

***Tawny Frogmouth*, by Gisela Kaplan**, CSIRO Publishing, Melbourne, 2007. Softcover, 155 pp. RRP \$40.

This book is another in the Australian Natural History series. It presents the results of 10 years of familiarity with 36 hand-raised or rehabilitated orphaned or injured Tawny Frogmouths, and 10 wild birds that were closely observed, including two pairs for six and nine years. The author is a neurobiologist and wildlife carer, and so a behaviourist and 'warm fuzzy' perspective colours her description and interpretation of Frogmouth behaviour. The book is organised in the following chapters and topics.

- 1 Relatives of the Tawny Frogmouth; geographical variation; distribution.
- 2 Anatomy.
- 3 The senses.
- 4 Daily life and adaptations.
- 5 Feeding and territory.
- 6 Bonding and breeding.
- 7 Development: eggs; nestling development; food for the young; fledging; dispersal.
- 8 Emotions, vocal behaviour and communication.

Epilogue: some concluding remarks on threats, the Frogmouth's adaptability, and its true character.

Helpfully, the Endnotes provide details on sources used in each chapter, and there is a comprehensive bibliography and a subject index.

Some highlights include original description or discussion of: subtle gender characteristics of Frogmouths; their extremely weather-proof plumage; facial tufts and bristles as possible defence against dangerous prey; camouflage of nestlings; Frogmouths' foot structure; their ability to diverge their eyes; life-spans of wild Frogmouths; chewing of eucalypt leaves by juveniles, possibly to activate their systems against toxins in prey; water balance (including the nasal structure of chicks); foraging behaviour; a parasitic nematode disease (rat lungworm, transmitted via slugs and snails); and various aspects of territorial, bonding and breeding behaviour, juvenile behaviour, and communication (including non-vocal, such as by plumage, posture, or by flushing the outer iris red). The strongest and most original parts of the book are Chapters 4 to 8, in which Professor Kaplan's expertise on Frogmouth behaviour, development and communication is clearly evident, and the text is well supported by her many wonderful photographs.

Being the most in-depth study of Tawny Frogmouth behaviour to date, the book is packed with new and interesting information on this otherwise understudied species. However, the writing style makes it difficult at times to separate Kaplan's original data from previously published work or from speculation, and (for a scientist) the text is too anthropomorphic in places. The book could have made more of some previous studies, notably those by Körtner & Geiser (1999a,b), and could have mentioned work on the Marbled Frogmouth that sheds light on relevant aspects in the Tawny Frogmouth (e.g. Beruldsen 2003 and papers cited therein). For instance, Kaplan says 'I have discovered that Tawny Frogmouths duet' (Chapter 8), but the behaviour was described previously (Debus 1997) and mentioned in *HANZAB*; there are other examples where relevant published work

is under-stated if mentioned at all.

Kaplan's prose encourages a critical read that uncovers many errors of fact as well as spelling and expression. Granted, English is not her first language, but correction of such matters is surely the CSIRO series editor's job. Furthermore, Dr Gerhard Körtner critically reviewed a draft, but the book shows little evidence of his advice being heeded. Unfortunately the book lacks an ecologist's perspective, and it would have been better if it had been modelled more closely on *Kookaburra* in the same series.

As regards spelling and expression, we have (for example) 'shovelling' for 'shuffling' walk; 'mucous' for 'mucus', and 'heckles' for 'hackles' in several places; 'opposable' for 'opposable', and 'rectricles' for 'rectrices'; facial 'strokes', presumably meaning 'stripes'; 'Bingham' for 'Brigham'; 'in tethers' for 'in tatters'; 'brooding' when 'incubating' (eggs, not chicks) is meant; 'precocious' for 'precocial', and 'flaunted' for 'flouted'; 'try and' for 'try to', and 'affect' for 'effect'. I'm not sure what Kaplan means by 'ventricular' (quality of vocalisations): perhaps 'ventriloquial'? Conversely, Kaplan puzzles over what Ingram meant by 'gulp down' food, but 'swallow whole' was clearly meant.

As to errors of fact, the Tawny Frogmouth is not the only nocturnal bird to 'grace backyards', the Boobook does too. The Frogmouth is not the largest Australian night bird besides the Powerful Owl: the Rufous Owl, Barking Owl and large *Tyto* owls (Masked, Sooty) are larger-bodied, and indeed Barking Owls prey on frogmouths; frogmouths (as opposed to nightjars in the strict sense) have never been called goatsuckers. The photograph of a 'contour feather' appears to show a rectrix; and the Emu's first (hind) toe is not 'vestigial', it is absent entirely. There is a paper on the Tawny Frogmouth's hearing capacity (Swanson & Sanderson 1999), not cited, and hence discussion of this topic is incomplete; frogmouths are not singular in their defensive odorous faeces, as *Tyto* owls do the same; and seabird nasal tubes do not 'filter out' salt, the salt gland excretes excess salt via the nares. 'Hobbies and falcons' generally do not take eggs or nestlings (except the Brown Falcon, which will take nestlings); magpies and currawongs are not parasitised by the Koel. Frogmouths do produce pellets, as indeed discussed by one of the sources (Rose & Eldridge 1997) quoted by Kaplan; Rose & Eldridge even suggest why Frogmouth pellets are seldom found. All birds 'lay eggs consecutively'; hatching synchrony or asynchrony is determined by when incubation starts in relation to completion of the clutch. Furthermore, the Frogmouth's laying interval (1–2 days) is not unusual for birds that size or larger, and even some passerines in Australia have a laying interval of > 24 hours. Raptor and owl chicks are also semi-altricial; and eagles also pass saliva with food to small chicks.

The author claims a sighting of the Marbled Frogmouth at Woolgoolga, New South Wales, far south of its accepted range and atypically roosting on a stump in the open. This record, if acceptable, should be published in the scientific literature after peer review of the details, but there is no substantiation so how do we know it wasn't just a rufous-morph Tawny Frogmouth? (As indeed was one such earlier claim, with photograph, for the nearby Dorrigo National Park, and a dead suspected Marbled Frogmouth from nearby Bellingen was a juvenile Tawny Frogmouth). There have in fact been surveys of nocturnal birds in the relevant area (cf. Kavanagh *et al.* 1995).

Kaplan puzzles over the low weights given in *HANZAB* for Tawny Frogmouths, but this is partly because weights are given for the species as a whole, including the small tropical subspecies; also, museum weights are probably biased by the

high proportion of birds found dead in winter. The 'bush rats' were probably the feral, scansorial Black Rat rather than the terrestrial native Bush Rat. I think frogmouths in the wild do take only moving (or at least living) prey; the author probably trained her captive birds to recognise and take non-moving food (and dead food thrown into the air is moving anyway). The early claim of cobweb in Frogmouth nests probably derived from the adoption by Frogmouths of an old cuckoo-shrike nest as a base, or perhaps spiders building on the underside of the nest. It would have been worth further comment that the high rate of Frogmouth wildlife-carer cases is probably because people often misguidedly 'rescue' fledgling Frogmouths that don't need rescuing, only a safe perch where the parents will continue to feed them. Finally, it's perhaps inappropriate to attribute emotions, at least in the human sense, to Frogmouths or other birds, and to suggest that Frogmouths 'grieve' is speculative.

Kaplan catalogues all the Frogmouth's calls, most of which were already described in *HANZAB*. I would have liked to see comment on the alleged *morepork* call. *HANZAB* notwithstanding, I believe that the closest the Tawny Frogmouth comes to such a call is the subdued disyllabic *oo-oom* repeated rapidly, and that early claims of a loud *morepork*, supposedly more drawn-out than the Boobook's call and not substantiated in recent times, represent confusion with the Boobook or perhaps the Powerful Owl.

I would prefer to be more positive, as this book has much to offer by way of important new information on the Tawny Frogmouth; it corrects some old myths and prejudices, makes Frogmouths accessible to lay readers, and lifts their public profile. This book is highly recommended, with the proviso that it should be read critically in the light of *HANZAB* and current scientific literature.

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