
LITERATURE REVIEW

Compiled by D. Purchase.

This section is compiled from journals which are often not available to non-professional ornithologists in Australia. The following criteria are used to select papers for review:

- They relate to species which occur in Australia and its Territories;
- They provide details of techniques and equipment that may be of use in Australia;
- They provide details of studies that may be of general interest to Australian ornithologists.

Journals perused: *Auk* 107(2 and 3); *N. Amer. Bird Bander* 15(1 and 2); *Notornis* 37(2); *Orn. Beob.* 87(4); *Ornis Fennica* 67(2); *Wilson Bull.* 102(2 and 3).

PAPERS OF GENERAL INTEREST

A comparison of radar observations of bird migration at Haizhou Bay, China, and Guam, Marianas. Williams, T. and Mao, Y. (1990). *Auk* 107: 404-406. (Simultaneous radar studies were made at the two sites during September and October 1983.)

Seasonal distribution of the Azure Gallinule (*Porphyrola flavirostris*), with comments on vagrancy in rails and gallinules.

Remsen, J. V. and Parker, T. A. (1990). *Wilson Bull.* 102: 380-399. (The dispersal capabilities of many rails and gallinules, and the evolutionary reasons for these, are discussed.)

Extrapair fertilizations and the evolution of colonial breeding in Purple Martins. Morton, E. S., Forman, L. and Braun, M. (1990). *Auk* 107: 275-283. (The findings support the hypothesis that colonial breeding evolved in Purple Martins to increase the opportunity for extrapair fertilizations and thus increased fecundity in older (and more experienced) males.)

Effects of forest irrigation on long-term trends in breeding-bird communities. Rollfinke, B. F., Yahner, R. H. and Wakeley, J. S. (1990). *Wilson Bull.* 102: 264-278. (Irrigation caused species diversity and evenness to decline.)

Song features birds use to identify individuals. Weary, D. M., Norris, K. J. and Falls, B. (1990). *Auk* 107: 623-625. (The results demonstrate which acoustic features are suitable for individual recognition, and show that all the songs in a bird's repertoire share distinctive qualities.)

A review of bird deaths on barbed-wire fences. Allen, G. T. and Ramirez, P. (1990). *Wilson Bull.* 102: 553-558. (Seventy incidents involving 48 species from various countries are reviewed. No incidents from Australia are included.)

AUSTRALIAN SPECIES

Promiscuity in the Cattle Egret (*Bubulcus ibis*). McKilligan, N. G. (1990). *Auk* 107: 334-341. (Among 19 pairs of individually marked Cattle Egrets c. 3 in 10 successful copulations were extrapair.)

Remex growth and body mass of Mallards during moult. Panek, M. and Przemyslaw, M. (1990). *Auk* 107: 255-259. (It is concluded that decrease in body mass is unrelated to feather synthesis but rather a result of constraints on foraging time.)

Foraging behavior, reproductive success, and colonial nesting in Ospreys. Hagan, J. M. and Walters, J. R. (1990). *Auk* 107: 506-521. (Several hypotheses about the evolution of colonial nesting were tested.)

Insect hawking by a Peregrine Falcon (*Falco peregrinus*) in Fiji. White, C. M. and Brimm, D. J. (1990). *Notornis* 37: 141-145. (Catching airborne locusts flushed by a grass fire.)

First record of the Pectoral Sandpiper in Fiji. Beckon, W. N. (1990). *Notornis* 37: 106. (One photographed in mid-November 1988.)

Variation in size and shape in pigeons, *Columba livia*. Johnston, R. F. (1990). *Wilson Bull.* 102: 213-225. (A comparative study of domestic and feral Rock Doves.)

Nistkastengemeinschaft von Schleiereule *Tyto alba* und Falco *tinnunculus*. Minder, H. (1990). *Orn. Beob.* 87: 354. [In German.] (Barn Owl and Common Kestrel breeding in the same nest-box.)

Sex and age dimorphism in the Barn Owl and a test of mate choice. Marti, C. D. (1990). *Auk* 107: 246-254. (Lower wing loading could contribute to more efficient foraging by males. No evidence was found to support the hypothesis that females choose small males as mates.)

Variation in osmoregulatory parameters of captive and wild House Sparrows (*Passer domesticus*). Goldstein, D. L. and Zahedi, A. (1990). *Auk* 107: 533-538. (The regulation of plasma osmolality (P_{osm}), hematocrit (HCT) and urine osmolality and sodium concentration was examined.)

Phenotypes of juvenile offspring of a mixed pair consisting of a male House Sparrow and a female Tree Sparrow *Passer* spp. Cordero, P. J. (1990). *Ornis Fennica* 67: 52-56. (Morphological descriptions of 10 birds.)

Density effects on asynchronous hatching and brood reduction in European Starlings. Stouffer, P. C. and Power, H. W. (1990). *Auk* 107: 359-366. (It was demonstrated that asynchrony imposes a cost in the form of increased mortality of last-hatched nestlings.)

Intraspecific brood parasitism in the European Starling. Romagnano, L., Hoffenberg, A. S. and Power, H. W. (1990). *Wilson Bull.* 102: 279-291. (Parasites, birds that laid eggs in the nests of other birds with no subsequent care of eggs or offspring, were adopting a reproductive strategy that was better than total reproductive failure.)

Differences in taste preference between Red-winged Blackbirds and European Starlings. Espallat, J. E. and Mason, J. R. (1990). *Wilson Bull.* 102: 292-299. (It is speculated that one mechanism for inter- and intra-specific differences in food selection may be differences in taste sensitivity.)

TECHNIQUES AND ANALYSES

A nonparametric aid in identifying sex of cryptically dimorphic birds. Schlinger, B. A. and Adler, G. H. (1990). *Wilson Bull.* 102: 545–550. (Discriminant function analyses are frequently used to sex birds from external morphometric characters. An alternative method (multiple logistic regression) is presented for sexing birds based upon suites of morphometric and categorical plumage characteristics.)

The AFMO Hi-Lo: double height mist net utilizing a pivoted parallelogram support system. Heselton, K. E. (1990). *N. Amer. Bird Bander* 15: 13–16. (An ingenious system which allows two nets to be used one on top of the other, but at the same time allowing the top net to be quickly lowered for removal of birds. A useful feature is that as the top net is lowered it is automatically replaced by the bottom net, thereby maintaining catching potential.)

Horizontal mist net for capturing upland nesting ducks. Bacon, B. R. and Evrard, J. O. (1990). *N. Amer. Bird Bander* 15: 18–19. (Two persons approach the nest while holding a net in a horizontal plane between two lengths of conduit.)

Improvement in bal-chatri trap. Blakeman, J. A. (1990). *N. Amer. Bird Bander* 15: 26. [Reprinted from *The Eyas* 12(2) 1989.] (The nylon monofilament used for making the nooses is soaked in black fabric dye.)

Two climbing aids useful in wildlife research. Seginak, J. T. (1990). *N. Amer. Bird Bander* 15: 27. (Discusses two devices for climbing trees: a small portable stand used by deer hunters; and an ascender used by rock climbers.)

Patagial tag causes White Pelican death. Chapman, B. R. and Chapman, S. S. (1990). *N. Amer. Bird Bander* 15: 17. (The pelican's bill had become caught under the tag and held firmly to the wing. Despite signs of a desperate struggle the bird had been unable to free its bill and eventually died.)

BOOK REVIEW

Australian Waterbirds — A Field Guide. R. Kingsford, 1991. Kangaroo Press. 128 pp, 88 colour plates, 210×132 mm, paperback, rrp \$14.95, postage \$3.50 within Australia.

This book has one overall aim and several specific aims. Its overall aim is to make waterbirds accessible to everyone. Its specific aims are as follows. Firstly, it is a guide to identifying waterbird species. To help achieve this aim, species are arranged according to their habitat (land surrounding swamps through to deep water). I am not sure this arrangement works for me but I am used (perhaps too used) to seeing waterbirds arranged taxonomically. This arrangement of species by habitats would probably work well for practical bird watchers, especially for people new to bird watching for whom the book was written (p. 10). I, and I imagine Dr Kingsford, would be interested in hearing opinions on how well the ordering of species by habitats works.

Enhanced conservation of waterbirds is the second purpose of the book. The community generally accepts that conservation of wetlands is desirable, but few wetlands are dedicated for nature conservation, at least in New South Wales. However, wetland and waterbird conservation outside parks and reserves is improving as we increase our knowledge of wetland ecology, and stop committing the errors of the past.

The third aim of the book is to provide information about waterbirds. The text provides interesting, although necessarily brief and rather variable, details about each species. Information about the birds' habitats, diets, sizes, distributions, breeding seasons, sexual differences in plumages, nesting patterns and parental care are provided as diagrams (drawn by J. Porter) and short pieces of text in boxes. I liked this aspect of the book's layout immensely, and found it conveyed the information clearly. Of course, there can be only so many boxes of possible dietary items, so this display method results in some loss of detail about food habits. However, I think broad, rather than detailed, dietary information is justified in a book of this type.

The fourth aim of 'Australian Waterbirds — A Field Guide' is expressed in its Appendix IV entitled "Places to See Waterbirds in Australia". The book is worth buying for this list of good waterbird watching places. The list contains wetlands that are easily accessible and those that are not, and wetlands that have relatively low numbers of waterbirds and those that have many. I suspect accessible wetlands with comparatively few waterbirds were included, whereas inaccessible wetlands with relatively few waterbirds were omitted. This is acceptable, otherwise the list of places to see waterbirds in Australia would overwhelm the book.

'Australian Waterbirds — A Field Guide' contains excellent photographs. Many of these are by W. Lawler, whose wetland and waterbird photographs set a standard. I must also draw attention to the book's Appendices II and III which respectively list Australian ornithological societies and relevant journals. These two appendices add to the usefulness of the book.

I have some minor criticisms of the book. There are some spelling errors in the place names, e.g., "Fyswick" on p. 108. Both Grey Teal and Pink-eared Duck have biparental brood care, not female only as shown. River regulation (p. 8) is only occasionally undertaken for flood mitigation. Flood mitigation is usually the stated aim of wetland drainage, which in itself destroys wetlands.

The book is excellent value, and BP deserves congratulations and thanks for subsidizing it. In conclusion, buy 'Australian Waterbirds — A Field Guide'. I did (unfortunately before I was offered a free review copy). But at \$14.95 (plus postage), I am not complaining.

S. V. Briggs
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