

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* 105(4), 106(2); *Ardea* 76(2); *Birdscope* 3(1); *Bokmakierie* 40(3,4), 41(1,2); *Hirundo* Nos 1,2,3; *Malayan Nature Journal* 42(2 & 3); *N. Am. Bird Bander* 13(4); *Notornis* 35(4), 36(2,3); *Orn. Beob.* 86(2); *Ornis Fennica* 65(3,4), 66(1); *Ostrich* 59(4), 60(1,2); *Point Reyes Bird Observatory Newsletter* Nos 77,84,85; *Traffic Bull.* 11(2); *Wilson Bull.* 100(4), 101(1,2).

AUSTRALIAN SPECIES

Cranial pneumatization in the Phalacrocoracidae. Siegel-Causey, D. (1989). *Wilson Bull.* 101: 112–114. (Includes Little Pied, Little Black, Pied, and Great Cormorants, and Imperial, and Black-faced Shags.)

Mate and nestling desertion in colonial Little Egrets. Fujioka, M. (1989). *Auk* 106: 292–302. (Deserters left nest soon after single parent care became feasible and established new breeding relationships.)

The behaviour of bitterns and their use of habitat. Whiteside, A. J. (1989). *Notornis* 36: 89–95. (Ninty hours of observation of Australian Bitterns were made in the autumn and winter of 1986.)

Inbreeding in Ospreys. Postupalsky, S. (1989). *Wilson Bull.* 101: 124–126. (A case of full-sibling mating over a period of 7 years.)

Hunting behaviour of Blackshouldered Kites in the Americas, Europe, Africa and Australia. Mendelsohn, J. M. and Jaksic, F. M. (1988). *Ostrich* 60: 1–12. (All populations including *Elanus notatus* of Australia show similar patterns of behaviour.)

Maintenance energy requirements and energy assimilation efficiency of the Australasian Harrier. Tollan, A. M. (1988). *Ardea* 76: 181–186. (Eighteen food consumption trials using fish, day-old domestic chicks, and laboratory mice, were conducted with six harriers maintained within the zone of thermoneutrality.)

Development of Spotless Crane chicks. Kaufmann, G. (1988). *Notornis* 35: 324–327. (Details of two chicks raised in captivity. May help to tell age of chicks.)

The distribution of Banded Rails and Marsh Crakes in coastal Nelson and the Marlborough Sounds. Elliott, G. (1989). *Notornis* 36: 117–123. (The habitat requirements of each species were investigated and found to be different. The need to protect more habitat to ensure the long-term survival of the Banded Rail was stressed.)

Waders (Charadrii) and other shorebirds at Cape Recife, Algoa Bay, South Africa: seasonality, trends, conservation, and reliability of surveys. Spearpoint, J. A., Every, B. and Underhill, L. G. (1988). *Ostrich* 59: 166–177. (Results of 126 surveys made along 4 km of shore between September 1978 and July 1988. Includes 24 species that occur in Australia.)

Habitat use by breeding and migrating shorebirds in south-central Saskatchewan. Colwell, M. A. and Oring, L. W. (1988). *Wilson Bull.* 100: 554–566. (Includes ten species of waders that occur in Australia.)

Plover's page or plover's parasite? Aggressive behaviour of Golden Plover toward Dunlin. (1988). *Ornis Fennica* 65: 169–171. (The behaviour of Dunlin flying closely behind and landing beside Golden Plover has been termed 'pageing'. This paper shows that Golden Plover with young chicks regard this behaviour as intrusive.)

Nest habitat and nesting success of Lesser Golden-Plovers. Byrkjedal, I. (1989). *Wilson Bull.* 101: 93–96. (Nests and eggs on variegated lichen were harder to see and survived better than those on other vegetation.)

A Ruff at Lake Wainono. Maloney, R. (1988). *Notornis* 35: 328. (The fourth in New Zealand.)

Plumage color correlates with body size in the Ruff (*Philomachus pugnax*). Hoglund, J. and Lundberg, A. (1989). *Auk* 106: 336–338. (Black males were the largest, brown intermediate, and white the smallest.)

Evolutionary genetics of Phalaropes. Dittmann, D. L., Zink, R. M. and Gerwin, J. A. (1989). *Auk* 106: 326–331. (Wilson's Phalarope is genetically distinct from the other phalaropes.)

A second Grey Phalarope at Lake Wainono. Maloney, R. and Watola, G. (1989). *Notornis* 36: 88. (Fifth recorded in New Zealand.)

Breeding biology of Wilson's Phalarope in southcentral Saskatchewan. Colwell, M. A. and Oring, L. W. (1988). *Wilson Bull.* 100: 567–582. (The results of a six-year study.)

Morepork hunting House Sparrows. Sibson, R. B. (1989). *Notornis* 36: 95. (Observed at dusk investigating cypresses in which sparrows nest and roost.)

Early growth and development of the Common Barn-Owl's facial ruff. Haresign, T. and Moiseff, A. (1988). *Auk* 105: 699–705. (The feathers of the ruff act as acoustical reflectors and their growth pattern has several implications with respect to binaural cues available to the owls.)

Food sharing by sibling Common Barn Owls. Marti, C. D. (1989). *Wilson Bull.* 101: 132–134. (The first documented case of food sharing among siblings of the North American race of the Barn Owl.)

Feeding behaviour of New Zealand Kingfishers at an estuary in winter. Hayes, L. M. (1989). *Notornis* 36: 107–113. (*Halcyon sancta vagans* fed only on Mud Crabs which they battered against a perch before swallowing.)

Short summary of current and future research on the Barn Swallow *Hirundo rustica* by the State University of New York laboratory of William M. Shields. Shields, W. M. (1988). *Hirundo* No. 1: 8–11.

Long summary of current and future research on the Barn Swallow (*Hirundo rustica*) by the State University of New York laboratory of William M. Shields. Anon. (1988). *Hirundo* No. 2: 7–15. (The causes and consequences of group living, and the social behaviour have been studied since 1979.)

Female choice and sexual tail ornaments in the swallow *Hirundo rustica*. Møller, A. P. (1988). *Hirundo* No. 1: 3–5. (Naturally occurring long-tailed males were shown to have a higher seasonal reproductive success than those with short tails. This was then tested experimentally by adjusting the length of tails before the start of the breeding season.)

Mud pellets fixed in a row by Welcome Swallows *Hirundo neoxena*. Brown, R. J. and Brown, M. N. (1989). *Hirundo* No. 3: 5–6. (Two pairs were observed to undertake this preliminary nest building behaviour but the reason for it is unknown.)

Feeding behaviour of the Fantail (*Rhipidura fuliginosa*). McLean, I. G. (1989). *Notornis* 36: 99–106. (Three feeding methods are described: hawking; flushing; and feeding associations.)

Genetic and morphological differentiation and phylogeny in the Australo-Papuan Scrubwrens (Sericornis, Acanthizidae). Christidis, L., Schodde, R. and Baverstock, P. R. (1988). *Auk* 105: 616–629. (The interrelationships of 13 of the 14 species currently recognized were assessed by protein electrophoresis.)

TECHNIQUES AND ANALYSES

A capture technique for Burrowing Owls. Barrentine, C. D. and Ewing, K. D. (1988). *N. Am. Bird Bander* 13: 107. (A simple method using nooses which may have application for the capture of other species.)

Construction of poles for double-tiered mist nets. Chapin, R. E. (1988). *N. Am. Bird Bander* 13: 108–109. (A method of hoisting nets up 4 m poles.)

Nest boxes — you fix — will use — swallows. Brown, R. J. and Brown, M. N. (1988). *Hirundo* No. 2: 4–7. (A description of a nest box used by Welcome Swallows.)

Breeding behaviour of the Redbreasted Swallow *Hirundo semirufa*. Earle, R. A. (1988). *Ostrich* 60: 13–21. (Describes method of fitting an observation hole to swallows' nests for inspection of contents and removal of chicks for examination.)

Using precision balances to study swallow energetics. Jones, G. (1988). *Hirundo* No. 1: 5–8. (Nests were permanently placed on electronic balances so that the weight of incubating females and nestlings could be monitored continuously.)

Seasonal and diurnal body weight variation in titmice, based on analyses of individual birds. Haftorn, S. (1989). *Wilson Bull.* 101: 217–235. (An electronic balance was used as a feeding table to attract and weigh individually colour-banded birds.)

Ptilochronology: feather growth bars as indicators of nutritional status. Grubb, T. C. (1989). *Auk* 106: 314–320. (If a rectrix is plucked from a bird that is released and recaptured more than a month later, the width of the growth bars on the replacement rectrix can provide a day-by-day record of the nutritional regime under which the bird had lived.)

Singing territories and home ranges of breeding Chaffinches: visual observation vs. radio-tracking. Hanski, I. K. and Haila, Y. (1988). *Ornis Fennica* 65: 97–103. (Radio-tracking showed more extensive movements were made than was indicated by visual observation.)

The usefulness of taped Spotless Crane calls as a census technique. Kaufmann, G. W. (1988). *Wilson Bull.* 100: 682–686. (Response varied to calls broadcast throughout the breeding season.)

PAPERS OF GENERAL INTEREST

The peninsular effect and habitat structure: bird communities in coniferous forests of the Hanko Peninsula, southern Finland. Raivio, S. (1988). *Ornis Fennica* 65: 129–149. (The peninsular effect predicts that the numbers of species declines towards the tip. On this basis it has been suggested that long and thin nature reserves are poorer than, for example, circular reserves. The peninsular effect was not observed on the Hanko Peninsula, possibly because of its large size.)

The importance of heronries for mate attraction. Draulans, D. (1988). *Ardea* 76: 187–192. (It is hypothesized that coloniality improves mate attraction and the probability of finding a suitable partner.)

Wing areas, wing loadings and wing spans of 66 species of African raptors. Mendelsohn, J. M., Kemp, A. C., Biggs, H. C., Biggs, R. and Brown, C. J. (1988). *Ostrich* 60: 35–42. (Provides data on the wing areas of 855 birds.)

Laying dates and clutch size in the Great Tit. Perrins, C. M. and McCleery (1989). *Wilson Bull.* 101: 236–253. (Clutch size declines with laying date and also with increasing density of both Great Tits and Blue Tits. Breeding success decreases seasonally.)

The conservation of birds in an urban environment — the promotion of invasives? Chown, S. (1989). *Bokmakierie* 41: 60. (Highlights the threat to native South African vegetation posed by planting *Craetegus crenulata* (hawthorn), *Pyraacantha* spp. (firethorns), *Cotoneaster* spp. (cotoneaster), and other exotic species, to attract birds to gardens.) A similar situation also occurs in Australia.