

Red Wattlebird *Anthochaera carunculata*

071-42650. Juvenile banded by D. F. Dorward at Burwood, Vic. on 15 Feb. 79. Found dead at Blackburn South, Vic. on 20 Sept. 85, over 6 years 7 months after banding. 6.2 km ENE.

Yellow-faced Honeyeater*Lichenostomus chrysops*

(a) 022-88930. Banded by T. J. Bradley at Hale Conservation Park, SA on 28 Jan. 85. Recaptured near Sandy Creek, SA by B. R. Hutchins on 27 July 85. 13 km WNW.

(b) 023-03508. Banded by T. J. Bradley at Hale Conservation Park, SA on 16 June 85. Recaptured near Sandy Creek, SA by B. R. Hutchins on 3 Aug. 85. 13 km WNW.

Singing Honeyeater *Lichenostomus virescens*

032-63739. Banded by D. C. Paton at Yilki, SA on 6 Apr. 85. Found dead at Victor Harbour, SA on 8 Aug. 85. 2.4 km NE.

Yellow-tufted Honeyeater*Lichenostomus melanops*

031-64075. Banded by C. J. Fabian at Lucas Heights, NSW on 6 Oct. 84. "Killed by cat" at Woronora River, NSW on 28 Oct. 85. 5.5 km S.

White-plumed Honeyeater*Lichenostomus penicillatus*

022-90417. Banded by B. R. Hutchins near Sandy Creek, SA on 30 June 84. Found dead at Smithfield Plains Primary School, SA on 29 Aug. 85. 21 km NE.

New Holland Honeyeater*Phylidonyris novaehollandiae*

032-58526. Banded by B. R. Hutchins near Sandy Creek, SA on 13 Apr. 85. Found dead at Seacombe Gardens, SA on 19 Oct. 85. 56 km SW.

Olive-backed Oriole *Oriolus sagittatus*

061-38813. Banded by D. I. Smedley at Deepwater Park, East Hills, NSW on 23 Nov. 83. "Hit by car" at banding place on 26 Nov. 85.

Satin Bowerbird *Ptilonorhynchus violaceus*

091-06800. Banded by J. W. Hardy at Cumberland State Forest, West Pennant Hills, NSW on 4 Aug. 85. Found dead at Menangle Park, NSW about 27 Dec. 85. 47 km SSW.

LITERATURE REVIEW

Capturing birds with mist nets: A Review. Keyes, B. E. and Gruc, C. E. (1982). *N. Am Bird Bander* 7: 2-14.

A comprehensive review of mist-netting techniques, mist-netting procedures and modifications devised by banders for particular bird species and habitats. Over 200 references are cited in the article.

A perch snare for catching ospreys. Prevost, Y. A. and Baker, J. M. (1984). *J. Wildl. Manage.* 45: 991-993.

This paper describes a simply and cheaply constructed snare trap which was used for catching ospreys on their wintering grounds in Senegambia, West Africa. The trap exploits the tendencies of ospreys to use a preferred perch site for resting or feeding. It is possible that a modified version of this trap could be used for catching other species of birds which use preferred perch sites.

The breeding behaviour and population dynamics of the Large White-rumped Swift, *Apus pacificus pacificus* (Latham), at Cheniushan Island in the Yellow Sea. Yuren, G. and Benxiang, Z. (1985). *Acta Zoologica Sinica* 31: 84-92. (in Chinese with English summary).

The paper provides information on nest building, clutch size, incubation and fledging period, and breeding success of the Large White-rumped Swift (= Fork-tailed Swift).

Weight gain and adjustment of feeding territory size in migrating hummingbirds. Carpenter, F. L., Paton, D. C. and Hixon, M. A. (1983). *Proc. Natl. Acad. Sci. USA* 80: 7259-7263.

Rufous Hummingbirds periodically establish and defend territories along their summer southward migration route. Four of five intensively studied birds adjusted their territories (number of flowers) to that size which was associated with the fastest sustained rate of weight gain. The one exception was explicable on the basis of its unusually high weight. Artificial perches attached to Persola spring balances or Mettler electronic balances were used to measure daily weight changes in the individually colour-marked birds without having to capture the birds. This technique could be applied to other species of birds that use a favoured perch and can be individually recognised (either by marking or by morphological features).

An aerial survey of nests of Malleefowl *Leipoa ocellata* Gould (Megapodidae) in central New South Wales. Brickhill, J. (1985). *Aust. Wildl. Res.* 12: 257-261.

The results show a very low population of Malleefowl on Round Hill Nature Reserve and suggest a decline in the population in the last few decades.

Comparison of techniques to recover stomach contents from penguins. Montague, T. L. and Cullen, J. M. (1985). *Aust. Wildl. Res.* 12: 327-330.

The emetics, ipecacuanha (ipecac) and copper sulphate, were found to be humane and efficient techniques for extracting stomach content from Little Penguins. Stomach pumps, apomorphine and potassium antimony tartrate proved ineffective.

Observations on the sensitivity of some Australian birds and the feral pig to the organophosphorus insecticide, fenthion ethyl. Mellroy, J. C. (1985). *Aust. Wildl. Res.* 12: 331-335.

Some toxicological data are presented to show that seven species of birds in Australia are highly sensitive to fenthion ethyl (sold under the trade name of Luci-Jet). The insecticide is sometimes used to kill feral pigs. The data obtained indicate that pigs are much more tolerant of the insecticide than the birds tested. Poison 1080 (sodium monofluoroacetate) is probably a more effective poison to kill pigs and would be less hazardous to birdlife.

Age-related differences in behaviour and ecology of Crimson Rosellas, *Platycercus elegans*. During the non-breeding season. Magrath, R. R. and Lill, A. (1985). *Aust. Wildl. Res.* 12: 299-306.

Immature birds occurred mainly at forest edges and were more patchily distributed than adults. They also differed quantitatively in their diet, spent more time feeding and less time resting, and occurred in larger flocks than adults.

Estimating forest bird densities by variable distance point counts. Pyke, G. H. and Recher, H. F. (1985). *Aust. Wildl. Res.* 12: 307-319.

Variable distance point counts can be used to estimate bird density so long as the following assumptions can be made: (1) the distribution of birds is unaffected by the observer; (2) observers are certain or detecting near birds; (3) there is no error in measurement of estimation of distances; and (4) birds are stationary. Data collected from a study are presented which indicate that at least two of those assumptions were not satisfied: estimates of distance based on sound were inaccurate and observers do not always detect near birds.

Studies on the Purple Swamphen, *Porphyrio porphyrio*, in Victoria. Norman, F. I. and Mumford, L. (1985). *Aust. Wildl. Res.* 12: 263-278.

Details are presented of breeding, body measurements, moult, and food taken by Purple Swamphens. Colour scores for bill and tarsus showed some seasonal variation in subsamples of males and females.

Dispersal of Silver Gulls, *Larus novaehollandiae* Stephens, from breeding colonies in South Australia. Ottaway, J. R., Carrick, R. and Murray, M. D. (1985). *Aust. Wildl. Res.* 12: 279-298.

Dispersal patterns were characteristic of each colony, even for three colonies which were, at most, 10 km apart. Almost all dispersal records came from the area between Adelaide and Melbourne, and within 30 km of the coast. After breeding, the majority of gulls disperse eastwards; however, dispersal from each colony was correlated with a shift of gull populations into areas where food was available from human sources such as rubbish dumps. Overall, there was no significant difference in the mean dispersal distances of juveniles and

adults, although at distances > 480 km significantly more juveniles ($\leq 2y$) were seen than adults ($> 2y$). It was suggested that older, dominant birds maintain high status at preferred feeding places, and juveniles are possibly more erratic in their movements, as they search for food.

On the migration of banded waders between China and Australia. Weishu, X. and Purchase, D. (1983). *Memoirs of Beijing Natural History Museum*. 23: 1-12. (in Chinese with English translation).

This paper presents the details of 24 waders which were banded in Australia and recovered in eastern Asia and Australia. It discusses the relevance of these recoveries to the understanding of wader migration through eastern Asia. The paper stresses the need for increased co-operation between Chinese and Australian ornithologists in the study of bird migration and the role which this cooperation will play in the conservation of migrating waders.

Causes and frequency of death among birds mist-netted for banding studies at two locations. Recher, H. F., Gowing, G. and Armstrong, T. (1985). *Aust. Wildl. Res.* 12: 321-326.

During studies of forest and heathland birds undertaken by the authors in south-eastern Australia, 53 (1.3% of 4184 birds caught in mist nets died in the nets or when handled for banding. Mortality was higher in the study of forest birds, where 2.8% of individuals died, than in that of heathland birds, where 0.5% died. There was no relation between the size or kinds of birds handled and mortality. Instead, the difference between the two studies was probably the result of better procedures for handling birds in the heathland study. Causes of mortality, and ways to avoid or minimize injury to or death of birds during use of mist-nets are discussed.

Web tag loss from Lesser Snow Geese. Seguin, R. J. and Cooke, F. (1985). *J. Wildl. Manage.* 49: 420-422.

Serially numbered monel fish tags clipped through the foot web have been commonly used to mark young waterfowl at or soon after hatching. In this study, 3.6% (111) of 3047 web-tagged goslings captured 3-5 weeks after trapping had lost tags.

Slow continuous wing-moult of Zebra Finches *Poephila guttata* from southeastern Australia. Zann, R. (1985). *Ibis* 127: 184-196.

In first-year birds the first primary feather was lost at a mean age of 80 days in both sexes; moult took 204 days to complete in males and 223 in females. Birds hatched in autumn postponed the start of their primary moult until spring. In adults, primary moult was initiated in any month; it took 229 days to complete in males and 240 in females. Limited food, low temperatures and breeding slowed, but did not stop, wing-moult. Birds caring for eggs and young actively replaced wing feathers. The pattern of wing-moult by Zebra Finches is exceptional for passerines and may be related to the opportunistic breeding strategy necessary in an arid, unpredictable environment.

The diet of the nestling Noisy Scrub-bird, *Atrichornis clamosus*. Smith, G. T. and Calver, M. C. (1984). *Aust Wildl. Res.* 11: 553-558.

Nestlings were fed invertebrates of 18 orders plus a few small vertebrates.

Censusing Robins in winter: A test using colour ringed birds. da Prato, S. R. D. and de Prato, E. S. (1984). *Ornis Scandinavica* 15: 248-252.

The estimates of the number of Robin's present made by a person who undertook transect counts were, on average, around half those located by another observer who intensively searched for colour-banded birds, but was subject to considerable variation (8-92%).

Band wear and band loss in Common Terns. J. J. Hatch (1983). *J. Field Ornithol.* 54: 1-16.

Factors associated with band wear and band loss in Common Terns *Sterna hirundo* were investigated by comparing weights of 402 worn bands. Bands on Common Terns wear primarily from the inside. Aluminium bands lose weight at the rate of 4.1 to 6.6%/year and the first bands are lost 4 to 5 years after banding. In-colour bands used on Common Terns lose weight at the rate of 0.5-0.6%/year and minimum life is expected to be about 40 years.

Band wear and band loss in Roseate Terns. I. C. T. Nisbet and J. J. Hatch (1983). *J. Field Ornithol.* 54: 90.

A short paper analyzing wear on aluminium bands which had been recovered from Roseate Terns. For 12 bands carried for 2-4 years the mean rate of weight loss was $6.27 \pm 0.39\%$ /year. For 14 bands carried for 6-11 years the mean rate of weight loss was $5.6 \pm 0.24\%$ /year. It is estimated that aluminium bands fall off Roseate Terns after losing between 53% and 73% of their weight. The oldest band in the sample had been carried for 11 years.

Band wear in Arctic Terns. J. J. Hatch and I. C. T. Nisbet (1983). *J. Field Ornithol.* 54, 91.

A general note reporting rates of wear of 28 aluminium bands carried by Arctic Terns. In this species band wear is very slow and loss would affect only the longest lived species. It is estimated that only 4% of adult birds would survive for 25 years — the approximate age at which they would become susceptible to band loss. The oldest band in the sample had been worn for 34 years.

REVIEWS

The Waterbirds of Australia. The National Photographic Index of Australian Wildlife. Angus and Robertson, North Ryde. 331 pp, 254 colour plates; 2 line drawings, index, bibliography. \$60.00.

This book is the second in a series of ten which will cover the entire avian fauna of Australia. The first in the series was *Wrens and Warblers of Australia* published in 1982. It is intended that the remaining eight volumes be published by the bicentenary of European settlement in 1988. The format of the series deliberately follows the style of John Gould's *The Birds of Australia*. Beautiful coloured photographs of all Australian birds are matched with a brief account of the bird's natural history. The series is presented in a form intended to appeal to the well read public. The photographs in each volume have been selected from the best contained in The National Photographic Index of Australian Wildlife.

The birds forming the subject of this volume have been termed "Waterbirds" but do not include all birds seen on or around water. Rather, those that frequent Australian estuaries, rivers or lakes are depicted. Sea-birds and wading birds are the subject of other volumes. Sixty-seven species from the following seven avian families are illustrated: grebes (Podicipedidae), herons, egrets, bitterns (Ardeidae), storks (Ciconiidae), ibises, spoonbills (Threskiornithidae), swans, geese, ducks (Anatidae), rails, crakes, gallinules and coots (Rallidae) and lastly, cranes (Gruidae).

Each family is introduced by one or two pages of prose, containing notes relating peculiarities of the family, preferred habitats, relationships to other families within or outside Australia, and issues of conservation. Further text accompanies each species discussed, including some historical aspects of the species' discovery or past distribution, notes on courtship rituals, feeding, nesting, habits, plumage and the like. Each species has collated onto a single page, data for morphometrics; plumage descriptions of the adult, immature and juvenile; specific identification including recorded variations; voice; habitat; food; noted habits; breeding; distribution and status. A map depicting distribution accompanies this data.

The text on each species is highlighted by several exquisite photographs. These show where possible, eggs, nest, chicks, adults (males, females, breeding and eclipse plumages), habitats and often birds courting, sunning or hiding. The reproduction of photographs of most species' eggs (vagrants and accidentals excluded) follows the treatise of each species.

The data for the text has been compiled by T. Lindsey from the research of many other naturalists. As such, there is no new data presented and many existing inaccuracies will have been perpetuated. However, the series does not pretend to present a treatise for the specialist in the field. It aims to interest the lay reader and achieves its aim admirably. J. D. Pringle has achieved a fine effect with his "elegant prose", making the text very enjoyable to the ornithologist and lay-man alike.