

# Kingfishers

## and their relatives in Australia

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We are going to look at the Australian members of the Order Caracii-formes, a group of birds that probably is not as familiar as many other groups of birds. I am referring mainly to the parrots, finches, pheasants, waterfowl – the groups traditionally associated with aviculture.

In the United States, the Belted Kingfisher (*Ceryle alcyon*) is widespread and generally common, so is familiar to most of us. In southern Texas, near the Mexican border, you will find two additional species at the northern limits of their ranges; these are the large, spectacular Ringed Kingfisher (*Ceryle torquata*) and the smaller, brilliant Green Kingfisher (*Chloroceryle americana*). In general appearance and habitat preferences, all three species are similar – they frequent waterways and feed mainly on fish. In other words they conform to impressions of a typical kingfisher. Also it is noteworthy that although the Belted Kingfisher is common and widespread, kingfishers could not be considered a prominent component of the North American avifauna.

In other parts of the world, notably Africa and southeast Asia, the situation is very different. In these countries, kingfishers that frequent waterways and hunt fish are a minority, and the variety of species constitute a conspicuous element in local avifaunas. Kingfishers are well represented in Australia, where the eleven species include spectacularly-colored inhabitants of tropical rainforest and the well-known species commonly seen perched on powerlines or fenceposts.

Undoubtedly the best-known Australian species, and probably one of the most celebrated of all our birds is

the Laughing Kookaburra (*Dacelo novaeguineae*), which is the world's largest kingfisher. Although most capable of quickly changing a garden fishpond into just a garden pond, the Laughing Kookaburra is not really a "fishing" kingfisher, but is a member of the woodland or dry-country group, the group to which most species belong. Though they are often found near watercourses, these woodland kingfishers are not dependent on water, and indeed some species have adapted to semi-desert habitats. They use the same "wait and see" hunting techniques of their fishing counterparts, though the dive is to the ground or a tree branch to capture their prey. Man-made structures are often utilized as vantage perches.

Laughing Kookaburras are native to the woodlands and forests of eastern Australia, but have been introduced to Tasmania and southwestern Australia. They have successfully colonized man-made habitats, and now are familiar in city parks, urban gardens and sportsfields, and around farmhouses. They become quite tame, so have acquired a reputation as "friendly birds" and, if offered food regularly, they soon adopt a fearless disposition, even coming at the same time each day to be fed. There are many reports of birds knocking their bills against the door, or even coming into the home, if feeding is delayed.

Of course, it is the strange laughing call that is the renowned attribute of these birds. The famous laughing song usually is given by two or more birds, most frequently in the twilight of early morning and evening. Dawn and dusk choruses of Laughing Kookaburras is the sound that so

effectively epitomises the Australian countryside, and certainly it is out of place in early Tarzan films!

Kookaburras killing snakes is a feature of Australian folklore, and there are even ballads describing such situations as a bird swooping down to kill a snake that was about to attack a playing child! The birds obviously are efficient predators of small to medium-sized snakes, but in lore their prowess is larger than life. The diet also includes insects and their larvae, earthworms, snails, freshwater crayfish, frogs, other reptiles, small birds, fishes, and of course, prime hamburger steak!

Laughing Kookaburras are extremely sedentary, and they reside in clearly delineated territories, which may contain a mated adult pair or a family group comprising the adult pair with one or more auxiliaries. These auxiliaries are young from previous years; as non-breeding adults, they remain with their parents to assist with territory defense, incubation of eggs, and care of chicks. Some individuals are known to have remained auxiliaries for up to four years before replacing breeding adults.

Across northern Australia, the Laughing Kookaburra is replaced by the smaller, more colorful Blue-winged Kookaburra (*Dacelo leachii*) with its distinctive white eye and sexually different tail coloration. The Blue-winged Kookaburra occurs also in New Guinea, where there is found the remaining two species of kookaburras. Indeed, it is ironic that the only species which does not reach New Guinea is the Laughing Kookaburra, and its species name is *novae-guineae!*

The majority of woodland or "non-fishing" kingfishers belong to *Halcyon* which, as currently recognized is a large, rather unwieldy genus. Within the genus there are five groupings of species, and three of these are represented in Australia.

The first group is characterized by a simple plumage coloration of dark upperparts, usually blue or green, contrasting with white or buff underparts, and the bill is brownish to black with a pale lower mandible. Two Australian species belong to this group.

The Sacred Kingfisher (*Halcyon sancta*) is the ubiquitous kingfisher in Australia, where it is abundant in virtually all parts of the continent, being absent only from the driest

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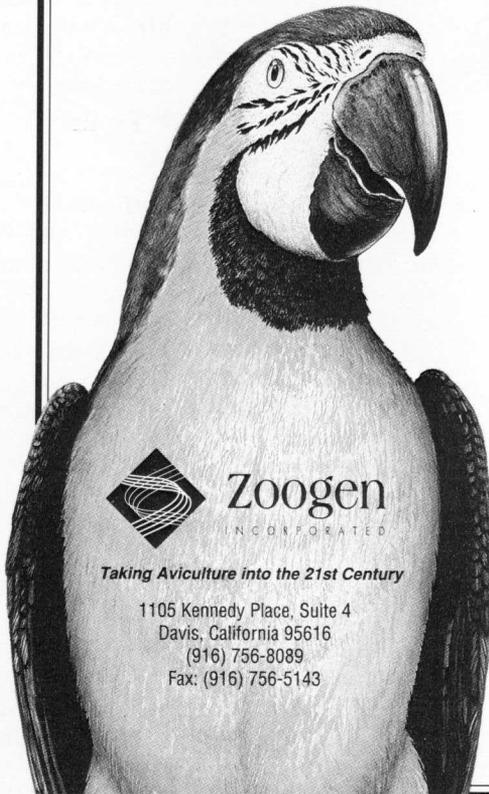
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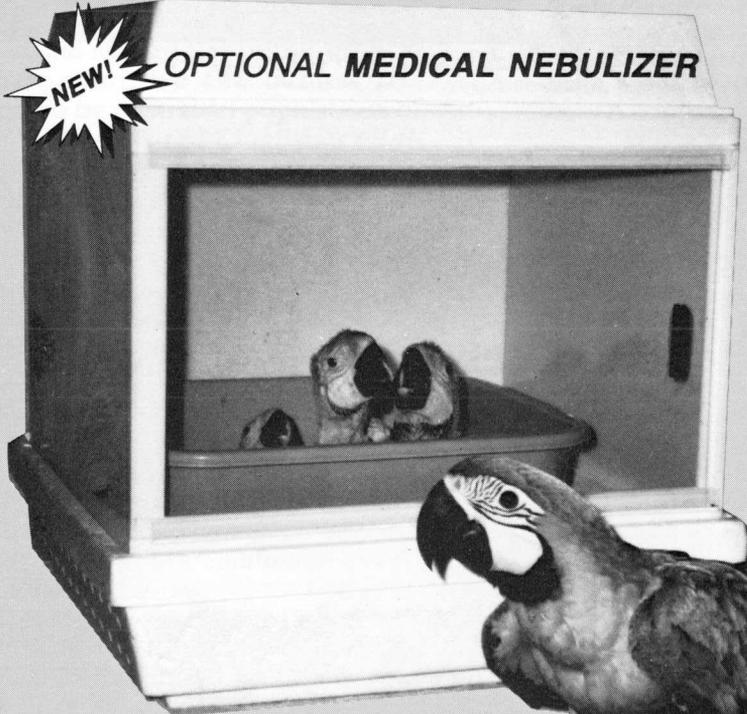
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*Sacred Kingfisher (Halcyon sancta)*

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*Azure Kingfisher (Alcyon azurea)*

Photo by W. Peckover —Visual Resources for Ornithology



*Little Kingfisher (Alcyon pusilla pusilla)*

Photo by W. Peckover —Visual Resources for Ornithology



*Little Kingfisher (Alcyon pusilla pusilla)*

desert regions, dense tropical rainforest, and high alpine meadow. It is one of our more conspicuous migrants, particularly at southern latitudes where there is a complete exodus in winter, when birds move north to New Guinea, the Solomon Islands and Indonesia. It feeds on a wide variety of animal prey, including large insects, small reptiles, frogs, nestling birds, and fishes. It also utilizes powerlines, fenceposts or roadside signposts as vantage perches from which dives are made to the ground to capture prey. Nests are in burrows excavated by the birds in an earth bank, or in a hole excavated in an arboreal termitarium.

Essentially a bird of drier inland habitats, the Red-backed Kingfisher (*Halcyon pyrrhopygia*) comes to the coast mainly in regions where such habitats approach the seaboard. Certainly it is not dependent on the presence of water, and is the only kingfisher found in harsh desert areas. Though at times it can be locally plentiful, especially in the north, my impression is that overall it occurs at lower densities than does the Sacred Kingfisher. Across southern Australia, it is predominantly a summer breeding migrant, presumably from wintering areas to the north, but, unlike the Sacred Kingfisher, it does not range outside continental Australia.

Littoral mangroves in the tropical north comprise the habitat frequented by Australian populations of the White-collared Kingfisher (*Halcyon chloris*), which has a world range extending from the Red Sea coasts and the Arabian Gulf to Samoa in the Pacific Ocean, and so is the most widespread of all kingfishers. In Southeast Asia and on many of the Pacific Islands, it is the dominant species and is quite abundant, but in northern Australia it seems to be generally scarce. I suspect that this scarcity, as well as its restriction to coastal mangrove, could be due, at least in part, to competition from the widespread and very common Sacred Kingfisher. Another interesting comparison is that in Australia I find it to be rather secretive and inconspicuous, but in Southeast Asia my experience has been that it is noisy, bold and almost inquisitive.

The second *Halcyon* group consists of predominantly blue and white kingfishers with pronounced sexual dimorphism and a mainly black bill. It is concentrated in the

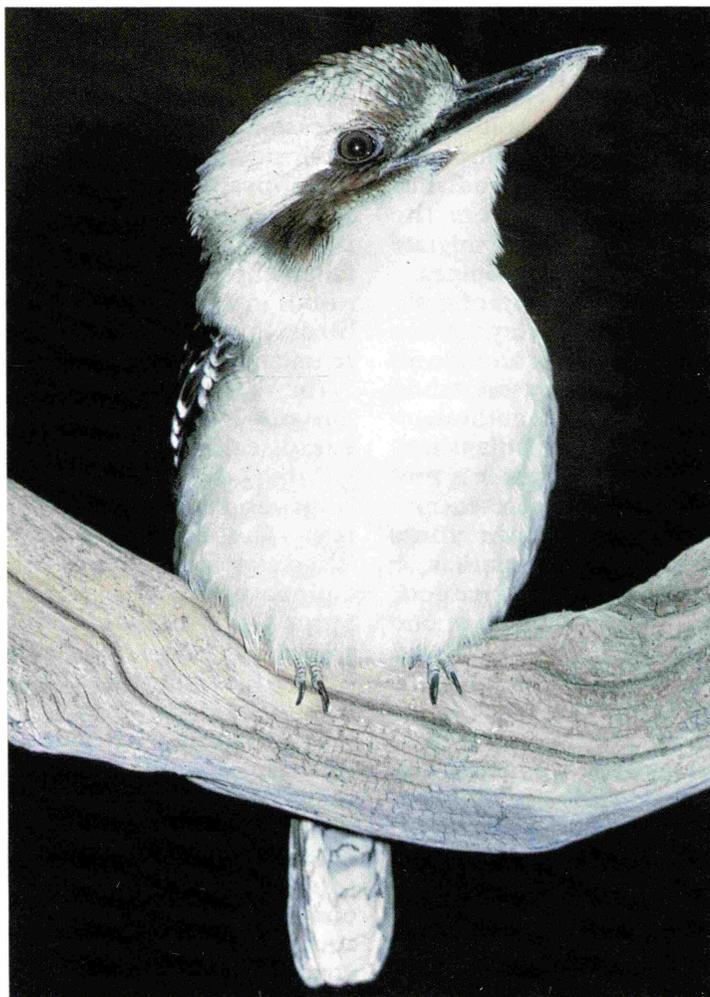


Photo by George D. Dodge/Dale R. Thompson

The Laughing Kookaburra, *Dacelo novaeguineae (gigas)*, is one of the largest kingfishers in the world. It is noted for its famous repeated vocal call in the form of a "laugh." They nest in a hollow tree trunk or limb, occasionally in a creek bank, termite nest, haystack or cavity in a wall. They have from two to four eggs.



Photo by W. Peckover — Visual Resources for Ornithology

Yellow-billed Kingfisher (*Halcyon torotoro*)

islands to the north of Australia, from the Philippines east to Vanuatu, but one species, the striking Forest Kingfisher (*Halcyon macleayi*), reaches northern Australia, where it is generally common, though somewhat unevenly distributed in woodlands and open forest. Birds from the southern sector of the range migrate north to overwinter in New Guinea.

Forest Kingfishers are among my favorite birds. They are noisy "show-offs," especially at the commencement of the breeding season, when their striking plumage coloration features in courtship displays and agitated territorial defences. It is very difficult to overlook their presence.

The third and final *Halcyon* grouping consists of two very similar or sibling species with saw-edged, yellow bills, and the presence of one species, the Lesser Yellow-billed Kingfisher (*Halcyon torotoro*) in tropical rainforests on Cape York Peninsula, northernmost Australia, is the only occurrence of members of the group outside New Guinea. Despite its bright plumage coloration, the Lesser Yellow-billed Kingfisher is more often heard than seen, and locating a calling bird on its perch in the forest substage can be a most frustrating experience. Consequently, it is not well known, but its habits apparently are similar to those of the more familiar species. I have found it to be quite confiding, and a bird will sit for long periods on a favored perch, only occasionally cocking its tail in a typical kingfisher manner.

Paradise Kingfishers belonging to the genus *Tanysiptera* are among the most spectacular of the world's birds. Brilliantly colored and with long, streamer-like tail feathers, they present a memorable sight when observed in their rainforest habitat. New Guinea certainly is the home of these exquisite birds, but two species reach northernmost Australia.

The Buff-breasted Paradise Kingfisher (*Tanysiptera sylvia*) is a common breeding migrant in the rainforests of Cape York Peninsula and neighboring northeastern Queensland. There appear to be two different breeding populations which migrate at slightly different times, and probably come from different wintering areas in New Guinea. Other than at the commencement of breeding, when they are busily engaged in the excavation of nesting holes, these kingfishers are

not conspicuous and are heard more often than seen, even in places where they are plentiful. On its perch, a bird may sit for long periods, occasionally moving its head slowly from side to side, as if watching for the appearance of prey, or at intervals flicking its tail up and down, which produces a sweeping rise and fall of the long central plumes. The nest is in a burrow excavated by the birds in a terrestrial or arboreal termitarium.

The second species recorded from Australia is the spectacular Common Paradise Kingfisher (*Tanysiptera galatea*), but its name certainly is inappropriate in the Australian context. The only record is from an island almost within sight of the New Guinea coastline, so in practical terms this predominantly blue and white kingfisher remains a new Guinea bird and there it is extremely plentiful.

In Australia, we have only two "fishing" kingfishers, and both are shared with the New Guinea region. The more widespread, and hence better known, is the Azure Kingfisher (*Alcyon azurea*), which is generally common in coastal and subcoastal aquatic habitats in northern and eastern Australia. A preference is shown for well-vegetated waterways, including mangrove creeks, and brackish or saltwater habitats seem to be utilized more commonly in the north than in the south. Always, I have found Azure Kingfishers to be conspicuous, and even when perched in a well-shaded position, the rufous underparts contrasting with the deep blue back and wings is readily detected. However, they are fairly shy, and when disturbed usually fly off to seek shelter beyond the next bend in the watercourse. Food comprises small fishes, amphibians, crustaceans, and aquatic insects captured by diving into the water from an overhanging perch or rarely from hovering flight. The nest is in a burrow excavated by the birds in the bank of a river or stream.

The Little Kingfisher (*Alcyon pusilla*) is our smallest kingfisher, and, with deep ultramarine blue upperparts contrasting strongly against white underparts, it is a real gem! It is restricted to coastal and subcoastal waterways, especially mangrove-lined streams, in northern Australia, and is generally uncommon, though sometimes fairly plentiful locally. It can be found together

with the Azure Kingfisher, but there is ecological differentiation according to size, with this smaller species taking smaller fishes, crustaceans and insects and their larvae. Despite its brilliant plumage coloration, the diminutive Little Kingfisher is easily overlooked. Usually single birds are encountered sitting on a perch low over the water, but at times the perch may be concealed by foliage and the bird can remain undetected until it takes flight.

Let us now look briefly at the relatives of kingfishers, and on a world basis these include some of the world's most spectacular birds. Motmots will be known to some of you who have visited Central and South America, while the lordly hornbills are becoming established in some major zoos and a few aviculturists have been successful in breeding several species. The graceful bee-eaters and showy rollers may not be so familiar, and the strange todies from the West Indies continue to be somewhat enigmatic. Only two of these families get to Australia — the bee-eaters and the rollers, and each is represented by only a single species.

The grace and beauty of bee-eaters are seen to advantage when the birds are in the air. On outspread wings, they wheel about in pursuit of flying insects, and when the prey is captured it is taken back to the vantage perch to be killed and devoured before being swallowed. The Rainbow Bee-eater (*Merops ornatus*) is a typical bee-eater, and is a conspicuous, common breeding migrant throughout much of the continent. Winter is spent in New Guinea and the Indonesian Archipelago, and the return of flocks to their nesting sites is one of our sure signs of spring.

Another conspicuous summer visitor is the Red-billed Roller or Dollarbird (*Eurystomus orientalis*), but it is the strange, cackling call-notes rather than colorful plumage which denotes the arrival of this aerial hunter. It also is more obvious when in flight, and the conspicuous white circle on each outspread wing is responsible for the name Dollarbird. The term roller refers to the peculiar rolling flight with flapping wingbeats and the habit of courting birds to tumble over when in display flight. Large insects, especially cicadas and grasshoppers are the favoured food of the Red-billed Roller, and the nest is high up in a hollow limb or hole in a tree. ●