

THE SCIENTIFIC NAME OF THE LAUGHING KOOKABURRA: *DACELO GIGAS*
(BODDAERT) v. *DACELO NOVAEGUINEAE* (HERMANN)

It is surprising that there should still be controversy and confusion over the scientific name of that most familiar of all Australian birds, the Laughing Kookaburra. This confusion has now lasted for over half a century and the RAOU Checklist Amendment Committee have suggested that I should write a note on the respective merits of the two names in current use, *Dacelo gigas* (Boddaert) and *Dacelo novaeguineae* (Hermann), as a first step to terminating it.

The Kookaburra was first made known to western science by Sonnerat (1776: 170-171, pl. 106), who gave a description and a recognizable plate in black-and-white, captioned: 'Grand martin-Pêcheur de la nouvelle Guinée'. The text further definitely conveys the impression that Sonnerat had personally observed and collected the bird in New Guinea, the sentence preceding the description of the Kookaburra boldly beginning with the words: 'Les deux Martin-Pêcheurs que j'ai observés à la nouvelle Guinée . . .'. It seems that this claim of the species's occurrence in New Guinea was intentional falsification (Lysaght 1952). In this connexion it may be worth mentioning that, notwithstanding the title of his book, Sonnerat never reached the mainland of New Guinea; the nearest he got to it was the island of Gebe, half way between Halmahera and Waigeo, with an impoverished but admittedly mainly Papuan avifauna. He traded there with Papuans from farther east, who provided him with skins of the several birds-of-paradise described in his book. How Sonnerat obtained an Australian bird on a voyage from Mauritius over the Philippines to the Moluccas was explained by Lysaght (1956).

Daubenton's (1765-81) Plate No. 663 of the 'Martin-pêcheur, de la Nouvelle Guinée', based on Sonnerat's specimen, must have been made very soon afterwards, because Buffon (1780: 265-266) could refer to it.

These early authors did not use the binary system of nomenclature but in 1783, almost simultaneously, Hermann and Boddaert provided scientific names according to the Linnean system of nomenclature. Both names are based on Plate No. 663 of Daubenton; the name given by Hermann (1783: 192 footnote a) was *Alcedo novae Guineae*, whereas Boddaert (1783: 40) called the bird *Alcedo gigas*.

Because it is rare, Hermann's work was overlooked by later authors and about the middle of the nineteenth century the name *Dacelo gigas* (Boddaert) for the Laughing Kookaburra came into general use.

Hermann's book was rediscovered by Richmond (1900), who in a discussion of the nomenclature of tinamous stated: '*Crypturus pileatus* (Bodd. Dec. 1783, or later) is antedated (without doubt) by *Tinamus soui* Hermann, *Tabula Affin. Anim.*, 1783, 164, 235 . . .'. Richmond made no mention of the Laughing Kookaburra and the rediscovery of the name *Alcedo novae*

Guineae was left to Stresemann (1920), who submitted that *Dacelo novaeguineae* (Hermann) should replace *Dacelo gigas* (Boddaert) on the ground of priority. Thus, the whole question is a matter of priority of publication; it was on the grounds of priority only that *D. gigas* had to give way to *D. novaeguineae*.

The priority of Hermann's work over that of Boddaert was first claimed by Richmond, as quoted above. The words 'without doubt' in this quotation are revealing; the preface to Boddaert's work is dated 1 December 1783, whereas Hermann's book is dated 1783. Because December is so late in the year, Richmond assumed Hermann's priority. According to the Rules, however, (Stoll *et al.* 1961) the date of publication given in a book must be accepted as correct, unless there is evidence to prove it wrong and the latest date deducible from it, be it year or month, must be accepted for matters of priority. Thus, Boddaert's work would date from the last day of December 1783; Hermann's work would date from the year 1783, of which the last day is also 31 December. This would mean that both works appeared simultaneously (for purposes of nomenclature) and that it would be possible to pick those names from each that are best known and preferred.

Stresemann (1920) had no new evidence; in introducing his proposal for numerous changes in established nomenclature he referred only to Richmond: 'It has been pointed out by C. W. Richmond that Hermann's book has precedence over Boddaert's, the latter having been issued "in December 1783 or later".'

Therefore Leach *et al.* (1926: v) were entirely justified in retaining the name *D. gigas* in the Official Checklist. Their comment is exemplary: 'The date of publication of *Alcedo gigas* of Boddaert is fixed as 1783. The publication of *A. novae-guineae* of Hermann is fixed at "preferably September, 1783". The evidence is, at least, indefinite.'

Unfortunately Mathews (1926) (it would be Mathews) finally produced irrefutable evidence proving Hermann's priority. An extensive review of Hermann's book appeared in the *Göttingische Anzeigen* of 15 November 1783; obviously it must have been in the hands of the reviewer some time before that date. Note that neither Richmond nor Stresemann nor Mathews (1925: 66: 'There seems to be no doubt that this was published before December') had this evidence. When Mathews (1926) wrote his letter to the *Emu* he must have only just excavated it. How smug he must have felt when he wrote that letter, which proved him right in opposition to the Checklist Committee, at just the opportune moment. One small puzzle remains: from where did Leach *et al.* (1926) get the month September?

In the preceding discussion I believe I have shown

that the priority of *D.novaeguineae* over *D.gigas* is unassailable. The only way to save *D.gigas* for use in zoological nomenclature would be an application to the International Commission on Zoological Nomenclature, for the suppression of the senior synonym *D.novaeguineae*. The main objection against the name *D.novaeguineae* is that it conveys a false impression of the distribution of the species, the Laughing Kookaburra being the only member of its genus not occurring in New Guinea. Although personally I am emotionally biased in favour of *D.gigas*, the case for suppression of *D.novaeguineae* would have been stronger if a submission had been made fifty years ago. It is true that Australian ornithologists have grumbled from time to time, for example Mack (1953: 17), who wrote: 'As this kingfisher does not occur in New Guinea, it should be possible to have the name suppressed in favour of *gigas*' but the name he used was *D.novaeguineae*.

It may be relevant to quote two examples from the most recent Australian literature, as an illustration of how much the problem here discussed is alive and how much it needs thrashing out. The first is Macdonald (1973: 226), who calls the Laughing Kookaburra *D.gigas* and then lists a subspecies under the name *novaeguineae* (because *gigas* and *novaeguineae* are objective synonyms, which means that they are based on the same specimen, they can never be used for different subspecies). The second is Condon (1975: 231), who uses the name *D.novaeguineae*. In the synonymy he gives as substitute type-locality of *Alcedo novae Guineae* Hermann, New South Wales, as type-locality of *Alcedo gigas* Boddaert, northern Queensland, as

type-locality of *Alcedo undulata* Scopoli (another objective synonym), northern Queensland.

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REPTILIAN PREDATION ON BIRDS AND EGGS AT LAKE COWAL, NSW

Information on predation by the Lace Monitor *Varanus varius* and the Mainland Tiger Snake *Notechis scutatus* on birds and eggs at Lake Cowal, NSW, was obtained from 1970 to 1976. Both species are common and are active between spring and autumn. The largest numbers seen in one day were eight Monitors and forty-two Snakes. Both species are found on the ground and also in trees, including some standing in water and up to two kilometres from the shore; Tiger Snakes are also found on lignum bushes. Information on predation by these reptiles was obtained by observations of attack and also from analysis of stomach contents.

RESULTS

Lace Monitor

Details of the attacks observed are given in Table I. The contents of eighteen stomachs also were examined. Two contained remains of birds: one the remains of a nestling White-winged Chough *Corcorax melanorhamphus*; the other, unidentified white egg-shell. Other

material in the eighteen stomachs included the remains of: Rabbit *Oryctolagus cuniculus*, Black Rat *Rattus rattus*; House Mouse *Mus musculus*, eggs of Snake-necked Tortoise *Chelodina longicollis*, spiders, grasshoppers, stick-insects, bug, bees, beetles and ants.

TABLE I
Observed predation by the Lace Monitor *V. varius*

Species	No. obs.	eggs/chicks	Site
Little Black Cormorant <i>Phalacrocorax sulcirostris</i>	1	1	tree in water
Little Pied Cormorant <i>Phalacrocorax melanoleucos</i>	4	3 1	"
Royal Spoonbill <i>Platalea regia</i>	2	2	"
Silver Gull <i>Larus novaehollandiae</i>	1	1	"
Rainbow-Bee-eater <i>Merops ornatus</i>	2	3	tunnel in soil