

INTRODUCTION

Volume 7 is the final volume in the series, and concludes our coverage of the passerines (Order Passeriformes)—the largest and most diverse order of birds, comprising well over half the world's known bird species. At the time of finishing this volume, we have dealt with 394 passerine species, in 42 families, reported in the HANZAB region; no doubt with time and refinements in taxonomic studies there will be more. This volume deals with 169 species, in 27 families, plus summaries of various failed introductions (including in an additional family, Ploceidae). With the completion of this volume, HANZAB has dealt with a total of 957 species.

A full introduction to the series, including the scope and arrangement of each section, and glossaries where needed, was given in Volume 1 and a full revision for most sections was provided in Volume 5. We have followed the style and layout of Volumes 5 and 6 without serious modification. However, we comment in the sections below on matters where there has been some departure in approach from previous volumes, or where there are specific conventions that we feel warrant repeated explanation. Some abbreviations and conventions are used throughout the work; others are applied only to a particular section. All are listed on pages 28–32.

TAXONOMY AND NOMENCLATURE Birds The publication of the *Directory of Australian Birds: Passerines* by Schodde & Mason (1999; CSIRO Publishing, Melbourne [abbreviated throughout this volume as DAB]) has provided the base from which to investigate further the variation in species and subspecies of Aust. birds, and has greatly assisted us in the preparation of this volume. For the first time in contemporary ornithology in the Aust. region, DAB presents a complete listing and analysis of the terminal taxa of Aust. passerine birds.

As in Volumes 3–6, for families and species we continue to follow the arrangement and nomenclature of Christidis & Boles (1994) and the revised version of this work currently in preparation (per L. Christidis & W.E. Boles); the latter will incorporate several changes published in DAB. In this volume, as in previous passerine volumes, details of subspecies and subspecific nomenclature essentially follow DAB except in cases where they conflict with species limits set out in Christidis & Boles (1994, in prep.). Even in those instances, however, the subspecific treatment of DAB is always discussed within the texts and reasons for departure from DAB are given.

The arrangements of the few species recorded in the wider HANZAB region that were not included within the above publications were determined in consultation with L. Christidis and W.E. Boles (representing Birds Australia's Taxonomic Advisory Committee, with L. Christidis also a member of the HANZAB Steering Committee), based on the principles and sources used by Christidis & Boles (1994). For NZ species, scientific nomenclature follows OSNZ (1990), except in cases where it conflicts with Christidis & Boles (1994, in prep.).

English names follow those of Christidis & Boles (1994); English names for species endemic to NZ follow those of OSNZ (1990).

Plants and animals other than birds All scientific names, other than those of birds, were checked against the following references; for those groups for which volumes have been published, we have used the multi-volume series the *Flora of Australia*, the *Fauna of Australia* and the *Zoological Catalogue of Australia*. **Plants** For Aust., Hnatiuk (1990), ABRs (1993), Bodkin (1991) and, for specific families, George (1986, 1989), Chippendale (1988) and Orchard (1995, 1998); for NZ, Allan (1961), Poole & Adams (1963), and Moore & Edgar (1970); and, more generally or outside these areas, Wallis & Airy Shaw (1973). We have retained *Eucalyptus* as a single genus. **Animals GENERAL INVERTEBRATES:** Marshall & Williams (1972). **MOLLUSCS:** Vaught (1989). **SPIDERS:** Main *et al.* (1985). **INSECTS:** Taylor *et al.* (1985); Lawrence *et al.* (1987), Campbell *et al.* (1988), Common (1990), CSIRO (1991), Naumann (1993), Lawrence & Britton (1994) and Nielsen *et al.* (1996). **FISH:** Paxton *et al.* (1989), Eschmeyer (1990) and Gommon *et al.* (1994). **AMPHIBIANS AND REPTILES:** Cogger *et al.* (1983) and Cogger (1992). **MAMMALS:** Bannister *et al.* (1988) and Strahan (1995).

REFERENCES

- Allan, H.L. 1961. *Flora of New Zealand*. I. R.E. Owen, Govt Printer, Wellington.
- ABRS (Aust. Biol. Resources Study). 1993. *Flora of Australia*. 50. *Oceanic Islands*. Aust. Govt Publ. Service, Canberra.
- Bannister, J.L., *et al.* 1988. *Fauna of Australia*. 5. *Mammalia*. Aust. Govt Publ. Service, Canberra.
- Bodkin, F. 1991. *Encyclopaedia Botanica*. HarperCollins, Sydney.
- Campbell, I., *et al.* 1988. *Zoological Catalogue of Australia*. 6. *Ephemeroptera, Megaloptera, Odonata, Plecoptera, Trichoptera*. Aust. Govt Publ. Service, Canberra.
- Chippendale, G.M. 1988. *Flora of Australia*. 19. *Eucalyptus, Angophora (Myrtaceae)*. Aust. Govt Publ. Service, Canberra.
- Christidis, L. & W.E. Boles. 1994. *RAOU Monogr.* 2.
- Cogger, H.G. 1992. *Reptiles and Amphibians of Australia*. Rev. edn. Reed, Sydney.
- , *et al.* 1983. *Zoological Catalogue of Australia*. 1. *Amphibia and Reptilia*. Aust. Govt Publ. Service, Canberra.
- Common, I.F.B. 1990. *Moths of Australia*. Melb. Univ. Press, Melbourne.
- CSIRO. 1991. *Insects of Australia*. CSIRO Publ., Melbourne.
- Eschmeyer, W.N. 1990. *Catalogue of the Genera of Recent Fishes*. Calif. Acad. Sci., San Francisco.
- George, A.S. (Ed.) 1986. *Flora of Australia*. 46. *Iridaceae to Dioscoreaceae*. Aust. Govt Publ. Service, Canberra.
- , 1989. *Flora of Australia*. 3. *Hamamelidales to Casuarinales*. Aust. Govt Publ. Service, Canberra.
- Gommon, M.F., *et al.* (Eds) 1994. *The Fishes of Australia's South Coast*. State Printer, Adelaide.
- Hnatiuk, R.J. 1990. *Census of Australian Vascular Plants*. Aust. Flora & Fauna Ser. 11 (Bureau Flora & Fauna); Aust. Govt Publ. Service, Canberra.
- Lawrence, J.F., & E.B. Britton. 1994. *Australian Beetles*. Melb. Univ. Press, Melbourne.
- , *et al.* 1987. *Zoological Catalogue of Australia*. 4. *Coleoptera*. Aust. Govt Publ. Service, Canberra.
- Main, B.Y., *et al.* 1985. *Zoological Catalogue of Australia*. 3. *Arachnida*. Aust. Govt Publ. Service, Canberra.
- Marshall, A.J., & W.D. Williams. 1972. *Textbook of Zoology: Invertebrates*. Macmillan, Melbourne.

- Moore, L.B., & E. Edgar. 1970. *Flora of New Zealand*. II. A.R. Shearer, Govt Printer, Wellington.
- Naumann, I. 1993. *CSIRO Handbook of Australian Insect Names*. CSIRO Publ., Melbourne.
- Nielsen, E.S., et al. 1996. *Checklist of the Lepidoptera of Australia*. *Monographs on Australian Lepidoptera*. 4. CSIRO Publ., Melbourne.
- Orchard, A.E. (Ed.) 1995. *Flora of Australia* 16. *Elaeagnaceae, Proteaceae* 1. CSIRO Publ., Melbourne.
- 1998. *Flora of Australia*. 12. *Mimosaceae (excluding Acacia), Caesalpiniaceae*. CSIRO Publ., Melbourne.
- OSNZ (Orn. Soc. of NZ [E.G. Turbott, Convenor, Checklist Committee]). 1990. *Checklist of the Birds of New Zealand and the Ross Dependency, Antarctica*. Third edn. Random Century, Auckland.
- Paxton, J.R., et al. 1989. *Zoological Catalogue of Australia*. 7. *Pisces*. Aust. Govt Publ. Service, Canberra.
- Poole, A.L., & N.M. Adams. 1963. *Trees and Shrubs of New Zealand*. R.E. Owen, Govt Printers, Wellington.
- Schodde, R., & I.J. Mason. 1999. *Directory of Australian Birds: Passerines*. CSIRO Publ., Melbourne.
- Strahan, R. (Ed.) 1995. *The Mammals of Australia*. Reed New Holland, Sydney.
- Taylor, R.W., et al. 1985. *Zoological Catalogue of Australia*. 2. *Hymenoptera*. Aust. Govt Publ. Service, Canberra.
- Vaught, K.C. 1989. *A Classification of the Living Mollusca*. Am. Malacologist Inc., Melbourne, Florida.
- Wallis, J.C., & H.K. Airy Shaw. 1973. *A Dictionary of the Flowering Plants and Ferns*. Cambridge Univ. Press, Cambridge.

CUT-OFF DATES FOR TEXTS Most texts for this volume were prepared between the end of 2002 and June 2005, with editing and refereeing extending to September 2005. It is not, however, simple to give an overall cut-off for all sections and texts because preparation of different sections, and completion of texts, took place at different rates. By and large, we have not been able to include in detail material either published, in press or in preparation after Dec. 2004, though we have tried at least to cite important papers that appeared after completion of the texts, to incorporate what information we could, and to comment on major discrepancies between new data and older information within our texts that resulted from such papers. We are grateful to our referees for making this information available and apologize to them for not including it as fully as we would like.

DISTRIBUTION AND POPULATION The detailed descriptions of distribution need to be read in conjunction with the maps, which themselves obviate the need for much text. A map showing the regions, divisions and districts of the various Aust. states that are used in conjunction with town and place names and geographical features to describe distribution is printed on page viii of Part B. The end-paper map for NZ (inside rear cover) shows the regions of the main islands which are used to describe distribution there.

Maps Presentation of maps remains as in previous volumes, with breeding areas shown in full red and areas of occurrence where breeding has not been recorded in half-tone red. Because we know little of the limits of breeding and non-breeding distribution of species in New Guinea and Indonesia, distribution in these regions has usually been shown in half-tone red, giving no indication of breeding range outside the HANZAB region.

MOVEMENTS As in previous volumes, a summary of banding recoveries is given in the final paragraph of this section. Where appropriate, summaries of the results of other

banding or radio-tracking studies or other published recovery records are also presented in the final paragraph.

The Banding paragraph begins with a statement giving the total number of birds of that species banded in Aust. (and New Guinea or the sw. Pacific or both if a species also occurs there), between 1953 and June 2003, and the total number of recoveries. The number of recoveries includes repeat recoveries, and is not the number of individuals recovered. These data were extracted from the ABBBS database during May 2005 and include all data entered to that date. Banding recoveries are then presented in categories of distance from banding site (<10 km, 10–49 km, 50–99 km, ≥100 km). For Aust., these figures are calculated from data supplied by the ABBBS, most of which (to 1997) are summarized in Baker et al. (1999). Where a species could have been banded in islands of the sw. Pacific or New Guinea or both, these totals are also incorporated (because they could not easily be extracted from the calculations). The information on recovery rates in distance categories is excluded from species with recent taxonomic splits and where there is subsequent uncertainty as to the specific identity of banded birds. Recoveries were summed for taxa that have been recently lumped but are recorded separately in the ABBBS database.

Details are also provided for all LONG-DISTANCE RECOVERIES (≥100 km from banding site) where they are available (including those from before 1984, and records on microfiche), and details of banding and recovery. In many instances, data are presented in the following summarized form:

Kenmore, se. Qld, to Wewak E., Sepik Province, PNG:

(1)	(2)						
2825 km,	337°,	3 months ^D ,	Mar.,	J,	M		
(3)	(4)	(5)	(6)	(7)	(8)		

Where: (1) Banding site; (2) recovery site; (3) minimum distance from banding site to recovery site (great circle distance); (4) direction from banding to recovery site (great circle); (5) number of months elapsed between banding and recovery; a superscript ^D indicates recovery of dead bird; (6) month of banding; (7) age at banding, if known (P = pullus; J = juvenile, 1 = 1 year old, – = unknown or >1 year old); and (8) sex if known (M = male, F = female, – = unknown).

Where appropriate, recoveries showing site-fidelity are also discussed. LONGEVITY from banding records of wild birds is also given (if >12 months).

REFERENCES

- Baker, G.B., et al. 1999. *Report on the Australian Bird and Bat Banding Scheme, 1996–97*. Environment Aust. (ABBBS), Canberra.

VOICE Sonagrams were made, where suitable recordings were available, using an Apple Macintosh computer. Sounds were digitized at 16-bit resolution and edited using SoundEdit software (Macromedia Inc.). Irrelevant intrusions and background noises were, as far as possible, removed. Sonagrams were made using Canary 1.2.4 software (Bioacoustics Res. Prog., Cornell Lab. Orn.). The analysis used a Hamming window function, a filter bandwidth of c. 350 Hz, smooth display style, 50% overlap and 256 point FFT size. Sonagrams were sent in electronic form (as PICT files) to the publisher. Each sonagram is shown with an overlay, with time on the horizontal scale and frequency on the vertical scale. The amplitude (loudness) of a sound is shown by the darkness of the tracing.

To permit reference to the actual sound used to make a sonagram, published recordings have been used as much as possible, particularly those from the compilations attempting to cover all species in our region (Buckingham & Jackson for Aust.; McPherson for NZ). Recordings from the sound library of the Australian National Wildlife Collection (ANWC), CSIRO Division of Sustainable Ecosystems, Canberra, have been used to complete the coverage. We have also made use of the large collection contributed by D.A. Stewart. The caption to each sonagram lists (as far as is known) the recordist, place and date of the recording, and the source of the recording. If the source is given as the letter P (records, cassettes) or the letter Q (compact discs) followed by a number then the source is a published recording and is listed below.

Sonagrams show 2.5 s, 5 s, 10 s or 20 s of sound. The vertical frequency scale is used regardless of the length of time shown, so that increases or decreases in pitch appear to be more rapid in sonagrams showing longer durations of sound. Reader beware!

In the introductions to earlier volumes we paid tribute to the completion in 12 cassettes of *A Field Guide to Australian Birdsong*, compiled for the Bird Observers Club by the late R. Buckingham and the late L. Jackson. This compilation has continued to be of great value, and its sounds have been the source of most of the sonagrams. The Bird Observers Club of Australia is issuing a revised edition on compact disc, compiled and edited by H. Plowright, and intended for quick reference (CDs 1–7 are currently published). It does not replace the cassette edition with its comprehensive booklets, and a particular track from the cassette edition may be abbreviated or omitted in the CD edition, which also contains some new recordings. The sonagrams in this volume which are made from calls in *A Field Guide to Australian Birdsong* are from the cassette edition, and these calls may or may not be included in the CD edition.

PUBLISHED SOUND RECORDINGS

- P10 Hutchinson, J.N. No date. *Australian Bird Calls: Series 1. Western Australia*. Second edn. Author, Balingup, WA.
- P32 ——— No date. *Australian Bird Calls: Series 4. Queensland Birds*. Author, Balingup, WA.
- P48 Buckingham, R., & L. Jackson. 1991. *A Field Guide to Australian Birdsong. Cassette 6. Eastern Grass Owl to Ground Cuckoo-shrike*. Bird Obs. Club Aust., Melbourne.
- P49 ———, ——— 1992a. *A Field Guide to Australian Birdsong. Cassette 7. White-winged Triller to White-breasted Whistler*. Bird Obs. Club Aust., Melbourne.
- P50 ———, ——— 1992b. *A Field Guide to Australian Birdsong. Cassette 8. Little Shrike-thrush to Hall's Babbler*. Bird Obs. Club Aust., Melbourne.
- P73 ———, ——— 1994. *A Field Guide to Australian Birdsong. Cassette 9. Chestnut-crowned Babbler to Redthroat*. Bird Obs. Club Aust., Melbourne.
- P94 ———, ——— 1999. *A Field Guide to Australian Birdsong. Cassette 12. Crimson Chat to Torresian Crow and Supplementary Calls*. Bird Obs. Club Aust., Melbourne.
- P100 NZ Wildlife Service. 1980. *Birds of New Zealand: 38 Forest and Sea Birds*. Viking Music Cassette VP445C. NZ Dept Internal Affairs.
- P106 McPherson, L.B. 1990. *New Zealand Birds: A Sound Guide*. 6. Author, Christchurch.

- P107 ——— 1990. *New Zealand Birds: A Sound Guide*. 7. Author, Christchurch.
- Q2 Ulman, P., & J. Ulman. 1991. *Mountain Scenes, Nature's Sounds*. Aust. Broadcasting Corporation, Sydney.
- Q29 Horton, H. 1996. *Birdsong of Australia: Bird Calls of the Desert and Semi-arid Regions of Inland Australia*. Aust. Broadcasting Corporation, Sydney.
- Q99 Stewart, D.A. 2002. *Australian Bird Calls: Tropical North-east*. Nature Sound, Mullumbimby, NSW.

BREEDING In our discussion of Season, we have sometimes included a monthly breakdown of breeding records from either the first *Atlas of Australian Birds* or the *New Atlas of Australian Birds* (Aust. Atlas 1, 2 [see Abbreviations and Conventions: Standard References]) or both combined. In these cases, the data comes from Atlas databases and not the published books.

PLUMAGES AND RELATED MATTERS These sections are primarily based on examination of material within the collections of museums in Aust., NZ and, less often, elsewhere, as well as a compilation of the available literature. For each species, the editor or editors who undertook the primary research and prepared the sections on Plumages and related matters is named at the start of the Plumages section.

PLUMAGES This section opens with a summary paragraph that describes the overall sequence of plumages and moults from nestling to definitive plumage as far as it is known. The descriptions that follow are based on examination of museum skins unless otherwise stated. We indicate the number of skins of each sex and age that were examined in preparing the descriptions, and the museum collections from which they came. For polytypic species, where more than one subspecies is described separately in Plumages, or for the descriptions of other subspecies in Geographical Variation, the number of skins are also given separately for each subspecies (wherever they are described). If other sources of information (such as examination of live birds) form a major portion of these descriptions, that is also noted here; otherwise they are simply cited in the text.

The appearance of tracts or topographical areas of the birds is described, with the appearance of individual feathers described as appropriate; individual feathers are often described for the wing and tail. Where individual feathers are not described, the description of the tract also applies to the feathers (e.g. if the mantle is described as black, it consists entirely of black feathers). Terms used to describe patterns of feathers are shown in the figures of topography (see HANZAB 5).

Colour descriptions of Plumages and Bare Parts The identity of colour depends on the light in which it has been seen and how precisely it needs to be defined. The greatest problem is that different people perceive colours differently. We have observed all skins in diffuse natural light or under a daylight globe (Philips 60W Daylight). Wherever possible we have used the F.B. Smithe *Naturalist's Color Guide* (Smithe 1975, 1981) in describing colours, though we have not used the names given to colours themselves by Smithe. These were only used by Smithe to convey a sense of familiarity, and are overly technical and somewhat confusing; in the descriptions of plumages and bare parts, colour names given are simple names that convey a better general impression of the colours

involved. However, to identify correctly the exact colour, the identification numbers for the closest equivalent from Smithe's guide are bracketed in the text, after the simple names of colours, e.g. dark brown (121). When the match is not particularly close the colour number is qualified, often with the abbreviation 'c', e.g. dark brown (c121). For colours that have no equivalent in the guide, we place (ne) in brackets after the colour descriptor. If we have not been able to compare colours with the guide and this is not clear from the context, we have denoted such colours by (-). Where two colours are combined, the last-named colour is dominant (e.g. buff-yellow is more yellow than buff); sometimes the suffix 'ish' is added to a colour to denote a weaker tinge of that colour (e.g. buffish yellow has a weaker tinge of buff than buff-yellow).

MOULTS A primary moult-score (PMS) is a sum of the moult-scores of individual feathers (see HANZAB 5 for full discussion of moults and their scoring). In birds with ten primaries the PMS will lie between 0 (moult of primaries has not yet begun) or 50 (moult of primaries has recently finished). When calculating PMS, feathers labelled O and V are scored 0; feathers labelled N are scored 5; and S can equal 5 or 0 depending on the circumstances. For example, a bird that has temporarily suspended moult of primaries may have a moult sequence of S⁴O⁶, in which case S = 5 and the PMS = 20. When this bird begins moulting again it may have the sequence S⁴N¹3¹O⁴, again S = 5 and the PMS = 28. However, a bird that has undergone a partial moult of outer primaries may have a moult sequence of O⁷S³. In this case, S = 0 and the PMS = 0. Unless otherwise stated, we have scored the moult of the primaries of one wing. We have not recorded condition of moult of the remicle, or used it in moult-scores.

MEASUREMENTS, WEIGHTS Measurements of skins, taken by HANZAB researchers (see Editing and Artwork in Acknowledgements below), are given for nearly all species (see HANZAB 5). Published measurements and weights from the literature or unpublished data of live birds or skins are also given where they are available (or references to them are given). Measurements of skins and of live birds are presented separately. For species in which males and females look

similar, sexing of skins has been based on data on labels. We have reduced the numbers of mis-sexed birds in our samples by relying mainly on specimens for which gonads were sketched or described, and on specimens prepared by experienced workers, a process that can involve rather subjective decisions. It is likely that a few mis-sexed specimens were not discarded on this basis; we have mentioned those few cases where it is thought that mis-sexed specimens may have affected the means calculated for either sex. Where published measurements contained obvious errors, we have often included the measurements, with a note of the error.

We have not usually presented data for live birds of unknown sex and from unknown locations given in the annual, and other, reports of the ABBBS (e.g. Baker *et al.* 1999, unless we have very few data for a species).

In addition to the standard measurements in HANZAB 5, we have used the following measurements in some species accounts:

BILL WN: Width of bill measured at anterior edge of nostrils.
BILL DN: Depth of bill measured at anterior edge of nostrils.

GLOSSARY

BERGMANN'S RULE: An ecogeographical trend whereby populations of a species at lower latitudes and altitudes (warmer environments) have smaller body-mass than those at higher latitudes and altitudes (colder environments).

ALLEN'S RULE: An ecogeographical trend whereby populations of a species at lower latitudes have larger extremities (bills, feet) than those at higher latitudes.

GLOGER'S RULE: An ecogeographical trend whereby populations of a species living in sunnier, more highly irradiated and, commonly, arid environments are paler and less intensely pigmented than those in cloudier and, commonly, wetter environments.

PLANTAR: Pertaining to the posterior surface of the tarsus.

REFERENCES

- Baker, G.B., *et al.* 1999. *Report on the Australian Bird and Bat Banding Scheme, 1996-97*. Environment Aust. (ABBBS), Canberra.
 Smithe, F.B. 1975. *Naturalist's Color Guide*. Am. Mus. Nat. Hist., New York.
 ——— 1981. *Naturalist's Color Guide. III*. Am. Mus. Nat. Hist., New York.

ACKNOWLEDGEMENTS

As with all previous volumes in the series, a great many people have been involved in the preparation of Volume 7 and we are enormously grateful to all who have assisted us. Some of those who have helped us have done so over many volumes or, in some cases, over much of the life of the HANZAB project, and the importance of their assistance cannot be underestimated. Importantly, the Handbook would not have been possible without the continued generous financial support of our sponsors, who are listed on pages 13–16. We have also had a great deal of help from many ornithologists, birdwatchers and others interested in birds in Australia, New Zealand and overseas. Such help has been fundamental to completing this volume, and without it we would not be able to meet the goals of the project or approach the quality of work required.

We are grateful to the members of the Fundraising Committee and the Handbook Fundraising Working Group—Lady Southey AM, Mrs M.S. Ross AM, Mr S.J. Cowling, Mr J.B. Downey, Ms G. O'Donoghue, Ms S.M. Grant and Dr J.G. Hamilton—who have performed the vital task of raising the large sums of money needed to produce this volume. The HANZAB team regret deeply the delays that have accompanied the completion of this final volume, and the difficulties this has caused. Special thanks must go to the late Dr H.N.B. Wettenhall, whose enthusiasm and support for the project were largely responsible for raising the funds needed to see this work through to its completion, and to Lady Southey and Mrs M.S. Ross, who took over the major role in raising the funds needed to complete the series. We must also acknowledge the work of the Council and Research Committee of Birds Australia, and the Chief Executive Officers of Birds Australia, Mr J.B. Downey (to Dec. 2004), and Dr J.G. Hamilton (from Dec. 2004), in ensuring that the project reached its conclusion. The members of the HANZAB Steering Committee—Mr S.J. Cowling (Chair), Dr B.D. Bell, Dr L. Christidis, Dr S.J.J.F. Davies, Mr J.B. Downey, Dr J.G. Hamilton, Mr P.J. Higgins, Dr A. Lill, Mr R.H. Loyn, Dr P. Olsen and Ms H. Fawcett (OUP)—have worked to ensure the overall quality and direction of this work and the completion of the work to its stated goals and standards.

We are once again indebted to Derrick Stone, who was responsible for the design and layout of the volume and whose forbearance, and commitment to the project, has produced a book of the highest standards. We must also thank V. Somerset, J. Missen, D. Meagher and J. Anderson, who read and edited all the texts for Oxford University Press, and whose attention to detail picked up many errors or raised questions that needed to be asked about the text. Lastly we must thank all the staff at Oxford University Press in Melbourne involved in the production of this volume, especially G. Corridon, H. Fawcett and P. Wilson, with whom we have worked closely.

Museums and other official organizations

Throughout the production of this series, we have received much help and been generously provided with facilities by museums throughout Australia, New Zealand and overseas. The curators of birds at such museums are thanked for

allowing us to study the collections in their care; without this we would not have been able to complete the monumental task of describing the plumages and other external morphology of all the species occurring in the HANZAB region. We are especially grateful to Dr L. Christidis (now Australian Museum, Sydney), Mr R.M. O'Brien and Mr N.W. Longmore at the **Museum of Victoria**, who, throughout the production of HANZAB, have provided a permanent base for the preparation of texts for Plumages and related matters, assisted with the preparation of the colour illustrations, arranged loans of material from other museums, and helped us with reference material that was hard to obtain; our task would be difficult, if not impossible without this help. Similarly, we are also very grateful to R. Schodde, I.J. Mason, R.T. Chesser, J.C. Wombey, M. Clayton, P.J. Fullagar and R.P. Palmer of the **Australian National Wildlife Collection**, CSIRO Division of Sustainable Ecosystems, Canberra, who also provided a permanent base for the preparation of Plumages and related matters, and allowed other Handbook staff to use the collection and facilities as needed, most notably in the preparation of Voice texts and the colour illustrations. In NZ, J.A. Bartle, at the **Museum of New Zealand Te Papa Tongarewa**, Wellington, allowed our workers to spend long periods there and provided a base for their work in NZ; A.J.D. Tennyson also helped in many ways while our workers were at the Museum. Curators at other museums throughout Australia and New Zealand also provided much help. We thank B.J. Gill, **Auckland Institute and Museum**; W.E. Boles and L. Christidis, **Australian Museum**, Sydney; P. Scofield and G.A. Tunnicliffe, **Canterbury Museum**, Christchurch; P. Horner, **Northern Territory Museum and Art Gallery**, Darwin; H. Janitsky, **Queensland Museum**, Brisbane; T. Scarborough, **Queen Victoria Museum and Art Gallery**, Launceston; P. Horton and M. Penck, **South Australian Museum**, Adelaide; K. Davidson, **Tasmanian Museum and Art Gallery**; and R.E. Johnstone, **Western Australian Museum**, Perth.

In NZ, we must thank all those who helped with the production of this volume, especially Brian D. Bell, who provided lists of potential contributors and reviewers for species that occur there, chased up banding data, and continued as a member of the HANZAB Steering Committee; and Paul Scofield, who assisted with many suggestions for reviewers, and some extremely useful photocopying from the library of the Canterbury Museum. We would also like to thank the NZ Department of Conservation and Auckland Regional Council, which generously allowed their employees (I. Flux and T. Lovegrove respectively) time to prepare their contributions for this volume (see Contributors and Reviewers). We, and J.G. Innes, acknowledge the support of the Foundation for Research, Science and Technology (under contract CO9X0204). Those who assisted by reviewing or contributing to this volume are listed fully below, but we would like to take this opportunity to express our sincere gratitude, and our indebtedness, to all those in NZ who devoted so much time and effort, over many years now, either to prepare the texts for NZ species or to bring to acceptable

standard the often rather poor efforts we managed to produce from this side of the Tasman Sea. Sincere thanks.

Thanks must also go to the staff of the **Australian Bird and Bat Banding Scheme** (ABBBS) of Environment Australia in Canberra who supplied and helped with analysis of banding recovery records and made available biometric data for birds within this volume, especially D. Drynan, who provided many banding summaries, and cheerfully answered a host of detailed queries; G.B. Baker, who gave permission for use of the data; and E.B. Dettmann, who extracted much of the data for us in her own time.

We are very grateful to P. Larner and staff of the library of the **CSIRO Division of Sustainable Ecosystems**, Canberra, for use of the collection and for assistance freely given.

At the **Birds Australia** National Office, librarian Evelyn Scott helped in many ways with obtaining references and books for us—may you enjoy a long, happy and well-deserved retirement from the overly demanding Handbook project. Thanks should also go to Bob Cross who, while not directly assisting HANZAB, has been intimately involved in keeping the H.L. White Library running and in getting the journals on the shelves for many years now, and has often brightened our days when he has been in the office.

For kind permission to reproduce black-and-white illustrations by W.T. Cooper in *The Birds of Paradise* (Frith, C.B., & B.M. Beehler. 1998. OUP, Oxford) and in *Emu*, and those of M.J. Bamford in *The Zebra Finch* (Zann, R.A. 1996. OUP, Melbourne) we thank the artists, authors and publishers.

Special assistance

Throughout the preparation of Volume 7 we continued to be assisted by the work of the late J.D. Waterhouse, who compiled a complete author and subject index to *Emu*, which he freely made available to Handbook staff (and which is now lodged at the Birds Australia National Office). **Names and nomenclature** L. Christidis and W.E. Boles, as representatives of the Birds Australia Taxonomic Advisory Committee, cheerfully provided taxonomic and nomenclatural advice whenever it was required. **Field Identification, Plumages and related matters, and Artwork** Many people helped by providing data, photographs, slides and sketches that were used in the preparation of the sections on Field Identification and Plumages and related matters and for the preparation of the colour illustrations. We thank: R.P. Allen, W.E. Boles, P. Beaumont, A. Boyle, M.G. Brooker, A.H. Burbidge, M.J. Carter, G.A. Carpenter, G.S. Chapman, W. Cherry, B. Chudleigh, M. Clayton, J.N. Davies, R. Drummond, D.W. Eades, P. Evans, K. & L. Fisher, C.B. & D.W. Frith, C.J. Hassel, P.J. Higgins, A.J. Huggett, A.F. Hurst, D.J. James, J. Lewis, R. Mackenzie, P.R. Marsack, J.S. Matthew, J. Moverley, J.A. Nicholls, L. Nielsen, M. Norgard, R.A. Noske, D.J. Onley,

A. Palliser, R.M. Patterson, L. Pedler, L.N. Robinson, A.C. Rogers, K.G., A. & D.I. Rogers, A.B. Rose, C.S. Roselaar, C.H. & J.L. Sandbrink, J. Seymour, H. Shirihai, A.F. Silcocks, G. Swann, C.L. Tzaros, K. Uhlenhut, F.W. van Gessel and D. Watts. **Distribution and Population** G.A. Carpenter provided much unpublished data on the distribution of birds in SA. **Movements** In addition to the assistance of the ABBBS (above), D. Ingwersen helped at Birds Australia to extract banding data from files provided by the ABBBS. **Food** A. O'Callaghan assisted with the literature search, and S.J.S. Debus, G. Holmes and A.J. Leishman provided much useful information. **Voice** The following helped by sending recordings or in other ways: the late R. Buckingham, M.L. Hall, the late L. Jackson, L.B. McPherson, and H. Plowright. Particular thanks to C.B. Frith, D.W. Frith, P.J. Fullagar, G.P. Johnson, G. Kaplan, T.G. Lovegrove, L.E. Molles, E. Slater, D.A. Stewart and J.R. Waas for assistance with voice texts. **Breeding** R.M. O'Brien provided some egg measurements and reference material. **Family introductions** We must thank Dr P.B. (Barry) Taylor and the editors of the *Handbook of the Birds of the World* (Lynx Edicions, Barcelona) for permission to use a draft version of the *Family Campephagidae* (*Cuckoo-shrikes*) in preparation of our introduction to this family.

General

We must thank the many people who have helped, voluntarily or otherwise, at the Birds Australia National Office and elsewhere, who made it possible to complete this volume: they and many other people assisted in a great variety of ways in the preparation of this volume. We particularly thank: A. Butcher, A. O'Callaghan, A. Silcocks, J. Smith, J. Suftin, M. Sweeny, and C. Williams.

We are grateful to J. Henderson, of Environment Australia, Norfolk I., who kindly spent much time photocopying reports unavailable on the mainland.

On various trips, accommodation was provided or offered by J.S. Boyd (Canberra), K. Burrell (Canberra), A.R. Johnson (Melbourne), C. McIntosh and P. Collins (Adelaide), and B. Rochford (Auckland).

For Birds Australia, the bulk of the proof-reading for this volume has been done by G.D. Price, with much assistance from A.M. Dunn, P.J. Higgins, J.S. Matthew and J.M. Peter.

Lastly, the members of the Handbook team extend our sincere thanks and appreciation to our spouses, partners and families, who cannot fail to be in some way involved in, or affected by, a project of this size. Their patience, advice and assistance in various ways, over a great many years for some, has been a valuable yet unsung contribution to the project. Thank you.

EDITING AND ARTWORK

EDITING

Texts were prepared by the editors indicated below except for those accounts where we received an external contribution (which are not listed below; see Acknowledgements [Contributors and Reviewers]), in which case the contribution was edited as indicated.

Field Identification K.A. Bartram prepared or edited most accounts, with the following exceptions: D.W. Eades prepared accounts for most Dicruridae (*Myiagra ruficollis*, *M. rubecula*, *M. cyanoleuca*, and *Rhipidura* other than

R. leucophrys), part of the Artamidae (*Artamus*, *Cracticus*) and co-authored, with K.A. Bartram, the texts for the Alaudidae and part of the Motacillidae (*Motacilla*); A. Rogers prepared accounts for part of the Dicruridae (*Machaerirhynchus flaviventer*, *Monarcha*, *Arses*, *Myiagra alecto* and *M. inquieta*, *Grallina cyanoleuca*, *Rhipidura leucophrys* and *Dicrurus bracteatus*) and Oriolidae (*Sphecotheres*); J.R. Starks prepared accounts for the Emberizidae, Nectariniidae, Dicaeidae, Pycnonotidae, part of the Sylviidae (*Megalurus*), and the Sturnidae; and M.J. Antos prepared accounts for parts of the Zosteropidae (*Zosterops*

citrinellus, *Z. luteus*) and Muscicapidae (*Turdus merula*, *T. philomelos*). Most Field Identification texts were also reviewed by editors of Plumages and related matters, and J.S. Matthew in particular added greatly to the texts and clarified many points of confusion. For **Habitat**, A. Williamson prepared or edited accounts for the Dicruridae, Campephagidae, Oriolidae, Artamidae (except *Gymnorhina tibicen*), Paradisaeidae, Corcoracidae, Callaeidae and Alaudidae; and A.J. Dare did so for *Gymnorhina tibicen* (in Artamidae), the Corvidae, Laniidae, Ptilinorhynchidae, Turnagridae, and Prunellidae to Sturnidae except for the Motacillidae other than *Anthus novaeseelandiae*, which were prepared by J.M. Peter. The accounts for **Distribution and Population** were all prepared by J.M. Peter. For **Movements**, R.N. Price prepared accounts for the Dicruridae, Campephagidae and Oriolidae; M.J. Hewish prepared accounts for parts of the Artamidae (*Artamus leucorhynchus*, *A. cinereus*, *A. cyanopterus*, *A. minor*, and *Cracticus*), the Prunellidae, and parts of the Passeridae (*P. montanus*) and Estrilidae (*Taeniopygia bichenovii*, *Poephila*, *Neochmia phaeton*, *N. ruficauda*, *N. modesta*, *Stagonopleura*, *Emblema*, and *Lonchura punctulata* and *L. flaviprymna*); and the rest were prepared or edited by J.L. O'Connor. K.Y. Al-Dabbagh prepared the **Food** sections for the Dicruridae, Campephagidae, Oriolidae and Artamidae; G.D. Price prepared the accounts for the Paradisaeidae, Corvidae, part of the Ptilinorhynchidae (*Ailuroedus melanotis*, *A. crassirostris*, *Chlamydera nuchalis* and *C. cerviniventris*), the Sylviidae and Muscicapidae; and S.A. Chambers prepared or edited the rest.

The accounts for **Social Organization** and **Social Behaviour** were mostly prepared or edited by A.M. Dunn, with the following exceptions: P.S. Lansley prepared most of the Dicruridae (except *Dicrurus bracteatus*); R.N. Price prepared the accounts for *Dicrurus bracteatus* (in Dicruridae), the Campephagidae and Oriolidae, part of the Artamidae (*Artamus*), the Corvidae, Corcoracidae, Callaeidae, Alaudidae, Prunellidae and Motacillidae, and parts of the Estrilidae (*Neochmia*, *Stagonopleura*, *Emblema*, *Lonchura* and *Heteromunia*) and Hirundinidae (*Cheramoeca leucosternus*, *Hirundo neoxena*); J.L. O'Connor prepared most of the Sylviidae (except *Bowdleria rufescens*), and parts of the Hirundinidae (*Hirundo nigricans*, *H. ariel*), Muscicapidae (*Turdus merula*) and Sturnidae (*Aplonis metallica*); and S.A. Chambers prepared part of the Muscicapidae (*Turdus poliocephalus*, *T. philomelos*). For **Voice**, T. Howard prepared or edited the accounts for the Dicruridae to the Corcoracidae; A.M. Dunn prepared or edited the accounts for the Callaeidae to the Muscicapidae, except for various introduced species, which were written by J.M. Peter; and A.M. Dunn also wrote the accounts for the Sturnidae. T. Howard made all sonagrams. For **Breeding** H.M. Gibbs prepared accounts for the Dicruridae and part of the Artamidae (*Gymnorhina*); G. Arnold and S.A. Chambers prepared the Oriolidae and most of the Campephagidae (except *C. novaehollandiae*); J.R. Starks prepared accounts for *C. novaehollandiae* (in Campephagidae), part of the Artamidae (*Artamus*), and all accounts for the Corvidae, Ptilinorhynchidae, Passeridae, Estrilidae, Pycnonotidae, Sylviidae, Zosteropidae and Sturnidae; A.M. Dunn prepared the Paradisaeidae and part of Artamidae (*Cracticus*, *Strepera*); and the remaining texts were prepared or edited by S.A. Chambers.

Plumages and related matters were mostly prepared by J.S. Matthew, except for the Dicruridae, which were partly or wholly prepared by E.J.G. Copley and A.M. Dunn, and most of the Estrilidae, which were partly prepared by A.M. Dunn.

(The editors responsible for these sections are indicated at the start of the Plumages accounts.)

Mastheads For each species, I.J. Mason and R. Schodde prepared the nomenclatural details of the original description and the summaries of subspecies. The etymologies of the scientific names and, as needed, recommended English names, were prepared by J. Jobling. **Ectoparasites** The list of ectoparasites of Australian, New Zealand and Antarctic birds (Appendix I) was prepared by M.D. Murray, R.L. Palma, R.L.C. Pilgrim and M. Shaw. **Aboriginal names** (Appendix II) were compiled by J.M. Peter and M.B. Peter.

Family introductions The introductions to the families were largely prepared by the section editors. The formal diagnoses and discussions of plumages and related matters were prepared by J.S. Matthew. The summaries for Habitat were prepared by A.J. Dare (Dicruridae to Estrilidae) and by J.L. O'Connor (Fringillidae to Sturnidae); for Movements by J.L. O'Connor; for Food by S.A. Chambers; for Social Organization and Social Behaviour by A.M. Dunn; for Voice by A.M. Dunn, except Dicruridae, Corvidae and Ptilinorhynchidae by T. Howard; Breeding by S.A. Chambers; and summary of status and threats by S.J. Cowling, J.M. Peter and P.J. Higgins.

G.D. Price compiled all texts, undertook a preliminary edit of the texts, had the painstaking task of entering many of the edits of the senior editors, conducted final checks on the accounts before submission to the publisher, did much of the proof-reading of the manuscript, as well as co-ordinating our other proof-readers, and checked the blueprints. He also did a superb job as Director of Tipping and Sweepstakes over the last few years. S.A. Chambers, A.M. Dunn, J.S. Matthew, J.L. O'Connor and G.D. Price assessed and entered the bulk of the review comments we received; other Section Editors assisted as required. P.J. Higgins, J.M. Peter and S.J. Cowling edited all species accounts and introductory matter. J.B. Hurley kindly assisted with final edits on the accounts for the Motacillidae and Sylviidae.

ARTWORK The colour plates were painted by P.R. Marsack (pl 1, 2, 7–8, 12–13, 19–20, 25–28, 32–37 and 40–42), N. Day (pl 3, 5, 14–17, 21–22, 24, 31, 38–39, 43 and 51–54), K. Franklin (pl 10–11, 18, 23, 30 and 44–50), P.J. Slater (pl 4 and 6), J. Luck (pl. 9), and D.J. Onley (pl. 29). Co-ordination and planning of colour plates was managed by D.W. Eades (pl 1–11) and J.S. Matthew (pl 12–54).

Line drawings were prepared by P.R. Marsack (pp 1428, 1429, 1437, 1438), A.K.H. Gorrington-Smith (pp 143, 621, 666), J.S. Matthew (pp 155, 204, 468, 525, 640, 642, 651, 712, 836, 1378, 1379, 1383, 1435, 1543, 1683, 1707, 1710, 1830, 1833), F. Knight (pp 310, 693, 737, 742, 783, 1655), N. Day (p. 1619) and J.M. Peter (p. 1017).

Further, the following illustrations were reproduced from published sources: W.T. Cooper (illustrations on pp 637, 647, 648, reproduced from Frith, C.B., & W.T. Cooper. 1996. *Emu* 96[2]: 102–13, June 1996; and on pp 657, 665, 657, reproduced from Frith, C.B., & B.M. Beehler. 1998. *The Birds of Paradise*. OUP, Oxford); and M.J. Bamford (illustrations on pp 1113, 1114, 11115, reproduced from Zann, R.A. 1996. *The Zebra Finch*. OUP, Melbourne).

MAPS The distribution maps were prepared by S.J. Cowling, based on texts of Distribution and Population and other information provided by J.M. Peter.

CONTRIBUTORS AND REVIEWERS

Many people have assisted with the production of this volume by preparing or reviewing texts, either in part or in full, for a species or for groups of species. Birds Australia insists on the review of all Handbook texts by ornithologists or other biologists expert in particular fields, or with expertise in individual species or groups of species. Reviewing of texts is an essential part of the preparation of the texts and we would like to thank all who made the time to assist us in this regard. Their assistance has greatly improved the accuracy and completeness of the texts. However, any errors within the text remain the responsibility of the editors. We also apologize for any inadvertent omissions from the following list.

While it is not possible to attribute credit in detail for all texts reviewed by individuals, a number of people provided special assistance by reviewing substantial numbers of species accounts in this volume (in many cases continuing their ongoing and invaluable assistance to this project). We thank G.S. Chapman, S.J.S. Debus, C.B. & D.W. Frith, C.J. Hassell, G. Holmes; D.J. James, R.H. Loyn, A.K. Morris, D. Myers, L. Nielsen, J. Wieneke and I.A. Woxvold. Many ornithologists in NZ also volunteered considerable time and effort in helping with the NZ species, and we greatly thank them all for their outstanding help.

The contributors listed below prepared most of the species accounts listed, and the sections prepared are usually identified in the accounts themselves. In all cases, those on Plumages and related matters were prepared by HANZAB editors. Contributors later reviewed the whole accounts they

prepared and often contributed additional information. For this volume we have had several external authors prepare complete accounts for a number of species (with the exception of Plumages and related matters, which were prepared by J.S. Matthew) but, unlike earlier volumes, we recommend that these accounts be cited individually as indicated below. A recommended citation for such accounts is in the form: Lovegrove, T.G., & J.S. Matthew. 2006. '*Philesturnus carunculatus* Saddleback.' In: *Handbook of Australian, New Zealand and Antarctic Birds. Volume 7: Boatbill to Starlings*. Edited by P.J. Higgins, J.M. Peter & S.J. Cowling. Oxford University Press, Melbourne.

Contributors

C.B. Frith, D.W. Frith & J.S. Matthew: Spotted Catbird, Green Catbird, Tooth-billed Bowerbird, Golden Bowerbird, Regent Bowerbird, Satin Bowerbird, Spotted Bowerbird, Western Bowerbird, Great Bowerbird, Fawn-breasted Bowerbird.

J.G. Innes, I. Flux, J.S. Matthew, L.E. Molles & J.R. Waas: Kokako.

T.G. Lovegrove & J.S. Matthew: Saddleback.

In addition to the above contributions, G. Kaplan prepared draft accounts for the Social Organization, Social Behaviour and Voice sections of the Australian Magpie *Gymnorhina tibicen*; and G.P. Johnson contributed the Voice account for Grey Butcherbird *Cracticus torquatus*.

Reviewers

R. Allen	J.D. Coleman	D.L. Goodfellow	D. Larkins	U. Munro	P.M. Sagar
D. Anthony	P. Copley	A.C.M. Griffin	P.C.M. Latham	D. Myers	M. Schöpfer
D.P. Armstrong	G. Copson	I.C. Gynther	S. Legge	L. Nielsen	P. Scofield
C.B. Ashton	M.D. Craig	M.L. Hall	A.J. Leishman	H.A. Nix	D. Secomb
M. Bamford	J.D. Croxall	C.J. Hassell	B. Leisler	C. Norment	R.H. Stranger
A.J. Beauchamp	S.J.J.F. Davies	J.R. Hay	N. Lenz	C.F.J. O'Donnell	G. & L. Swann
B.D. Bell	S.J.S. Debus	R.G. Heinsohn	A.J. Ley	T. Palliser	M.E. Talmage
G.R. Beruldsen	R.H. Donaghey	N. Hermes	N.W. Longmore	K. Parker	M.K. Tarburton
W.E. Boles	P.L. Dostine	D. Hobcroft	T.G. Lovegrove	R. Parrish	S.C. Tidemann
G. Borgia	R. Drummond	R.N. Holdaway	P.E. Lowther	R.M. Patterson	M.K. Todd
A. Boyle	H.J. Eckert	M.C. Holdsworth	R.H. Loyn	S.M. Pellis	B.J. Traill
J.V. Briskie	I.D. Endersby	G. Holmes	C. Macleod	B. Phalan	S.M. Trémont
M.G. Brooker	K.L. Evans	D. Hopton	J.R. Madden	J.P. Pierre	F.W. van Gessel
M.N. Brown	A. Fisher	W. & H. Horton	M.J.L. Magrath	R.E.R. Porter	C.R. Veitch
P. Brown	K. & L. Fisher	J.D. Hudson	W.J. Maher	R.G. Powlesland	C.J. Veltman
D.H. Brunton	I. Flux	A.J. Huggett	R.E. Major	D. Prawiradilaga	J.R. Waas
P.C. Bull	J.E.C. Flux	J.M. Hughes	M.C. Massam	J. Read	R. Webster
A.H. Burbidge	H.A. Ford	J.G. Innes	N. McCrie	R. Reed	J. Wieneke
G.A. Carpenter	R. Forsythe	R.P. Jaensch	D.C. McFarland	J.R.W. Reid	P.R. Wilson
M.J. Carter	D.C. Franklin	D.J. James	D.G. Medway	B. Reville	J.C.Z. Woinarski
I. Castro	C.B. Frith	P.F. Jenkins	D.R. Milledge	H.A. Robertson	P.F. Woodall
G.S. Chapman	D.W. Frith	G.P. Johnson	C.M. Miskelly	A. Robinson	R.D. Wooller
G.P. Clancy	M. Gardner	D.N. Jones	L.E. Molles	L.N. Robinson	T.H. Worthy
M. Clayton	D. Geering	B. Kentish	D. Morgan	D.I. Rogers	I.A. Woxvold
K.H. Coate	B.J. Gill	J. Kikkawa	A.K. Morris	I.C.R. Rowley	R.A. Zann

ABBREVIATIONS AND CONVENTIONS

Compass directions

N, NE, E, SE, S, SW, W, NW + standard intermediates. Note, however, when used as an adjective (e.g. northern Aust., north-eastern coast, and so on) the style is lower case with a full point: n., ne., e., se., s., sw., w., nw., and so on.

Units

Standard SI units and their recommended abbreviations are followed throughout.

Statistical arrangement

Throughout, simple statistical data are presented in the form: MEAN (STANDARD DEVIATION; RANGE; SAMPLE SIZE), e.g. 285 g

(5.23; 276–298; 14). By presenting the data in this way, if any one figure is missing from within the brackets it is obvious what it is. If only the range is available, it is presented in brackets, e.g. 253 g (276–298). If only standard deviation is available it is presented as MEAN±STANDARD DEVIATION, e.g. 253±5.23 g. If only the sample size is available it is presented as MEAN (n=...), e.g. 253 g (n=14).

In the sections on Measurements and Weights, the last column of the tables indicates significance of the t-test of the sample means:

- ns no significant difference
- * means are significantly different at 0.05
- ** means are significantly different at 0.01

GENERAL ABBREVIATIONS

A'asia(n)	Australasia(n)	Hwy	Highway	Prom.	Promontory
ACT	Aust. Capital Territory	I.	Island	Pt(e)	Point(e)
Arch.	Archipelago	Is	Islands	Qld	Queensland
asl	above sea-level	Isl.	Islet(s)	R.	River
Aust.	Australia(n)	L.	Lake	Ra.	Range
BATH	Banders Aiding the Handbook, a project established to collect data on the external morphology of Aust. birds for HANZAB, especially biometric and moult data	Ls	Lakes	Ras	Ranges
		MIA	Murrumbidgee Irrigation Area	Rd	Road
		min	minute(s)	Rs	Rivers
		Mt	Mountain	s	second(s)
		Mts	Mountains	SA	South Australia
		NI	North Island, NZ	SF	State Forest
BMR	Basal Metabolic Rate	NP	National Park	SI	South Island, NZ
C.	Cape	NR	Nature Reserve	SP	State Park
c.	circa	NSW	New South Wales	sp.	species
Ck	Creek	NT	Northern Territory	spp	species
CP	Conservation Park	NZ	New Zealand	St	Saint
CSN	Classified Summarised Notes (see Bird Reports below)	p.	page	Strn	Strait
		p.a.	per annum	Sub.	Submission (in reference to BARC, NSWORAC)
		Pen.	Peninsula	Tas.	Tasmania
Div.	Division (e.g. Kimberley Div.)	Pl.	Plate	UK	United Kingdom
		Pll	Plates	USA	United States of America
Grp	Group	PNG	Papua New Guinea	Vic.	Victoria
h	hour(s)	pp	pages	WA	Western Australia
HS	Homestead	ppt	parts per thousand		

OTHER ABBREVIATIONS

Several abbreviations are special to various sections.

FOOD

% freq.	% frequency
% no.	% number
% vol.	% volume
% wt	% wet weight
A	autumn
W	winter
S	spring

Su	summer
ad.	adult
ads	adults
excl.	excluding
fl.	flowers
fru.	fruits
imm.	immature(s)
incl.	including

indet.	indeterminate
juv.	juvenile(s)
larv.	larva, larvae
lvs	leaves
obs.	observations
sh.	shoots
sds	seeds
tr.	trace

unident. unidentified

PLUMAGES

(ne)	'no equivalent', in reference to colour-matches with the Smyth Colour Guide (see Introduction to Plumages)
PMS	primary moult-score

MUSEUMS AND OFFICIAL ORGANIZATIONS

ABBBS	Australian Bird and Bat Banding Schemes	MV	Museum of Victoria, Melbourne
ABC	Australian Bird Count (Birds Australia)	NMNH	National Museum of Natural History, Leiden, Netherlands
AIM	Auckland Institute and Museum, Auckland	NMNZ	Museum of New Zealand Te Papa Tongarewa, Wellington (formerly National Museum of New Zealand)
AM	Australian Museum, Sydney	NRS	Birds Australia Nest Record Scheme
AMNH	American Museum Natural History, New York	NSW NPWS	NSW National Parks and Wildlife Service
ANWC	Australian National Wildlife Collection, CSIRO, Canberra	NSWORAC	NSW Ornithological Records Appraisal Committee
BARC	Birds Australia Records Committee (formerly RAOU Records Appraisal Committee [RAC])	OM	Otago Museum, Dunedin (formerly Otago University)
BAS	British Antarctic Survey	OSNZ	Ornithological Society of New Zealand
BMNH	British Museum of Natural History	PWH	Department of Parks, Wildlife and Heritage (Tas.)
CALM	Department of Conservation and Land Management (WA)	QDEH	Queensland Department of Environment and Heritage
CCNT	Conservation Commission of the Northern Territory	QM	Queensland Museum, Brisbane
CM	Canterbury Museum, Christchurch	QNPWS	Queensland National Parks and Wildlife Service
CSIRO	Commonwealth Scientific and Industrial Research Organization (Aust.)	QVM	Queen Victoria Museum and Art Gallery, Launceston
DOC	Department of Conservation, Wellington (NZ)	RAOU	Royal Australasian Ornithologists Union (now Birds Australia)
DSE	Department of Sustainability and Environment (Vic.) (formerly Department of Natural Resources and Environment [NRE] and, before that, Conservation & Natural Resources [CNR])	RBC	OSNZ Rare Birds Committee
DSIR	Department of Scientific and Industrial Research (NZ)	RMNH	Rijksmuseum van Natuurlijke Historie, Leiden
HLW	H.L. White Collection (housed in MV)	SA NPWS	SA National Parks and Wildlife Service
MAGNT	Museum and Art Gallery of the Northern Territory, Darwin (formerly Northern Territory Museum [NTM])	SAM	South Australian Museum, Adelaide
MM	Macleay Museum, University of Sydney	SAW	S.A. White collection (housed in SAM)
		TMAG	Tasmanian Museum and Art Gallery, Hobart
		WAM	Western Australian Museum, Perth
		ZMA	Zoological Museum, Amsterdam
		ZMM	Zoological Museum, Moscow

STANDARD REFERENCES

Some references appear *ad nauseam* throughout the book. These are given in an abbreviated form in running text and are not cited in the list of references at the end of each text.

ACT Atlas	Taylor, M., & Canberra Ornithologists Group. 1992. <i>Birds of the Australian Capital Territory. An Atlas</i> . Canberra Orn. Grp & National Capital Planning Authority, Canberra.	BWP	Cramp, S., & K.E.L. Simmons. 1977, 1980, 1983, 1985, 1988, 1992, 1993, 1994. <i>The Handbook of the Birds of Europe, Middle East and North Africa—The Birds of the Western Palearctic. Volumes 1–9</i> . OUP, Oxford.
Aust. Atlas 1	Blakers, M., S.J.J.F. Davies, & P.N. Reilly. 1984. <i>The Atlas of Australian Birds</i> . Melbourne Univ. Press, Melbourne.	Campbell	Campbell, A.J. 1900. <i>Nests and Eggs of Australian Birds</i> . Privately, Sheffield.
Aust. Atlas 2	Barrett, G., A. Silcocks, S. Barry, R. Cunningham & R. Poulter. 2003. <i>The New Atlas of Australian Birds</i> . Birds Australia, Melbourne.	Cleland	Cleland, J.B., J.H. Maiden, W.W. Froggatt, E.W. Ferguson, & C.T. Musson. 1918. <i>Scient. Bull. Dept Agric. NSW</i> 15: 1–112.
Aust. CL	Condon, H.T. 1975. <i>Checklist of the Birds of Australia. 1. Non-Passerines</i> . RAOU, Melbourne.	DAB	Schodde, R., & I.J. Mason. 1999. <i>Directory of Australian Birds: Passerines</i> . CSIRO Publ., Melbourne.
Aust. CL 1926	RAOU Checklist Committee. 1926. <i>Official Checklist of the Birds of Australia</i> . Second edn. H.J. Green, Melbourne.	FAB	Barker, R.D., & W.J.M. Vestjens. Undated [c. 1989]. <i>The Food of Australian Birds. 1. Non-passerines</i> . CSIRO, Canberra. AND Barker, R.D., & W.J.M. Vestjens. Undated [c. 1991]. <i>The Food of Australian Birds. 2. Passerines</i> . CSIRO, Canberra.
Aust. RD	<i>Reader's Digest Complete Book of Australian Birds</i> . 1976. Reader's Digest, Sydney. AND Schodde, R., & S.C. Tidemann (Eds). 1986. <i>Reader's Digest Complete Book of Australian Birds</i> . Revised edn. Reader's Digest, Sydney.	Gould	Gould, J. 1865. <i>Handbook to the Birds of Australia</i> . Privately, London. (Facsimile edn. 1972. Lansdowne, Melbourne.)
		Hall	Hall, B.P. (Ed.) 1974. <i>Birds of the Harold Hall Australian Expeditions, 1962–70</i> . Br. Mus. (Nat. Hist.), London.

Lea & Gray	Lea, A.H., & J.T. Gray. 1935–36. <i>Emu</i> 35: 63–98, 145–78, 251–80, 335–47.	Serventy & Whittell	Serventy, D.L., & H.M. Whittell. 1976. <i>Birds of Western Australia</i> . Univ. West. Aust. Press, Perth.
Mathews	Mathews, G.M. 1910–27. <i>Birds of Australia</i> . Witherby, London. (All volumes and supplements.)	Storr 7	Storr, G.M. 1977. <i>Birds of the Northern Territory</i> . <i>Spec. Publ. West. Aust. Mus.</i> 7.
North	North, A.J. 1901–14. <i>Nests and Eggs of Birds found Breeding in Australia and Tasmania</i> . Spec. Cat. 1; Aust. Mus., Sydney.	11	— 1980. <i>Birds of the Kimberley Division, Western Australia</i> . <i>Spec. Publ. West. Aust. Mus.</i> 11.
NZ Atlas	Bull, P.C., P.D. Gaze, & C.J.R. Robertson. 1985. <i>The Atlas of Bird Distribution in New Zealand</i> . Orn. Soc. NZ, Wellington.	16	— 1984. <i>Birds of the Pilbara Region, Western Australia</i> . <i>Rec. West. Aust. Mus. Suppl.</i> 16.
NZCL	Ornithological Society of New Zealand (E.G. Turbott, Convenor, Checklist Committee). 1990. <i>Checklist of the Birds of New Zealand and the Ross Dependency, Antarctica</i> . Third edn. Random Century, Auckland.	19	— 1984. <i>Revised List of Queensland Birds</i> . <i>Rec. West. Aust. Mus. Suppl.</i> 19.
NZCL 1970	Ornithological Society of New Zealand (F.C. Kinsky, Convenor, Checklist Committee). 1970. <i>Annotated Checklist of the Birds of New Zealand</i> . Reed, Wellington.	21	— 1985. <i>Birds of the Gascoyne Region, Western Australia</i> . <i>Rec. West. Aust. Mus. Suppl.</i> 21.
NZCL 1953	Ornithological Society of New Zealand (C.A. Fleming, Convenor, Checklist Committee). 1953. <i>Checklist of New Zealand Birds</i> . Reed, Wellington.	22	— 1985. <i>Birds of the Mid-eastern Interior of Western Australia</i> . <i>Rec. West. Aust. Mus. Suppl.</i> 22.
NZRD	<i>Reader's Digest Complete Book of New Zealand Birds</i> . Reader's Digest, Sydney.	24	—, R.E. Johnstone & P. Griffin. 1986. <i>Birds of the Houtman Abrolhos, Western Australia</i> . <i>Rec. West. Aust. Mus. Suppl.</i> 24.
OED	<i>The Oxford English Dictionary</i> . Clarendon Press, Oxford. Includes abridgements, such as <i>The Shorter Oxford English Dictionary</i> .	26	— 1986. <i>Birds of the South-eastern Interior of Western Australia</i> . <i>Rec. West. Aust. Mus. Suppl.</i> 26.
Oliver	Oliver, W.R.B. 1955. <i>New Zealand Birds</i> . Reed, Wellington. (Reprinted 1974.)	27	— 1987. <i>Birds of the Eucla Division of Western Australia</i> . <i>Rec. West. Aust. Mus. Suppl.</i> 27.
Peters	<i>Check-list of Birds of the World</i> . Harvard Univ. Press or Museum of Comparative Zoology, Cambridge, MA. See Additional Standard References below for citations of volumes used in HANZAB 7.	28	—, & R.E. Johnstone. 1988. <i>Birds of the Swan Coastal Plain</i> . <i>Rec. West. Aust. Mus. Suppl.</i> 28.
		35	— 1991. <i>Birds of the South-western Division of Western Australia</i> . <i>Rec. West. Aust. Mus. Suppl.</i> 35.
		Vic. Atlas	Emison, W.B., C.M. Beardsell, F.I. Norman, R.H. Loyn, & S.C. Bennett. 1987. <i>Atlas of Victorian Birds</i> . Dept Cons. Forests and Lands and RAOU, Melbourne.

ADDITIONAL STANDARD REFERENCES

Several references are used as standard references in this volume only:

Boles	Boles, W.E. 1988. <i>The Robins & Flycatchers of Australia</i> . Angus & Robertson, Sydney.	NPIAW	National Photographic Index of Australian Wildlife. 1982. <i>Wrens and Warblers of Australia</i> . Angus & Robertson, Sydney.
Cooper & Forshaw	Cooper, W.T., & J.M. Forshaw. 1977. <i>The Birds of Paradise and Bower Birds</i> . Collins, London.	Peters	Mayr, E., & G.W. Cottrell. (Eds) 1986. <i>Check-list of Birds of the World</i> . 11. Mus. Comparative Zool., Cambridge, MA.
FF	Frith, C.B., & D.W. Frith. 2004. <i>The Bowerbirds</i> . OUP, Oxford.		—, & J.C. Greenway Jr. (Eds) 1960. <i>Check-list of Birds of the World</i> . 9. Mus. Comparative Zool., Cambridge, MA.
Frith & Beehler	Frith, C.B., & B.M. Beehler. 1998. <i>The Birds of Paradise</i> . OUP, Oxford.		—, — (Eds) 1962. <i>Check-list of Birds of the World</i> . 15. Mus. Comparative Zool., Cambridge, MA.
Gilliard	Gilliard, E.T. 1969. <i>Birds of Paradise and Bower Birds</i> . Weidenfeld & Nicolson, London.		—, & R.A. Paynter Jr. (Eds) 1964. <i>Check-list of Birds of the World</i> . 10. Mus. Comparative Zool., Cambridge, MA.
Goodwin	Goodwin, D. 1982. <i>Estrildid Finches of the World</i> . Br. Mus. Nat. Hist., London, & OUP, Oxford.		Paynter, R.A. Jr. (Ed.) 1967. <i>Check-list of Birds of the World</i> . 12. Mus. Comparative Zool., Cambridge, MA.
Immelmann	Immelmann, K. 1965. <i>Australian Finches</i> . Angus & Robertson, Sydney. AND Immelmann, K. 1982. <i>Australian Finches in Bush and Aviary</i> . Revised edn. Angus & Robertson, London.		—, & R.W. Storer. (Eds) 1970. <i>Check-list of Birds of the World</i> . 13. Mus. Comparative Zool., Cambridge, MA.
Iredale	Iredale, T. 1950. <i>Birds of Paradise and Bower Birds</i> . Georgian House, Melbourne.	Strahan	Strahan, R. 1994. <i>Cuckoos, Nightbirds & Kingfishers</i> . Angus & Robertson, Sydney.
Longmore	Longmore, W. (Ed.) 1991. <i>Honeyeaters & Their Allies of Australia</i> . Angus & Robertson, Sydney.	Strahan 2	Strahan, R. (Ed.) 1996. <i>Finches, Bowerbirds and Other Passerines</i> . Angus & Robertson, Sydney.
Marshall	Marshall, A.J. <i>Bower-Birds</i> . 1954. OUP, London.		

STANDARD SOURCES FOR PHOTOS USED AND REFERRED TO IN BARE PARTS

- Flegg, J., & S. Madge. 1995. *Reader's Digest Photographic Field Guide. Birds of Australia*. Reader's Digest, Sydney.
- Lindsey, T.R. 1992. *Encyclopedia of Australian Animals. Birds*. Angus & Robertson, Sydney.
- Morcombe, M. 1990. *The Great Australian Birdfinder*. Weldon Publishing, Sydney.
- Stepnell, K., & W. Boles. Undated. *Australia's Beautiful Birds and Their Young*. Australian Consolidated Press, Sydney.

- Trounson, D., & M. Trounson. 1994. *Australian Birds*. National Book Dist. & Publ., Sydney.
- Wade, P. (Ed.) 1975. *Every Australian Bird Illustrated*. Rigby, Adelaide.

AND

The following sources listed fully in Additional Standard References (above): Aust. RD, Boles, Longmore, NPIAW, Strahan, and Strahan 2.

BIRD REPORTS

As with other standard references, these are cited in an abbreviated form. For most, the name of the report is followed by the year that the bird report covers (not the year in which the report was published); for Classified Summarised Notes and Tasmanian Bird Reports, the volume number of the journal in which the report is published is given instead.

CSN Classified Summarised Notes, published in *Notornis* (OSNZ), which, for its first few volumes was published as *NZ Bird Notes*. Also note that a few CSN (or their equivalent) were published in *Reports and Bulletins of the OSNZ (Rep. Bull. OSNZ)* which preceded *NZ Bird Notes*.

- ACT Bird Rep. Published in *Canberra Bird Notes* (Canberra Orn. Grp)
- NSW Bird Rep. Published in *Australian Birds* (formerly *Birds*) (NSW Field Orn. Club)
- Qld Bird Rep. Published in *Sunbird* (Qld Orn. Soc.)
- SA Bird Rep. Published in *South Australian Ornithologist* (S. Aust. Orn. Assoc.)
- Tas. Bird Rep. Published in *Tasmanian Bird Report* (Birds Tas. [formerly Bird Obs. Assoc. Tas.])
- Vic. Bird Rep. Published by Bird Obs. Club Aust.
- WA Bird Rep. Published by WA Group of the RAOU

STANDARD PLANT AND ANIMAL NAMES

Some common species or genera of plants and animals are referred to often and throughout the text. For simplicity, where such species have recognized English names, their

scientific names are not given in the accounts. The scientific names of these species are given below.

PLANTS

Eucalypts	<i>Eucalyptus</i>	Lemon-scented Gum	<i>E. citriodora</i>	Salmon Gum	<i>E. salmonophloia</i>
Alpine Ash	<i>E. delegatensis</i>	Gum	<i>E. viminalis</i>	Scribbly Gum	<i>E. signata</i>
Apple Box	<i>E. bridgesiana</i>	Manna Gum	<i>E. calophylla</i>	Shining Gum	<i>E. nitens</i>
Bimble Box	<i>E. populnea</i>	Marri	<i>E. obliqua</i>	Silvertop Ash	<i>E. sieberi</i>
Black Box	<i>E. largiflorens</i>	Messmate	<i>E. tessellaris</i>	Snappy Gum	<i>E. racemosa</i>
Black Sallee	<i>E. stellulata</i>	Moreton Bay Ash	<i>E. regnans</i>	Snow Gum	<i>E. pauciflora</i>
Blackbutt	<i>E. pilularis</i>	Mountain Ash		Southern Mahogany	<i>E. botryoides</i>
Blakely's Red Gum	<i>E. blakelyi</i>	Mountain Grey Gum	<i>E. cytellocarpa</i>	Spotted Gum	<i>E. maculata</i>
Blue Mallee	<i>E. gamophylla</i>	Mountain Gum	<i>E. dabrympleana</i>	Sydney Peppermint	<i>E. piperita</i>
Brittle Gum	<i>E. mannifera</i>	Mugga	<i>E. sideroxylon</i>	Tallow-wood	<i>E. microcorys</i>
Broad-leaved Stringybark	<i>E. caliginosa</i>	Narrow-leaved Ironbark	<i>E. crebra</i>	Tuart	<i>E. gomphocephala</i>
Brown Barrel	<i>E. fastigata</i>	Narrow-leaved Peppermint	<i>E. radiata</i>	Variable-barked Bloodwood	<i>E. dichromophloia</i>
Brown Stringybark	<i>E. baxteri</i>	New England Peppermint	<i>E. nova-anglica</i>	Wandoo	<i>E. wandoo</i>
Coolibah	<i>E. microtheca</i>	Northern Grey Ironbark	<i>E. siderophloia</i>	White Box	<i>E. albens</i>
Darwin Box	<i>E. tectifera</i>	Pear-fruited Mallee	<i>E. pyriformis</i>	White Stringybark	<i>E. globoidea</i>
Darwin Stringybark	<i>E. tetradonta</i>	Pink Bloodwood	<i>E. intermedia</i>	Woollybutt	<i>E. longifolia</i>
Darwin Woollybutt	<i>E. miniata</i>	Pink Gum	<i>E. fasciculosa</i>	Yellow Bloodwood	<i>E. eximia</i>
Desert Mallee	<i>E. concinna</i>	Red Bloodwood	<i>E. gummifera</i>	Yellow Box	<i>E. melliodora</i>
Flooded Gum	<i>E. grandis</i>	Red Ironbark	<i>E. tricarpa</i>	Yellow Gum	<i>E. leucoxydon</i>
Forest Red Gum	<i>E. tereticornis</i>	Red Mahogany	<i>E. resinifera</i>	York Gum	<i>E. loxophleba</i>
Ghost Gum	<i>E. papuana</i>	Red Mallee	<i>E. socialis</i>	Yorrell	<i>E. gracilis</i>
Giant Mallee	<i>E. oleosa</i>	Red Stringybark	<i>E. macrorhyncha</i>	Mimosaceae	
Gimlet	<i>E. salubris</i>	River Peppermint	<i>E. elata</i>	acacias	<i>Acacia</i>
Grey Box	<i>E. microcarpa</i>	River Red Gum	<i>E. camaldulensis</i>	Black Wattle	<i>A. auriculiformis</i>
Grey Ironbark	<i>E. paniculata</i>			Blackwood	<i>A. melanoxylon</i>
Gully Peppermint	<i>E. smithii</i>			Brigalow	<i>A. harpophylla</i>
Jarra	<i>E. marginata</i>			Brown Salwood	<i>A. aulacocarpa</i>
Karri	<i>E. diversicolor</i>			Coastal Wattle	<i>A. sophorae</i>

Cootamundra Wattle	<i>A. baileyana</i>	Carabeen	<i>Sloanea langii</i>	Quince	<i>Cydonia vulgaris</i>
Dead Finish	<i>A. tetragonophylla</i>	Celerywood	<i>Polyscias elegans</i>	Sweetbriar	<i>Rubus rubiginosa</i>
Gidgee	<i>A. cambagei</i>	Cherry Ballart	<i>Exocarpos cupressiformis</i>	Nuts	
Golden Wattle	<i>A. pycnantha</i>	Cooktown Ironwood	<i>Erythrophleum chlorostachys</i>	Chestnuts	<i>Castanea sativa</i>
Jam	<i>A. acuminata</i>			Peanut	<i>Arachis hypogaea</i>
Lancewood	<i>A. shirleyi</i>	Cunjevoi	<i>Alocasia macrorrhizos</i>	Pistachio	<i>Pistacia vera</i>
Mulga	<i>A. aneura</i>			Walnut	<i>Juglans nigra</i>
Pindan Wattle	<i>A. tumida</i>	Deep Yellow-wood	<i>Rhodospaera rhodanthema</i>	walnut	<i>Juglans</i>
Sallow Wattle	<i>A. longifolia</i>			Vegetables	
Silver Wattle	<i>A. dealbata</i>	Fern-leaved		Potato	<i>Solanum tuberosum</i>
Weeping Myall	<i>A. pendula</i>	Grevillea	<i>Grevillea pteridifolia</i>	Cereals	
Western Myall	<i>A. papyrocarpa</i>	Flame Heath	<i>Astroloma conostephioides</i>	Canola	<i>Brassica napus</i>
Casuarinaceae			<i>Persoonia linearis</i>	Corn or Maize	<i>Zea mays</i>
casuarinas	<i>Casuarina</i> and <i>Allocasuarina</i>	Geebung	<i>Ulex europaeus</i>	Oats	<i>Avena sativa</i>
Belah	<i>C. cristata</i>	Gorse	<i>Neolitsea dealbata</i>	Safflower	<i>Carthamus tinctorius</i>
Black Oak	<i>C. pauper</i>	Grey Bolleywood	<i>Backhousia myrtifolia</i>	Sunflower	<i>Helianthus annua</i>
Black Sheoak	<i>A. littoralis</i>	Grey Myrtle	<i>Araucaria cunninghamii</i>	Wheat	<i>Triticum aestivum</i>
Buloke (Bull Oak)	<i>A. luehmannii</i>	Hoop Pine	<i>Brachychiton discolor</i>	Common genera	
Coast Sheoak	<i>C. equisetifolia</i>	Lacebark	<i>Lantana camara</i>	acacia	<i>Acacia</i>
Compass Bush	<i>A. pinaster</i>	Lantana	<i>Nauclea orientalis</i>	banksias	<i>Banksia</i>
Desert Oak	<i>A. decaisneana</i>	Leichhardt Tree	<i>Acmena smithii</i>	casuarinas	<i>Casuarina</i> and <i>Allocasuarina</i>
Drooping Sheoak	<i>A. verticillata</i>	Lilly Pilly	<i>Pinus radiata</i>	cypress-pine	<i>Callitris</i>
Dwarf Sheoak	<i>A. pusilla</i>	Monterey Pine	<i>Ficus macrophylla</i>	eucalypts	<i>Eucalyptus</i>
Forest Oak	<i>A. torulosa</i>	Moreton Bay Fig	<i>Nothofagus cunninghamii</i>	grass-tree	<i>Xanthorrhoea</i>
River Sheoak	<i>C. cunninghamiana</i>	Myrtle Beech	<i>Araucaria heterophylla</i>	grevilleas	<i>Grevillea</i>
Slaty Sheoak	<i>A. muelleriana</i>		<i>Schinus molle</i>	lignum	<i>Muehlenbeckia</i> ; this would be, in most cases, <i>M. cunninghamii</i>
Swamp Oak	<i>C. glauca</i>	Norfolk Island Pine	<i>Ficus rubiginosa</i>	paperbark	<i>Melaleuca</i>
Western Sheoak	<i>A. fraseriana</i>		<i>Syzygium crebrinerve</i>	tea-tree	<i>Leptospermum</i>
Proteaceae		Peppercorn	<i>Alphitonia excelsa</i>	willow	<i>Salix</i>
Bull Banksia	<i>Banksia grandis</i>	Port Jackson Fig	<i>Angophora floribunda</i>		
Coast Banksia	<i>B. integrifolia</i>	Purple Cherry			
Heath Banksia	<i>B. ericifolia</i>	Red Ash	<i>Callitris preissii</i>	ANIMALS	
Old Man Banksia	<i>B. serrata</i>	Rough-barked	<i>Angophora costata</i>	Black Rat	<i>Rattus rattus</i>
Silver Banksia	<i>B. marginata</i>	Apple	<i>Atherosperma moschatum</i>	Brown Hare	<i>Lepus capensis</i>
Wallum Banksia	<i>B. aemula</i>	Slender	<i>Bursaria spinosa</i>	Brown Rat	<i>Rattus norvegicus</i>
Melaleuca, tea-tree		Cypress-pine	<i>Pittosporum undulatum</i>	Cat	<i>Felis catus</i>
Cajuput	<i>Melaleuca cajuputi</i>	Smooth-barked	<i>Syncarpia glomulifera</i>	Cattle	<i>Bos taurus</i>
Coastal Tea-tree	<i>Leptospermum laevigatum</i>	Apple	<i>Tristaniopsis laurina</i>	Common Brushtail Possum	<i>Trichosurus vulpecula</i>
	<i>Melaleuca symphyocarpa</i>	Southern Sassafras	<i>Melia azedarach</i>		
Liniment Tree	<i>Leptospermum juniperinum</i>	Sweet Bursaria	<i>Callitris columellaris</i>	Common Ringtail Possum	<i>Pseudocheirus peregrinus</i>
Prickly Tea-tree	<i>Melaleuca ericifolia</i>	Sweet Pittosporum	<i>Geijera parviflora</i>		<i>Canis familiaris</i>
Swamp Paperbark	<i>M. leucadendra</i>	Turpentine	<i>Sloanea woollsii</i>	Dingo	<i>Canis familiaris</i>
Weeping Paperbark		Water Gum	<i>Doryphora sassafras</i>	Dog	<i>Equus asinus</i>
Other plants				Donkey	<i>Vulpes vulpes</i>
African Boxthorn	<i>Lycium ferocissimum</i>	White Cedar		Fox	<i>Capra hircus</i>
Alexandra Palm	<i>Archontophoenix alexandrae</i>	White Cypress-pine		Goat	<i>Equus caballus</i>
Bangalow Palm	<i>A. cunninghamiana</i>	Wilga		Horse	<i>Mus musculus</i>
Black Booyong	<i>Argyrodendron actinophyllum</i>	Yellow Carabeen		House Mouse	<i>Sus scrofa</i>
	<i>Callitris endlicheri</i>	Yellow Sassafras		Pig	<i>Oryctolagus cuniculus</i>
Black Cypress-pine	<i>Adansonia gregorii</i>	Fruits		Rabbit	
Boab	<i>Pteridium esculentum</i>	Apple	<i>Malus sylvestris</i>		
Bracken		Apricot	<i>Prunus armeniaca</i>	Sheep	<i>Ovis aries</i>
		Blackberry	<i>Rubus fruticosus</i>	Water Buffalo	<i>Bubalus bubalis</i>
Broad-leaved		Grape	<i>Vitis vinifera</i>		
Palm-lily	<i>Cordylone petiolaris</i>	Peach	<i>Prunus persica</i>		
		Pear	<i>Pyrus communis</i>		
		Pineapple	<i>Ananas sativa</i>		