Valley**

Looking north across Creek's Bend and the World Heritage Toonumbar National Park to the Border Ranges and Queensland.

The Iron Pot Creek water catchment is entirely within the Toonumbar Valley and the sources of the creek are springs within the rainforests.

Downstream from Toonumbar Dam, the Iron Pot Creek joins the Richmond River which flows in to the Pacific Ocean at Ballina.

## Toonumbar's Open Forest Birds

**Barn Owl:** This large light grey bird may be seen in a flurry of wings in your headlights at night.

**Bar-shouldered Dove:** This quiet grey and brown dove is commonly seen walking around on the ground or in the gardens at Creek's Bend.

**Bell Miner (Bellbird):** This vocal but physically undistinguished bird will be recognized in the canopy by its distinctive tinkling or bell-like calls.

**Black Cockatoo:** Red-tailed, Yellow-tailed or Glossy; Spectacular acrobatic bird with an eerie call: usually travels in groups of 2-3.

**Black Duck:** A brown duck with striking black and white stripes across its face.

**Black-faced Cuckoo-Shrike:** A larger grey bird with black face and throat.

**Black-faced Flycatcher:** Grey bird with striking black face and throat and orange belly.

**Black-shouldered Kite:** An impressive smaller raptor with distinct white and black markings (black across the back of the wings).

**Blue-faced Honeyeater:** An active and curious olive-green bird with a brilliant blue eye patch on the male. Loves to eat guavas and other fruit.

**Bronze Cuckoo:** Attractive green/bronze bird, horizontal stripes on chest.

**Brown Honeyeater:** A smaller drab olive honeyeater with a curved beak and bright yellow ear coverts which feeds on flower nectar and insects.

**Butcher-Bird (Pied):** Short-legged black and white bird with a melodious song.

**Cattle Egret:** These stately white birds escort the cows around the paddock looking for tasty insects turned up in the grass.

**Crimson Rosella:** Chosen for Creek's Bend logo because of their bright red and blue plumage and friendly nature.

**Channel-billed Cuckoo:** Active at Creek's Bend in October, these large white/grey birds have a loud echoing call and love to sit in the fig trees.

**Cormorant:** moderate-sized black bird with hooked beak, also fishes.

**Crested Pigeon:** Has a distinctive pointed black crest on top of its head.

**Crow:** A large jet black bird with white bases to feathers which might be seen when the wind blows the feathers apart. Loud cawing call.

**Currawong:** Mainly black crow-like bird, travelling in large groups.

## Toonumbar's Open Forest Birds (Continued)

**Dollar Bird:** This green/blue bird with a bright orange beak can be recognized in flight by a large white circle under each wing, like a silver dollar.

**Drongo:** Black bird with long forked fishlike tail; migrates here from Oct. to March.

**Eastern Rosella:** Cousin to the Crimson, with yellow and green colouring.

**Eastern Spinebill:** A small long-billed honeyeater with a chestnut collar.

**Fairy Wren (Superb Blue Wren):** Tiny bird with tail cocked, and blue and black head.

**Golden Whistler:** The male is a bright yellow on the body with a black head and white throat. A solid bird with a thick beak and a beautiful song.

**Grey Butcher-bird:** A light grey-backed butcher-bird.

**Grey-crowned Babbler:** Curved beak, black and white face; in noisy groups.

**Grey Fantail:** Grey and white fantail – a small active bird that fans its tail.

**Jabiru Stork:** Large black and white stork seen in Upper Valley dam.

**Kingfishers:** (Azure and Sacred): Bright turquoise or blue fishing birds who patrol the creek looking for small fish and insects.

**King Parrot:** Royalty of the property, with striking red and green colours.

**Koel:** Male glossy black; female with striking spots, barring all over with dark head.

**Kookaburra:** Can be tame in the garden, looking for worms or grubs.

**Leaden Flycatcher:** A flycatcher with a flattened crest and bristles around the beak for catching insects. The male is dark grey and white and the female brownish grey with a rust coloured throat.

**Lewin Honeyeater:** A white-gaped honeyeater (white line extending past the beak) with a blue eye and lemon yellow ear patch.

**Magpie (Black-backed):** Black and white bird with red eye; common.

**Mistletoe Bird:** A small bird with a stumpy tail and thick bill. Feeds mainly on mistletoe berries and insects. The male has a blue-black back, red breast and undertail, white belly; the female has gray back, red undertail.

**Monarch Flycatcher (Black-faced):** Slow moving insect hunters in the denser forests.

**Moorhen:** A midnight blue wading bird seen around the dams.

**Noisy Friar Bird:** Homely-looking grey bird with vulture-like head but beautiful song.

## Toonumbar's Open Forest Birds (Continued)

**Noisy Miner:** Small grey bird with black and yellow eye patch; bold and noisy.

**Pardalote:** Small colourful birds with short tails. Both Spotted (white spots on black wings and red rump) and Striated (white stripes on black wings/buff above beak).

**Peewee (Magpie Lark):** Black and white with thin legs and beak; attacks windows.

**Pheasant Coucal:** Black/brown bird with large tail often seen along the road from town; prefers to run rather than fly.

**Quail:** Small, stubby-tailed ground bird seen along the road.

**Rainbow Bee-eater:** Brightly coloured green and gold, 2 long black spines in tail.

**Rainbow Lorikeet:** Another bright multicolored parrot who loves fruit.

**Red-backed Wren:** A small black wren with upright tail and red back.

**Red-browed Finch:** Tiny brown bird with bright red forehead; seed-eater.

**Restless Flycatcher:** A black and white flycatcher with a white throat.

**Rose Robin:** A pink-breasted robin (male) with dark grey back. The females are grey-brown with two white bars across the wing and a white spot above the beak.

**Scrub Wren:** The Whiter Browed Scrub Wren can be seen in the dense understory of the forest.

**Shrike-Thrush:** The Grey Shrike-Thrush is a grey stout bird with white lores between its thick black beak and black eye, and melodious song.

**Shrike-Tit:** A yellow-breasted bird with a black and white crest and powerful beak, which it uses to pull bark from trees.

**Silvereye:** Grey-breasted or Eastern Silvereye with white eye ring and grey back. They feed on insects, fruit and nectar.

**Southern Figbird:** Males have distinctive red eye patches on a black head.

**Spur-winged Plover:** Active ground birds who defend their paddock nests with many antics, including "broken wing".

**Straw-necked Ibis:** Paddock bird with long curved beak; hunts for insects in the grass; groups fly in slow circular passes until they all land.

**Striated Thornbill:** A small active olive green bird with a streaked forehead and breast. They hover amongst the leaves, looking for insects.

**Sulphur-crested Cockatoo:** Raucous calls and flashing yellow crests lets everyone know when they arrive.

**Wedge-tailed Eagle:** Spectacular raptor with wedge-shaped tail seen in flight; quite impressive size when seen on the ground.

**Welcome Swallow:** Small black and white birds who dart through the air after insects and want to nest in every building on Creek's Bend.

**Willy Wagtail:** Small bird with black back and white chest; builds nests around the house and uses spider webs to line them.

**White-faced Heron:** Grey heron with long legs and neck, white face; hunts insects in the paddocks and roosts in trees.

**Wood Duck:** Wild ducks seen on most of the dams and along the creek.

**White-breasted Sea Eagle:** Cousin to the Wedge-tail, but grey and white.

### Toonumbar's Rainforest Birds

**Australian Brush Turkey:** A large bird with a distinctive red head & a vertical tail fan uses its feet to rake the forest floor in search of insects. These huge nesting mounds are often one metre high by three metres in diameter & the male bird tends the mound to ensure that the temperature does not exceed 38°C while the eggs incubate. Be sure not to disturb the nest because the birds re-use these mounds to hatch successive generations of chicks.

**Brown Pigeon:** The plain name of this bird does not do justice to the beautiful shades of apricot and browns in its plumage. Plentiful in the Toonumbar area.

**Crimson Rosella:** A very common & extremely attractive bright red and blue bird.

**Eastern Whipbird:** The male is one of the noisiest birds of the rainforest & delivers the familiar whipcrack sound & a variety of whistles. It is an insect-eater & spends much of its time turning over leaf litter to expose its prey.

**Eastern Yellow Robin:** One of the most inquisitive robins, feeding mainly on the ground, it perches sideways on a tree trunk, to drop down & catch insects. Its yellow breast is distinctive.

**Flame Robin:** The male is grey and white on the back and red on the throat and breast. They often catch insects in the air.

**Green-wing Pigeon:** A brown fruit-eating pigeon with distinctive bright green wings.

**Green Cat Bird:** This bird will be heard more than seen, and its distinctive cat-like "yowl" is unmistakable. It feeds mainly on fruit & some seeds & insects.

**Lewin's Honeyeater:** A beautiful olive green bird with a yellow ear patch & a loud staccato-like "dot-dot-dot" call.

## Toonumar's Rainforest Birds (Continued)

**Logrunner:** These birds seldom fly & spend most of their time on the forest floor looking for insects. They prefer fern-covered banks along watercourses & places where mosses abound & sunshine rarely penetrates.

**Noisy Pitta:** This multicoloured bird is actually quiet and shy and can only be seen in quick glimpses on the forest floor.

**Olive-backed Oriole:** Medium sized bird with olive back, streaked breast and reddish bill and eye. They like figs as well as other fruit and insects.

**Paradise Riflebird:** A metallic green & black bird of paradise that feeds high in the canopy. Its cup-shaped nests high in the canopy are often decorated with cast snake skins.

**Regent Bowerbird:** The male is golden yellow & black. It feeds on fruit & insects.

**Rufous Fantail:** Like all fantails, this active little bird likes to dash about, flashing its reddish-brown rump & upper tail in a fan.

**Satin Bowerbird:** A plentiful species on Creek's Bend; the male a shiny midnight blue while the female is olive green with a barred chest. They love the fruiting fig trees. Their ground bowers are filled with a collection of blue objects, re-used each year for mating.

**Topknot Pigeon:** A nomadic bird appearing at times in considerable numbers when particular fruits are ripe.

**White-browed Scrub-wren:** A small ground-feeding bird often seen in rainforest undergrowth. It has a white brow, yellow eye, and black lores.

**White-headed Pigeon:** Lives mainly on fruit, particularly the smaller berries of vines & trees of the lower stages of the rainforest but also eats some seeds.

**Wompoo Pigeon:** A brilliantly coloured bird which is seen in the canopy feeding on fruiting trees. When flying, it shows bright yellow beneath the wings.

**Wonga Pigeon:** A dark grey pigeon with attractive lacy white abdomen.

**Yellow-throated Scrub-wren:** A small rainforest wren with a yellow throat and brow, and black around its eye.

**Antechinus (marsupial mouse):** A small carnivorous marsupial mouse. The males die after mating but the females live for a few seasons.

**Bush Rat:** Common in rainforest, wet, well-vegetated gullies & along creeks with shrubby vegetation on the banks. A dark brown in colour.

**Common Ringtail Possum:** Distinguished by its tapering white tipped prehensile tail. It builds a round nest of sticks & has litters of two to three young at each breeding.

**Dingo:** Native dog. Ginger in colour, howls instead of barking.

**Eastern Grey Kangaroo:** The only local kangaroo, large grey macropod; rare.

**Echidna:** The spiny anteater can sometimes be found walking along the paddock. When frightened, he will immediately dig himself into the ground.

**Flying-foxes:** depend on rainforest food for survival. In the warmer months, the Grey-headed Flying-fox, the Little Red Flying-fox & the Black Flying-fox gather in large camps in the rainforests or in fruiting trees, like the figs at Creek's Bend.

**Gliders (Sugar, Yellow-bellied, and Greater):** These marsupials have gliding membranes & long bushy tails which help them glide from tree to tree. They feed on nectar and insects and can scratch the bark of gum trees so they can lick the sap.

**Koala:** Sightings of koalas in the area are rare but they can be heard in the trees.

**Long-nosed Bandicoot:** Commonly seen at night; leaves holes dug in the ground.

**Micro-bats (Bent Wing, Little Forest, Gold-tipped):** Tiny echo-location bats that fly the corridors of forest and creeks.

**Mountain Possum:** Can be black or grey. The young ride on the backs of their mothers. They are seen at night in shrubs or on low branches of trees.

**Platypus:** If you quietly sit at dusk next to the "Deep Hole" which is just a few hundred metres from your cabin at Creek's Bend you might see the resident platypus feeding. Please do not fish in the Deep Hole as lost tackle might injure the platypus.

**Red-necked Pademelon:** Small dark brown macropods; they come out of the rainforest & feed close to the edge of the road in the forest from the late afternoon.

**Red-necked Wallaby:** Our most common mammal; lives in large family groups around the homestead; used to visitors. Grey/tan with black stripe on face, red shoulder.

**Spotted-tailed Quoll:** Olive-grey marsupial with white spots down its back and on its tail. It is nocturnal and quite shy.

**Swamp Wallaby:** Larger dark brown wallaby seen in Toonumbar State Forest.

## Toonumbar's Reptiles & Amphibians

Most of the frogs are nocturnal & therefore not necessarily seen on a daytime visit. In the rainforests look out for shells of the Giant Snail in the leaf litter.

**Carpet Python:** Our largest snake, this non-poisonous python has distinctive large yellow patterns on his dark green skin and is not at all aggressive.

**Easter Froglet:** A small ground dwelling frog.

**Eastern Water Dragon:** These quiet lizards like to stand and sun themselves in warm places or can be seen on the creek's edges.

**Leaf Tail Gecko:** A small grey lizard with large toe pads for clinging upside down.

**Goanna:** These large lizards can reach impressive sizes of about 1 1/2 metres but most are under 1 metre. They are harmless and have beautiful patterns on their skin.

**Green Tree Frog:** Beautiful shiny green frog, which can get quite large. Often hunts for bugs at night on windows.

**Green Tree Snake:** Harmless, thin snake, green on the back and yellow or cream underneath. Often seen up in trees.

**Land Mullet:** Seen in rainforest this largest of the land skinks has a glossy appearance.

**Red-bellied Black Snake:** A shiny black snake with a red belly. This snake is poisonous but not aggressive, and will avoid people if possible.

**Rough-scaled Snake:** A smaller snake with an olive green body and scales that stand out distinctly. Poisonous but rare.

**Whip Snake:** Not a dangerous snake (mildly poisonous) and small, usually brown or tan, with a yellow line around its eye.

## A BRIEF HISTORY OF TOONUMBAR'S RAINFORESTS

From the early 1800's Red Cedar rainforest timber was much sought after and by the mid 1800's the Richmond River area in north-eastern New South Wales was providing two thirds of Australia's exports of Red Cedar. An 1861 Act of Parliament opened the rainforests to be cleared for farming. The effect on the rainforests was devastating. The largest area of lowland subtropical rainforest in Australia known as the "Big Scrub" once extended from a few kilometres east of Lismore to the edge of the coastal plain inland from Ballina and the hills overlooking Byron Bay. By the turn of the century the lowland subtropical rainforest of the Tweed Valley was gone, the Big Scrub's original 75,000 Ha was reduced to 300 Ha and the cedar getters had moved to Kyogle.

Early last century Toonumbar's Murray Scrub subtropical rainforest was selectively logged using bullock teams. The NSW Forestry Commission was established in 1916 and more rainforests were clear felled and converted to pine plantations.

In 1982, what is now the Toonumbar National Park's Murray Scrub World Heritage rainforest came close to being destroyed when Forestry proposed to log 90% of the canopy to supply concrete form board. Local protests and a narrow decision by the NSW State Government saw the Murray Scrub declared a Flora Reserve. Large areas near Middle Spur road at the head of the Iron Pot Creek were heavily logged during the 1950s and other areas of forest have been logged using the 50% canopy retention method. The reduction of canopy in the eucalypt forests has resulted in a surge of exotic weeds like lantana, which have filled in the understorey of much of the forest areas. At the same time, removal of cattle grazing in the grassy forests, and reduction of burning, has increased weeds which have out competed native species.

The Murray Scrub is now protected from logging, but a new threat has developed in the last 10 years. Much of the blue and flooded gum forest that surrounded the rain forest and buffered it from incursions of fire, weeds or drought has died due to Bell miner Associated Dieback (BMAD). The exposed edges of the Murray Scrub are under threat from future wildfires, fuelled by the massive lantana hedges, and drought which could cause the rainforest to retreat.

The Department of Environment and Climate Change (DECC) is mindful of the future threats to the Murray Scrub, and there are plans to work with the community protect and maintain this small but highly significant remaining remnant of our local rainforest.

## Subtropical Rainforest Flora

Subtropical rainforests are defined by an abundance of buttressed trees, strangler figs, palms, large vines, epiphytes, large-leaved herbs & ground ferns. The tree canopy usually consists of two or three layers of 40-60 different tree species. In the Toonumbar forests Booyongs, Yellow Carabeen, Pigeon-berry Ash, Teak, Rosewood, Giant Stinging Tree, Strangler Figs, and Red Cedar are common in the canopy.



Subtropical rainforests require a high rainfall and in Toonumbar they tend to grow on rich volcanic basalt soils in sheltered valley areas. As you step from dry eucalypt forest into the cool realm of the rainforest the first impression is of a rich abundance of plant life, from the delicate ferns on the grounds to the towering giants of the canopy.

The Subtropical Rainforests found in the Toonumbar National Park are amongst the most complex found in New South Wales and closely resemble the tropical rainforests. You will see many trees supported by large buttresses. Strangler figs are giants of the forest that start life as a seed excreted by birds high in a tree. From there they send a root to the ground and grow until they eventually completely envelop the host tree which dies & rots away.

In the Murray Scrub you will be able to climb inside the lattice of roots left when the ancient tree that once supported the fig has rotted away.

Avoid the leaves of the Giant Stinging Tree. One of the largest trees in the rainforest, sometimes growing to 50 metres, the Giant Stinging Tree begins life when the canopy is broken by a fallen tree. Its large heart-shaped leaves are covered with rigid stinging hairs and have a distinctive moth-eaten appearance. Touching the leaves produces an immediate sting which tends to persist for some time, and can recur for a day or so with changes of temperature on the skin. A bush remedy is to rub the juice of the Cunjevoi Lily plant, which often grows nearby, onto the sting.



Rainforest trees flower year round. From the lookouts around the Toonumbar valley, or by climbing up to the base of the razorback range in the Murray Scrub, you will be able to view the brilliant colours of flowering trees. In November you may find the bell-shaped rich red flower of the Flame Tree.

You will see large stands of Bangalow Palms & other palm species throughout the Toonumbar National Park. These are especially spectacular along the drive through the western side of the valley.

Stands of the smaller Walking Stick Palm, prized in years gone by for its qualities as a walking stick, can be seen throughout the rainforests. Its small red fruits grow in long, slender arrangements & can be eaten.

The Lawyer Vine or "Wait-a-while" palm grows like a vine high into the canopy supported by slender tendrils covered with barbed hooks.

The Pepper Vine has large heart-shaped leaves & climbs by anchoring roots attached to a tree trunk. It grows to be one of the larger vines of the forest & can hang down for 20 metres or more.

Many varieties of Epiphytes (plants which grow on another plant but do not get nutrition from the host) adorn the rainforest trees.

Over 41 different species of orchids occur including the Tongue Orchid with its delicate white flowers & corrugated leaves, & the Rock Lily with its yellow-white flowers.



Epiphytes like the Staghorn & Elkhorn ferns & the Birds Nest fern occur in abundance in the Toonumbar forests.

On the rainforest floor live an array of ferns, lillies, orchids & broad-leaved herbs. Pennyworts with geranium-like leaves can cover the ground. Helmholtzia with broad leaves up to two metres long grows in thick clumps in gullies.

Stands of Hoop Pines occur throughout the Toonumbar forests, & established plantations of this sought after species can be seen to the North of the Toonumbar forests.

From the ground to the sky the Toonumbar rainforest plants interrelate in complex ways. Some fungi use the roots of plants & provide their hosts with nutrients. Mosses & lichens thrive in the humid environment holding onto the bark of trees. Ferns & herbs rely upon environment provided by the canopy of trees.

The fauna of the subtropical rainforest fauna is an integral part of the Toonumbar forests. Birds, insects & moths pollinate plants & seeds are spread by birds, animals & insects.

Much of the mammal life is nocturnal & day-time visitors should not be disappointed if they do not see some of the rainforest creatures. Late afternoon when animals venture out to feed is a good time for observing.