BOOK REVIEW

Birds of Rottnest Island
Denis Saunders and Perry de Rebeira, 1993. (DAS and CP de R: Guildford, Western Australia.) Second (revised) edition. 210 × 150 mm. 118 pp., 6 Figs, 13 colour plates, b/w illustrations. $A45.00

One only has to compare the covers of the two editions to realize that the authors have put a great deal of thought into improving their paperback book. The front cover features photographic insets of ospreys on nests, a species synonymous with Rottnest Island. The background colour of the cover is light blue, reminiscent of the colour of the Indian Ocean which surrounds the island. An aerial photograph of the island on the back cover is a familiar sight to people visiting Rottnest, and it rather cleverly depicts all major habitats that are described in the book.

I reviewed the first edition in 1985 (*Australian Birdwatcher* 11: 244–45). The layout of the second edition is similar to that of the first, but with some significant changes. There are four chapters: (1) Introduction, (2) Bird Habitats, (3) The Birds, and (4) Bird Watching On Rottnest Island. Chapter 3 is divided into six sections that present bird species accounts in six different habitats: (a) the coast, (b) salt-lakes, (c) swamps, (d) woodlands, (e) heath, and (f) settlements and disturbed areas. Chapter 4 recommends those areas of the island which are likely to be the most rewarding bird-watching spots. An up-dated bibliography (an additional eight references) will help readers find more information about birds on Rottnest Island. A list of bird species and their status forms an appendix.

The authors claim that they revised their book because there have been several changes in the status of some species on the island. However, they have also responded to some suggestions made by reviewers of the first edition.

Most species in the colour plates have been repainted. The figures are set against a coloured background (instead of white) which somehow makes the figures stand out more, and also gives the book a more professional appearance. More plumage details are shown in some of the repainted species (e.g. Richard's Pipit), but for others (e.g. White-faced Heron) less detail is depicted compared with the first edition. This may be due to the quality of reproduction rather than that of the paintings. Migratory waders have been repainted in partial breeding plumage rather than in total eclipse (as in the first edition) — a more realistic way of portraying waders on Rottnest. The two black and white illustrations of the Australian Raven and Black-faced Cuckoo-shrike have been enlarged to show greater detail and to allow a more economic use of page space.

Species texts have remained largely unchanged. However, colloquial species names have been replaced by the RAOU's recommended English names.

The greatest revision has taken place in Chapter 2 (Bird Habitats). There is an improved selection of colour plates of habitats, and they are placed alongside the relevant text instead of being in the centre of the book. Maps of the island have also been moved from the back of the book to Chapter 2, making it easier for the reader to locate sites mentioned in the text. A computer-generated colour map of the vegetation zones is an attractive and informative addition to the book.

I criticized the first edition for having species accounts under specific habitat headings, maintaining that some species may be found in more than one habitat. The authors still use the same approach in the new edition, but have at least added an alphabetical index which should aid the inexperienced birdwatcher to better locate and identify species in the book.

It is refreshing to come across a revised publication which has heeded much of the advice of the reviewers. The first edition completely sold out. I am sure there will be no difficulty in selling the second edition to visitors to Rottnest Island and to the ornithological community at large.

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LITERATURE REVIEW

Compiled by D. Purchase and B. Baker.

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: *Ardea* **80**(1, 2); *Auk* **109**(1, 2, 3); *Biological Conservation* **55**; *Birding in Southern Africa* **44**(2); *Condor* **95**; *Journal of Wildlife Management* **58**; *L'Oiseau RFO.* **62**(1, 2, 3); *Living Bird* 11(3); *N. Amer. Bird Bander* 17(1, 2); *Notornis* **38**(3, 4), **39**(1, 2, 3); *Orn. Anz.* **31**(1, 2); *Ornis Beob.* **89**(2); *Ornis Fennica* **68**(4), **69**(1); *Ostrich* **63**(1, 3, 4); *Ringing and Migration* **13**; *Safring News* **22**(1); Wildlife Research **20**; *Wilson. Bull.* **104**(2, 3) 105.

GENERAL INTEREST

Ducks, hunters and rainfall at two sites in southern inland New South Wales. Briggs, S. V., Brickhill, J. G., Kingsford, R. T. and Hodgson, P. F. (1993). *Wildl. Res.* **20**: 759–769. (Hunting does not appear to be adversely affecting numbers of major species of game ducks at two sites in NSW.)

The Regent Parrot. A report on the nest site survey in south-eastern Australia. Beardsell, C. (1985). *Australian National Parks and Wildlife Service, Report Series No. 1.*

The Regent Parrot. A report on the breeding distribution and habitat requirements along the Murray River in south-eastern Australia. Burbidge, A. (1985). *Australian National Parks and Wildlife Service, Report Series No. 4.*

The biology and management of the Regent Parrot *(Polytelis anthopeplus anthopeplus)* in NSW. Webster, R. (1991). *NSW National Parks and Wildlife Service, Species Management Report No.4.*

Mate and nest site fidelity in a resident population of Bald Eagles. Jenkins, J. M. and Jackman, R. E. (1993). *Condor* **95**: 1053–1056. (Both males and females show a high degree of mate and nest site fidelity.)

The biology and management of the Osprey *(Pandion haliaetus cristatus)* in NSW. Clancy, G. P. (1991). *NSW National Parks and Wildlife Service, Species Management Report No.6.*

Some lethal avian protozoan diseases of native birds in eastern Australia. Hartley, W. J. (1992). *J. South African Vet. Ass.* **63**: 90. (Massive seasonal deaths of Pied Currawongs in Sydney were the direct result of acute infection with *Haemoproteus*. (This paper was cited in the paper referred to above and has not been seen by the reviewer.))

Bellbirds feeding on sap of Black Beech. Hailman, J. P. and Hailman, E. D. (1991). *Notornis* **38**: 238–239. (Bellbirds, like other meliphagids, specialize in nectar feeding. These were feeding on sap exuding from a wound on the trunk.)

Anting by an Orange-fronted Parakeet. Heatherbell, C. (1992). *Notornis* **39**: 131–132. (A captive bird 'anting' with plant material.)

Exotic birds: a growing problem with no easy solution. Temple, S. A. (1992) *Auk* **109**: 395–397. (A discussion on the history and control of exotic birds in the USA.)

AUSTRALIAN SPECIES

Sexual dimorphism in basal metabolism and body temperature of a large bird, the Emu. Maloney, S. K. and Dawson, T. J. (1993). *Condor* **95**: 1034–1037.

Cattle Egrets on Stewart Island. Dowding, J. E. (1991). *Notornis* **38**: 209–210. (Now a regular winter visitor in small numbers.)

Cattle Egret migration and meteorological conditions. Maddock, M. and Bridgman, H. (1992). *Notornis* **39**: 73–86. (Weather systems may be used in migration from the Hunter Valley to locations in Victoria, Tasmania and New Zealand.)

Sightings of White Heron at Suva. Mackereth, B. (1992). *Notornis* **39**: 70–71. (First record of an *Egretta alba* in Fiji.)

First record of white phase Reef Heron *(Egretta sacra)* in New Zealand. Crossland, A. C. (1992). *Notornis* **39**: 233–234. (Seen at Christchurch on 7 June 1987.)

The occurrence of fault bars in the plumage of nestling Ospreys. Machmer, M. M., Esselink, H., Steeger, C. and Ydenberg, R. C. (1992). *Ardea* **80**: 261–272. (It is suggested these resulted from the nestlings being repeatedly handled by the researchers.)

Ospreys use local enhancement and flock foraging to locate prey. Flemming, S. P., Smith, P. C., Seymour, N. R. and Bancroft, R. P. (1992). *Auk* **109**: 649–654. (Foraging strategies used by colonial-nesting Ospreys on Nova Scotia, Canada.)

Nest material supplies in the Marsh Harrier *Circus aeruginosus*: sexual roles, daily and seasonal activity patterns and rainfall influence. Fernandez, C. (1992). *Ardea* **80**: 281–284. (Supply trips were mainly carried out by the female with the male contributing during the incubation and early nestling period. The number of trips was greatest during the first half of the nestling period, the morning, and rainy days.)

The development of a Peregrine Falcon population *Falco peregrinus peregrinus* breeding on buildings and quarries in the lowlands of Wurttemberg. Heller, M. (1992). *Orn. Anz.* **31**: 51–55. (Sixteen pairs are now nesting on power station towers and quarries. The former sites on cliffs are no longer being used. In German with English summary.)

[Wanderfalkenbrut auf Bruckenpfeiler.] Herren, H. (1992). *Orn. Beob.* **89**: 139. (Brood of a Peregrine Falcon on a pile. In German.)

The importance of Baie de l'Aiguillon and Pointe d'Arcay (Vendee, France) for the waders. Yesou, P. (1992). *L'Oiseau RFO.* **62**: 213–233. (The numbers of some species were decreasing, probably because of the rapid silting of mudflats. In French with English summary.)

The importance of supratidal foraging habitats for waders at a south temperate estuary. Velasquez, C. R. and Hockey, P. A. R. (1992). *Ardea* **80**: 243–253. (Significant numbers of Curlew Sandpipers, Little Stints and Greenshanks foraged in saltmarshes and saltpans at high tide. The availability of high tide foraging areas may contribute to the maintenance of high foraging densities of waders on the intertidal mudflats.)

The Aukland Island Banded Dotterel has apparently increased. Walker, K., Moore, P. and Elliott, G. (1991). *Notornis* **38**: 257–265. (In November 1989, 730 birds were counted. Previously the total was considered to be 100–200.)

Antipredator behaviour and breeding associations of Bar-tailed Godwits and Whimbrels. Larsen, T. and Moldsvor, J. (1992). *Auk* **109**: 601–608. (Whimbrels defended their nests aggressively against predators, while Bar-tailed Godwits did not. It is suggested that Bar-tailed Godwits sought nest protection by breeding under the 'protective umbrella' of the Whimbrels.)

Roosting behaviour of premigratory Dunlins *(Calidris alpina)*. Handel, C. M. and Gill, R. E. (1992). *Auk* **109**: 57–72. (Dunlins were studied at the mouth of the Tutakoke River, Alaska, between 2 August and 19 September 1980. Peak populations of 70000 to 100000 Dunlins occur in the area.)

Evolution in the Rock Dove skeletal morphology. Johnston, R. F. (1992). *Auk* **109**: 530–542. (In feral pigeons of Europe and North America natural selection evidently has been reconstituting a reasonable facsimile of the size and shape phenotype of the wild Rock Dove.)

Shining Cuckoo eating an egg. Macdonald, C. and Gill, B. J. (1991). *Notornis* **38**: 250–251. (The origin of the egg was unknown, but was that of a small passerine.)

Shearwaters and Saddleback as prey at a Morepork ground nest. Anderson, S. H. (1992). *Notornis* **39**: 69–70. (The remains of the birds were found at a nest containing two downy young.)

Food of the Morepork in Taranaki. Clark, J. M. (1992). *Notornis* **39**: 94. (Gizzards from 19 owls were examined. Most food items were arthropods but four House Mice, one unidentified passerine and a small rodent or bird were found.)

The feeding of New Zealand Kingfisher chicks. Moon, G. (1991). *Notornis* 38: 232. (Details of the food given to chicks and the frequency of feeding at 23 nest sites in various habitats including forest, swamp, open country and marine. The food varied according to habitat.)

Swallow ringing in the Netherlands and Southern Africa: the Botswana swallow project. van den Brink, B. and van der Have, T. M. (1993). *Safring News* 22: 27–29. (Brief report on the banding of Barn Swallows in Botswana and details of the movement of banded swallows.)

An early sighting of the Welcome Swallow. Philipson, W. R. (1991). *Notornis* 38: 190. (A sighting at Lake Ellesmere, New Zealand in April 1953).

Evidence of intraspecific vocal imitation in Singing Honeyeaters (Meliphagidae) and Golden Whistlers (Pachycephalidae). Baker, M. C. (1993). *Condor* 95: 1044–1048. (Singing Honeyeaters and Golden Whistlers are capable of modifying their songs to achieve matching with neighbour's songs.)

Roles of egg mass and incubation pattern in establishment of hatching hierarchies in the Blackbird *(Turdus merula).* Magrath, R. D. (1992). *Auk* 109: 474–487. (It is concluded that females control the hatching asynchrony of their broods, and hatching asynchrony is far more important than egg mass in establishing hatching size hierarchies in broods.)

Energy costs of incubation in the Blackbird *Turdus merula*. Prinzinger, R. (1992). *Orn. Beob.* 89: 111–125. (It is suggested incubation may be a phase of energetic restoration when many birds actually increase their body mass. In German with English summary.)

Bill colour, reproduction and condition effects in wild and domesticated Zebra Finches. Burley, N. T., Price, D. K. and Zann, R. A. (1992). *Auk* 109: 13–23. (The objectives of the research were to ascertain the correspondence of bill colour in free-flying and domesticated finches, and to search for contexts in which bill colour may be an accurate indicator of condition.)

[Haussperling *Passer domesticus erbeutet* Grosslibellen.] Hirschi, W. (1992). *Orn. Beob.* 89: 138–139. (House Sparrow catching large dragonflies. In German.)

Age-related effects of testosterone, plumage, and experience on aggression and social dominance in juvenile male Satin Bowerbirds *(Ptilonorhynchus violaceus).* Collis, K. and Borgia, G. (1992). *Auk* 109: 422–434. (The relationship between age and dominance was investigated to understand why young males delay maturation.)

Vulnerability and mortality of young Australian Magpies on roads. Burger, J. and Gochfeld, M. *Wilson. Bul.* 104: 365–367. (Fifty-three magpies were found dead along a total of 1803 km of road in New Zealand. All were young. It is suggested that: (1) young birds have more difficulty finding natural foods and rely on carcases on the road more often than adults; and (2) they are less able to perceive and avoid an oncoming vehicle.)

TECHNIQUES AND ANALYSES

Avian responses to observer clothing color: caveats from winter point counts. Gutzwiller, K. J. and Marcum, H. A. (1993). *Wilson Bull.* 105: 628–636. (Detection probabilities for three species were associated with whether or not an orange vest was worn by the observer.)

Preference for symmetric males by female zebra finches. Swaddle, J. P. and Cuthill, I. C. (1994). *Nature* 367: 165–166. (Female Zebra Finches were demonstrated to choose symmetrically leg-banded males over asymmetrically banded ones. Whilst demonstrating the preference for symmetry in these birds, this study has implications for the study of birds using colour marking techniques.)

A review of the use and the effects of marks and devices on birds. Calvo, B. and Furness, R. W. (1992). *Ringing and Migration* 13: 129–151. (Demonstrates that many marking techniques which have been previously thought to be benign may in fact have adverse effects and alter behaviour to some extent.)

Novel method for estimating hours of oviposition, illustrated by data on Gray Catbirds. Scott, D. M. (1993). *Condor* 95: 1048–1050. (Time of egglaying may be determined by a single daily visit to nests made before a clutch is completed.)

Methods for trapping Quail Finches *Ortygospiza atricollis*. Nuttall, R. J. (1992). *Safring News* 21: 55–59. (The Quail Finches is primarily a terrestrial grassland species and difficult to capture. Five methods are described.)

Netting and banding Florida Grasshopper Sparrows. Delany, M. F., Progulske, D. R. and Coltman, S. D. (1992). *N. Amer. Bird Bander* 17: 45–47. (Describes the construction and use of mist net poles which are pushed into the ground and do not require guying.)

Technique for feral pigeon trapping, tagging and nest monitoring. Kautz, J. E. and Seamans, T. W. (1992). *N. Amer. Bird Bander* 17: 53–59. (Describes various trapping methods (including capture by hand), wing tags, and methods used to climb to nests.)

A trial of coloured anodyzed metal bands in Western Australia. Brown, R. J. and Brown, M. N. (1992). *Safring News* 21: 32–33. (A preliminary report. Contains observations on Grey Fantails and damage to their nests by other species seeking nest material.)

Hourly variations in transect counts of birds. Blake, J. G., Hanowski, J. M., Niemi, G. J. and Collins, P. T. (1991). *Ornis Fennica* 68: 139–147. (For most species, hourly variation, particularly within the first three hours of the morning, is not large or consistent enough to warrant the limitation of counts to shorter periods.)

Body-weight changes of egg-laying Curlews *Numenius arquata*, as monitored by an automatic weighing system. Mulder, J. L. and Swaan, A. H. (1992). *Ardea* 80: 273–279. (An electronic balance was placed under the nest and the data processed in a computer situated at a distance.)

Water and energy limitations on flight duration in small migrating birds. Carmi, N., Pinshow, B., Porter, W. P. and Jaeger, J. (1992). *Auk* 109: 268–276. (The limitations were examined with a computer-simulation model which can be applied to birds of any size that migrate by flapping flight.)

Structure of turning in airborne Rock Dove *(Columba livia)* flocks. Pomeroy, H. and Heppner, F. (1992). *Auk* 109: 256-267. (A nonstereo, three-dimensional photographic technique to study the turning movements of flocks of Rock Doves is described. Birds studied by this technique did not maintain fixed positions within the flock.)