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## LITERATURE REVIEW

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Compiled by D. Purchase and M. D. Murray.

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(4), 108(1, 2, 3); *Ardea* 79(1); *Birding in Southern Africa* 42(4); *Living Bird* 10(3, 4); *L'Oiseau et R.F.O.* 61(1, 2, 3); *Orn. Beob.* 87(4); *Ostrich* 61(3, 4); *Seabird* 11, 12, 13; *Wilson Bull.* 102(3, 4), 103(1, 2, 3).

### PAPERS OF GENERAL INTEREST

**Seawatching from the Cape Peninsula.** Fraser, M. and McMahon, L. (1990). *Birding in Southern Africa* 42: 118–122. (Observing seabirds from the Cape of Good Hope.)

**Albatross: bird of mystery and myth.** Ridl, J. (1991). *Living Bird* 10(4): 14–19. (How the albatross may have got its reputation of bringing bad luck.)

**Save our shearwaters.** Rauzon, M. J. (1991). *Living Bird* 10(2): 28–32. (Each year about 1 500 fledgling Newell's Shearwaters, which have been attracted to the city lights on the Hawaiian island of Kauai, are rescued, rehabilitated, and released.)

**The breeding biology of Cory's Shearwater *Calonectris diomedea borealis* on Berlenga Island, Portugal.** Granadeiro, J. P. (1991). *Seabird* 13: 30–39. (The chronology of breeding cycle is given; summer visitors are causing increased disturbance.)

**Onset of breeding by Cape Gannets *Morus capensis* influenced by availability of nesting material.** *Ostrich* 61: 147–149. (The collection of guano from breeding areas may delay the onset of breeding by more than a month.)

**Sexual size dimorphism and parental care patterns in a monomorphic and dimorphic Larid.** Quinn, J. S. (1990). *Auk* 107: 260–274. (Caspian Tern males provided greater numbers and total mass of prey to chicks than did their mates.)

**Sabine's Gull *Larus sabini* breeding at the mouth of the Taimyra River, Siberia.** Yesou, P. (1991). *L'Oiseau et R.F.O.* 61: 142–148. (Data on breeding and behaviour at western limit of Palearctic breeding range.)

**Early experience and vegetation preferences in Common Tern chicks.** Burger, J. and Gochfeld, M. (1990). *Wilson Bull.* 102: 328–333. (Experimental results indicate that when startled, chicks run to a vegetation type with which they became familiar during their first week of life.)

**Breeding terns in Britain and Ireland 1980–1984.** Thomas, G. L., Underwood, L. A. and Partridge, J. K. (1989). *Seabird* 12: 20–31. (A continuation of regular monitoring with a special effort on regions previously poorly covered.)

**Sandwich Terns *Sterna sandvicensis* feeding juveniles during autumn migration around the NW Iberian Peninsula.** Fernandez-Cordeiro, A. and Costas, R. (1991). *Seabird* 13: 70–71. (Juveniles were fed during migration and for some while at the wintering grounds.)

**The effects of disturbance on the growth of young Common Guillemots *Uria aalga*.** Hatchwell, B. J. (1989). *Seabird* 12: 35–39. (Regular disturbance influenced adversely fledging weight, and for this reason care is required when comparing data from different sources.)

**Interspecific and age-related differences in the handling time of discarded fish by scavenging seabirds.** Hudson, A. V. (1989). *Seabird* 12: 40–44. (The speed with which various bird species could consume fish of different species and sizes varied.)

**A note on the diet of Razorbills *Alca torda* wintering off Portugal.** Beja R. P. (1989). *Seabird* 12: 11–13. (Pilchards are an important food.)

**Post chick leaving behaviour of the Razorbill *Alca torda* as shown by radio-telemetry.** Wanless, S., Morris, J. A. and Harris, M. P. (1988). *Seabird* 11: 22–27. (The behaviours of two females and one male are reported.)

**Age, sex and origins of auks (Alcidae) killed in the Skagerrak oiling incident of January 1981.** Anker-Neilson, T., Jones, H. P. and Rostad, O. W. (1988). *Seabird* 11: 28–46. (A sample of 308 Razorbills, 202 Little Auks and 862 Guillemots of an estimated total mortality of 10 000 were examined. Morphometric analyses indicated that birds could have come from Scotland and northern Norway and Russia.)

**Changes in the Shetland Guillemot *Uria aalge* population and the pattern of recoveries of ringed birds, 1959–1990.** Heubeck, M., Harvey, P. V. and Okill, J. D. (1991). *Seabird* 13: 3–21. (Rises and declines in abundance are reported. Declines have been due to hunting, a winter oil spill in the Skagerrak and southern North Sea, and birds becoming trapped in fishing nets.)

**Auk mortality in fishing nets in north Norway.** Strann, K.-B., Vader, W. and Barret, B. (1991). *Seabird* 13: 22–29. (At least 200 000 Common Guillemots were drowned in cod fishing nets in April 1985, and tens of thousands auks are thought to have been drowned annually in salmon nets every year for the last 15–20 years. The steady decline in the numbers of Common Guillemot can now be explained.)

**Growth of young Guillemots *Uria aalge* after leaving the colony.** Harris, M. P., Webb, A. and Tasker, M. L. (1991). *Seabird* 13: 40–44. (Young Guillemots were weighed at the colony and at sea in two years. Growth at sea was as rapid as at the colony.)

### AUSTRALIAN SPECIES

**On the food and feeding ecology of Giant Petrels *Macronectes halli* and *M. giganteus* in the Crozets Islands.** Voison, J.-F. (1991). *L'Oiseau et R.F.O.* 61: 39–49. (*M. giganteus* fed mainly on penguins whereas the carrion diet of *M. halli* included that of seal and fish origin.)

Intermittent breeding of the Buller's Petrel *Bulweria bulwerii* on Selvagem Grande Island (30°09'N, 15°52'W). Mougín, J.-L. (1991). *L'Oiseau et R.F.O.* 61: 131–141. (About 22% of breeding birds do not breed annually, involves both sexes but mostly inexperienced young.)

Barau's Petrel *Pterodroma baraui*, Jouanin's Petrel *Bulweria fallax* and other seabirds in the northern Indian Ocean in June–July 1984 and 1985. Van den Berg, A. B., Smeenk, C., Bosman, C. A. W., Haase, B. J. M., Van der Niet, A. M. and Cadée, G. C. (1990). *Ardea* 79: 1–14. (Several Australian species recorded including Flesh-footed Shearwater and Wedge-tailed Shearwater.)

Nest-site selection in the Herald Petrel and White-tailed Tropicbird on Round Island, Indian Ocean. Burger, J. and Gochfeld, M. (1991). *Wilson Bull.* 103: 126–130. (The type of site used and probable reason for their choice are discussed.)

Comparative population biology of four prions (genus *Pachyptila*) from the Indian Ocean and consequences for their taxonomic status. Bretagnolle, V., Zotier, R. and Jouventin, P. (1990). *Auk* 107: 305–316. (The morphometrics, breeding biology, genetics, and calls of *Pachyptila desolata*, *P. salvini*, *P. belcheri* and *P. turtur* were studied.)

Genetic evidence for philopatry in a colonially nesting seabird, the Fairy Prion *Pachyptila turtur*. Ovenden, J. R., Wust-Saucy, A., Bywater, R., Brothers, N. and White, R. W. G. (1991). *Auk* 108: 688–694. (Twenty-one prions taken from one colony all had identical mitochondrial haplotypes. This was used as evidence to argue that juveniles as well as experienced adults return to the colony to breed.)

The volume of stomach oils increases during pre fledging weight loss in Leach's Storm-Petrel (*Oceanodroma leucorhoa*). Place, A. R., Sievert, P. and Butler, R. G. (1991). *Auk* 108: 709–711. (It is suggested that stomach oils serve as energy and water stores for fledglings while they learn to forage.)

Breeding chronology of the White-faced Storm-Petrel *Pelagodroma marina* (Latham). Mougín, J.-L., Jouanin, Chr. and Roux, F. (1991). *L'Oiseau et R.F.O.* 61: 237–253. (The breeding period on Selvagem Grande Island (30°09'N, 15°52'W) is spread over 8 months. The differences between this and elsewhere in Atlantic, Pacific and Indian Oceans is discussed.)

Closeness of nests and synchronization of the breeding cycles in the White-faced Storm-Petrel *Pelagodroma marina*. Mougín, J.-L. and Mougín, M.-C. (1991). *L'Oiseau et R.F.O.* 61: 262–268. (Synchronization between birds in same colony poor and no better than between neighbouring colonies, in contrast to Cory's Shearwater which also breeds on Selvagem Grande Island.)

Sexual segregation of foraging zones in procellariiform birds: implications of accidental capture on commercial fishery longlines of Grey Petrels (*Procellaria cineria*). Bartle, J. A. (1990). *Notornis* 37: 146–150. (During 19–28 June 1989, 15 of 16 Grey Petrels caught in subtropical waters beyond the continental shelf off East Cape, New Zealand, were adult females.)

Population size, distribution and dispersal of Kelp Gulls in the southwestern Cape, South Africa. Steele, W. K. and Hockey, P. A. R. (1990). *Ostrich* 61: 97–106. (There are indications that the population is increasing. It is proposed that food from man's activities may be the cause.)

Tests of three hypotheses of hatching asynchrony in the Common Tern. Bollinger, P. B., Bollinger, E. K. and Malecki, R. A. (1991). *Auk* 107: 696–706. (Incubation before laying is completed may maximize overall success by protecting eggs from predators.)

Body mass fluctuations and mortality in Common Tern *Sterna hirundo* chicks dependent of weather and tide in the Wadden Sea. Becker, P. H. and Specht, R. (1989). *Ardea* 79: 45–56. (The results confirm the relationship between chick mortality and weather.)

Noninvasive determination of embryonic heart rate during hatching in the Brown Noddy (*Anous stolidus*). Tazawa, H., Kuroda, O. and Whittow, G. C. (1991). *Auk* 108: 594–601. (An audiocartridge system, which measures the ballistic movements of the egg attributable to embryonic cardiac contractions, was used to determine heart rate.)

#### TECHNIQUES AND ANALYSES

A miniature activity recorder for plunge-diving seabirds. Anderson, D. J., Sievert, P. R., Andrews-Labenski, J., Ricklefs, R. E. (1991). *Auk* 108: 257–263. (A recorder small enough to be mounted on the tail of a booby or other seabird. The type of data collected depends on the sensor.)

Carbon isotope ratio of feathers reveals feeding behaviour of cormorants. Mizutani, H., Fukuda, M., Kabaya, Y. and Wada, E. (1990). *Auk* 107: 400–403. (Isotope analysis was used to determine the relative proportion of riverine and marine fish in the diet of Great Cormorants.)

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#### ERRATUM

There is an error in the review of Briggs, S. V., entitled 'Movement patterns and breeding characteristics of arid zone ducks' in *Corella* 16(1). The second sentence in the last paragraph on page 16 should read: 'The mean clutch size of all arid zone ducks is . . . , but *higher* than the mean clutch size of mesic zone, sedentary ducks . . .' The word 'smaller' incorrectly appeared for 'higher' in the paper.