

SHORT NOTES

Collection of water by the Australian Pelican

While studying the nesting behaviour of the Australian Pelican *Pelecanus conspicillatus* on a small sand-bank at the south end of Lake George, NSW, the following observations were made:

On 8 and 10 September, and on 13 October 1969, birds sitting on nests and heading into the direction of the wind opened their bills, as shown in Figure 1, at the beginning of a heavy rain shower. The upper mandible was opened to 60° while the lower mandible was held horizontal and widened. On one occasion half of about 400 birds sat with their bills open. Two birds held their bills open for 10 and 16 minutes respectively. From photographs, it was found that the lower mandible may widen up to 4.3 times the width of the upper mandible, providing the bird with a catchment area of about 0.039 m².

During the observations the rainfall was not recorded, but during an average heavy storm in the Canberra district the rainfall is about 270 mm per

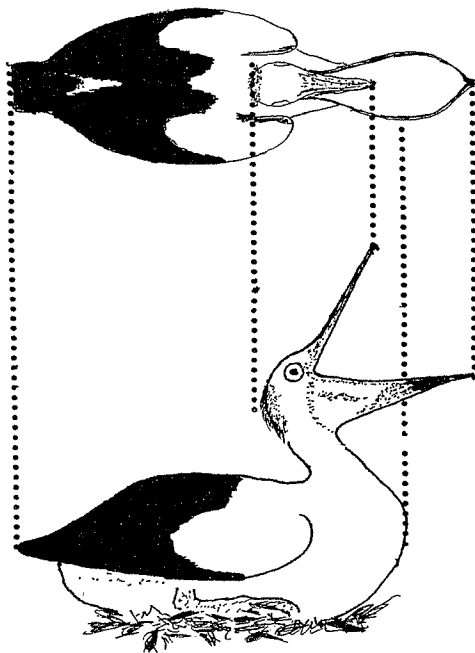


Figure 1

hour. At this rate a bird collecting rain water for 10 and 16 minutes may collect respectively 170 ml and 270 ml of water. The Commonwealth Bureau of Meteorology provided the information about the rainfall at Canberra.

W. J. M. VESTJENS, *Division of Wildlife Research, CSIRO, PO Box 109, Canberra City, ACT 2601.*
2 April 1970.

Australian and South African environments as habitats for birds

South Africa is, on the whole, an arid area; so is Australia. Keast (1959 in *Biogeography and Ecology in Australia*: 89-114) has calculated the number of species in the major habitats of Australia, and it is interesting to compare his figures with those for South Africa. Table I gives these data. In compiling the African figures, I have omitted all species of the Spheniscidae, Podicipedidae, Procellariiformes, Pelecaniformes, Ciconiiformes, Phoenicopteridae, Anatidae, Heliornithidae, Jacanidae, Charadriidae, Scolopacidae, Laridae, Apodidae, Hirundinidae, and *Motacilla*. Where a species is obviously a member of the fauna of more than one habitat, it has been counted under each. This is important to bear in mind because Keast counted each species once only; thus the total number of species at the foot of the penultimate column in Table I is less than the sum of the numbers for each habitat, which is given in parentheses.

The number of species in the two areas is of the same order of magnitude—indeed, remarkably similar. The proportions of species in rain-forest in Australia and in forest in South Africa, and in grasslands in the two areas, are also much the same, but the less severe deserts of Africa (in which I have

TABLE I
Numbers of species per habitat

AUSTRALIA			SOUTH AFRICA		
Habitat	No. Species	%	Habitat	No. Species	%
Rain-forest	81	16	Forest	95	17
Sclerophyll-forest	84	16	Woodland	198	36
Savanna woods	ca 146	ca 28	Acacia woods	93	17
Savanna grass	ca 59	ca 12	Grassland	86	15
Mallee	9	2	Macchia	50	9
Desert	41	8	Desert	93	17
Mangroves	16	3	Mangroves	1	0.2
Swamps, marshes	74	14	Swamps, marshes	54	10
Miscellaneous	14	3	Miscellaneous	2	0.4
Total of species considered	524			556 (372)	

Note: Woodland in Africa excludes that dominated by Acacia.

included the Karoo) contain a higher percentage of species than those of Australia. The Australian sclerophyll-forest and savanna woods contain a lower percentage of the fauna than the combined African woodlands, but in view of the method of calculating the African avifaunas the difference is less than that suggested by summing the two figures in the last column. Nevertheless, the savanna woods of Australia and the woodland of Africa each contain a higher proportion of the avifauna than any other major habitat. This is probably because both areas contain only a small part of the forest areas of their zoogeographical regions, the major forest areas of which are in New Guinea and West Africa respectively.

J. M. WINTERBOTTOM, *Percy FitzPatrick Institute of African Ornithology, University of Cape Town, Rondebosch, CP, South Africa.*

10 March 1970.

Possible colonization of Mutton Bird Island, NSW, by Short-tailed Shearwaters

Broughton Island, about 16 km north of Port Stephens on the central coast of New South Wales, is recorded as the most northerly breeding place in Australia of the Sooty Shearwater *Puffinus griseus* and the Short-tailed Shearwater *P. tenuirostris* (Hindwood and d'Ombrian, Emu 60: 147-154).

On the night of 1 December 1969 Mutton Bird Island, Coffs Harbour, some 270 km north of Broughton Island, was visited to band shearwaters. This island is now connected to the mainland by a breakwater. As the party climbed the slope from the breakwater, Wedge-tailed Shearwaters *P. pacificus* called continuously. Near the top of the island I heard different calls identified as those of Short-tailed Shearwaters, and I moved quickly towards the sounds some distance off the track. Mr H. Battam, following behind me, also heard the calls as he approached. Apparently the birds were calling from burrows, and three locations were noted in the general area, although difficult to pin-point. As the rest of the party arrived, the calling stopped and was not heard again. A search of the surface, as well as of some burrows, found many Wedge-tailed Shearwaters and, surprisingly, one Sooty Shearwater on the surface. I remained in the area for over an hour, but heard no more calls of the Short-tailed Shearwater. The next morning, with Messrs H. Battam and B. Jones, I searched the area where the calls had been heard and most, if not all, burrows were checked. Ninety-five burrows each contained a Wedge-tailed Shearwater on an egg, two burrows were too deep to find out if they were occupied, and eight were empty.

Because it is easily accessible, with no dependence on boats and little, if any, difficulty from weather, Mutton Bird Island has been visited by many ornithologists.

Since 1959, some 5,300 Wedge-tailed Shearwaters have been banded there, but before this visit no evidence had been found of either of the other two species. About the time of the visit, numbers of Short-tailed Shearwaters in a weak condition were seen nearby during the daytime sitting or swimming on the water; recently dead, exhausted, or sick birds were also found on the beaches. Two days earlier (on 30 November) some were caught by hand from a launch inside the harbour as we returned from visiting South-east Islet. These birds were checked for bands and released. No doubt they were caught because they were exhausted or sick. The Short-tailed Shearwaters that we heard calling on Mutton Bird Island at night may have been sick or exhausted and resting; or they could have been colonizers, prospecting burrows in anticipation of returning to breed next season.

S. G. LANE, 65 Wood Street, Lane Cove, NSW 2066.

1 April 1970.

Grey Wagtail in northern Queensland

At 09:25 on 8 February 1970 in overcast weather with heavy showers Miss A. Griffin and I were at a large disused basalt quarry about 8 km west of Innisfail.

Our attention was attracted by a strange call, and we saw a bird near running water on the floor of the quarry. We immediately took it to be a Yellow Wagtail *Motacilla flava*, but very soon it was obvious that, though certainly a species of *Motacilla*, it was not a Yellow Wagtail. It had striking pink legs and a very long black tail edged with white; from where we stood above, the yellow rump was most pronounced. The bird was continually moving, flying to catch insects, and wagging its tail up and down. It moved out of sight, and when next seen was on the wall of the quarry, apparently feeding among plants growing where water cascaded down the wall. It moved away several times, but we were able to find it again. Once it perched facing us in a tree for five minutes. By the time it finally disappeared we had made the following description, during perhaps 15 minutes viewing of a very lively bird over a period of 25 minutes.

Head and upperparts: brownish-grey generally, with bright yellow rump; no facial pattern as in the Yellow Wagtail. Tail: long, black with white edges. Underparts: breast buff; throat lighter; under tail-coverts bright yellow. Legs: flesh-pink. Calls: quite unlike those of the Yellow Wagtail and uttered each time the bird took flight; a single note repeated three times, and another of a single note uttered twice followed by a double note, resembling 'choc, choc, choc' and 'choc, choc, choc-choc'. These calls were similar to those of the alarm calls of the Spinifexbird *Eremiornis carteri* and of the Tawny Grassbird *Megalurys timoriensis*.

It seems that the bird was a Grey Wagtail *Motacilla cinerea*, then recorded for the first time in Australia, because its brownish-grey back and light-coloured legs distinguished it from all races of *flava* wagtails, and because its yellow rump and also the colour of its legs separated it from the Yellow-headed Wagtail *M. citreola*. Its long tail also supported this identification. Our transcriptions of its calls are less convincing, but it is notoriously difficult to put sounds in writing. In fact, A.G., who was familiar with the species in Britain and watched *cinerea* there about a year ago, would have described the call as 'tzit', which is much nearer the way it is usually transcribed in standard references. Her previous experience of the species has been of birds in nuptial plumage. We also failed to notice a pale supercilium which *M. cinerea* has in all plumages. These shortcomings probably do not outweigh the positive characters noted (colour of back, rump and legs, and length of tail), and the brownish-grey colour of the back suggests that the bird was immature when perhaps the supercilium is less pronounced than in adult plumage.

MRS H. B. GILL, *M/S 216, Innisfail, Q 4860.*
10 April 1970.

Southern Emu-Wren at high altitude

The Southern Emu-Wren *Stipiturus malachurus* is generally accepted as being confined to the heathlands, invariably swampy, of low-lying areas near the coast, as is confirmed for south-eastern Australia by all authors I have consulted. Frith (1969, *Birds in the Australian High Country*) gives its distribution as mainly coastal, but extending inland to the foothills of the south-eastern highlands. Further, he assumes that the bird must occur on the Southern Tablelands of New South Wales, i.e. in an area around Canberra extending north to near Goulburn, and in support adds: 'In Victoria it has penetrated mountain gullies and has been collected at 1,000 feet'.

The sandstone plateau of the Blue Mountains is less than 80 km north of Goulburn. Recently I have

found the Southern Emu-Wren well distributed and fairly common in swampy areas of the upper Blue Mts. I have seen it at Leura, Wentworth Falls and Lawson, at altitudes up to 950 m, in summer and late winter when at times snow was lying on the bird's habitat. This is the coarse grasses of hanging swamps on the steeper treeless slopes. Apparently the bird does not occur in the seemingly suitable and extensive areas of short, but drier, heathland. The bird has completely crossed this high sandstone barrier because it is on the western fall at Hartley Vale below Mt Victoria.

J. N. HOBBS, *135 Lurline Street, Katoomba, NSW 2780.*
15 April 1970.

Whiskered Tern in Tasmania

On 12 September 1967 Mr D. Milledge advised me that a strange tern on Meadowbank Dam, near Ouse in the upper Derwent Valley, had been brought to his attention by Mr M. Houston. The following day I visited Ouse, and spent more than an hour with Mr Houston watching the bird from the west side of the dam, as a result of which I was able to confirm its identification as a Whiskered Tern *Chlidonias hybrida*.

My field notes were as follows:

Length about ten inches. Black crown and forehead, surrounded by clear white stripe; remainder of upper surface ash-grey; chin white, breast grey, underwings light-grey, belly and flanks blackish. Bill short and reddish-brown. Legs pinkish? Tail slightly forked. It was hawking round the shallow shores a metre or so above the water, dipping to pick up food from or near the surface. It did not fold its wings in a dive, but held them erect. The body was generally partly submerged in a dive, but occasionally the bird skimmed the surface without diving.

Mr Milledge reported that Whiskered Terns had reappeared at Meadowbank Dam in July 1969, but I have not been able to confirm this.

L. E. WALL, *63 Elphinstone Road, North Hobart, Tas. 7000.*
27 April 1970.

CORRIGENDUM

BELL, H. L. *Field Notes on the birds of Amazon Bay, Papua.* Emu 70: 23-26.

Page 25, left-hand column, twelfth line from bottom. The species name is CHLAMYDERA CERVINIVENTRIS Fawn-breasted Bowerbird NOT LAUTERBACHI Yellow-breasted Bowerbird.