SHORT NOTES

Brown and Amadon (1968, Eagles, Hawks and Falcons of the World: 48-49) mention that there are few observations of bathing by birds of prey in the wild. On 30 January 1967, at Bootless Bay, Port Moresby, Papua New Guinea, I observed two Ospreys Pandion haliaetus bathing in salt water on the sand-flats near the old site of Dokuna Village. From the difference in size I presumed the birds to be a pair. Both were standing in the water with only the head and shoulders showing. They both opened and closed their wings many times and ruffled their body feathers as if bathing. After about ten minutes one flew to a log embedded in the sand, perched and began preening. I observed a similar incident on three other dates but, believing the habit to be well-

Bathing by the Osprey Pandion haliaetus in New Guinea

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11 September 1978.

known, took no details. All observations were in

the afternoon. On 9 October 1976, Brother S. J.

Heron, G. W. Swainson and I saw an Osprev

bathing at the mouth of the Angabunga River, Be-

reina, Central Province. The bird was standing in

water up to its shoulders. The water was probably

brackish.

Copulation by the Green Catbird Ailuroedus crassirostris

Copulation in wild or captive bowerbirds (Ptilonorhynchidae) has been rarely observed; the few observed instances involve only the avenue-building Satin and Spotted Bowerbirds Ptilonorhynchus violaceus and Chlamydera maculata respectively (Chaffer 1959, Aust. Zool. 12: 295-305; Gilliard 1969, Birds of Paradise and Bower Birds; Vellenga 1970, Aust. Bird-Bander 8: 3-11; Ramsay in Marshall 1954, Bower-Birds; their displays and breeding cycles). No record of copulation by the non-bower building catbirds Ailuroedus spp or the closely related court-clearing Tooth-billed Catbird Ailuroedus dentirostris appears to be published (Marshall 1954; Gilliard 1969; Cooper and Forshaw 1977, The Birds of Paradise and Bower Birds) and it is therefore worth recording here an instance of copulation by captive Green Catbirds A. crassirostris, observed in the large walk-through rainforest aviary, measuring 37 2 x 21 3 x 18 3 metres, at the Taronga Zoological Park, Sydney (Muller 1973, Avicult. Mag. 79: 35-38) on 7 January 1978.

Two birds were noted in close association. The smaller of the two was perched two metres from me when the larger flew in and perched beside the apparent female. He held some food in his bill, drew close to the female and stretched his head and neck up vertically to full extent while looking at her so that the somewhat erected feathers of the neck appeared sparse. He directly mounted the crouching female for a few seconds and the two birds then flew together directly to the ground, the male still holding the food in his bill. Once on the ground the male passed the food to the female, who took and swallowed it. Both birds then flew off together. On a subsequent visit to the aviary on 19 June 1978 a small A. crassirostris was sitting in a nest four metres up in a tree, suggesting that these captives were attempting full breeding in captivity. The normal breeding season, however, appears to be September to January (Reader's Digest 1976, Complete Book of Australian Birds).

The feeding of the female by the male after copulation is interesting. Several observations of copulating *P. violaceus* and *C. maculata* suggest that, though the male may hold in his bill a decorative object for the bower during pre-coition displays, no object or food is held or passed during or after copulation. Marshall (1954: 53), however, refers vaguely to 'courtship-feeding' by a captive male *P. violaceus* and to an unconvincing record of possible courtship feeding by *C. maculata* (Chaffer 1945, Emu 44: 183), apparently implying that these instances involved regurgitation of matter.

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25 September 1978.

Nocturnal feeding of the Inland Dotterel Peltohyas australis

The following observations lend support to the interesting hypothesis of Maclean (Emu 76: 211) that *Peltohyas australis* consumed plant material during the day, to obtain water, and animals at night, to obtain nourishment.

On 28 August 1974, with T. Gauld I left Marree, SA, after sunset and travelled along the Birdsville Track to Cooper Creek. At least one hour later, when it was quite dark, between Dulkaninna and Etadunna one Inland Dotterel of several seen was killed by the vehicle. The gizzard and its contents were preserved in formalin. An examination of this

material found some plant material and many in-

Taxon	Approx. length (mm)	Parts counted	Minimum No.
Arachnida	4.0	, ,	
Lycosidae?	10	body	2
Insecta	35	forces	3
Dermaptera Orthoptera	33	forceps	3
Grillidae	15	mandibles	7
Coleoptera	5	heads	7
Hymenoptera			
Formicidae	3–5	heads	60
		Total items	79

The crickets (Grillidae), spiders (Lycosidae?) and earwig (Dermaptera) probably accounted for more of the total volume of food than their numbers indicate, because they were so much larger than the small ants (Formicidae) and beetles (Coleoptera). The crickets and earwigs are almost certainly nocturnal and probably the spiders and ants are also.

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28 December 1978.

Australian specimen of a Magellanic Penguin

A penguin found dead on Summerlands Beach, Phillip Island, Vic., by Mr G. Wintle, on 31 March 1979 was sent to the Fisheries and Wildlife Division and thence by donation to the National Museum of Victoria where it was received on 1 April 1976. It was identified as *Spheniscus magellanicus* (Forster) and prepared as a skin. Details of the specimen are: B11676 \$\rightarrow\$ ovary not enlarged. Skin round eye whitish above, pinkish in front. Feet, soles black, upper pinkish, speckled black. Bill, black, grey patch on anterior of lower mandible. Total length 564 millimetres. Weight 2,155 grams. Bill 52.5 millimetres. Length of foot est. 110 millimetres. Middle toe and claw 67 millimetres. Flipper c. 180 millimetres.

It is the first Australian record of this species. This record, at the request of the Secretary, RAOU, was subsequently submitted to the Record Appraisal Committee and accepted by the Committee. I merely publish here this record of the specimen and do not consider how it may have reached Phillip Island.

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14 March 1979.

Cooperative feeding of fledgelings by Crested Shrike-tits

In many species of birds individuals other than the parents assist in feeding young. Such cooperative behaviour is specially common in Australia, where it has received considerable attention. Rowley (1976, Proc. XVI Int. orn. Congr.: 657-666) reported that at least thirty-nine species are known to breed cooperatively

and Dow (1980, Emu in press) has expanded that list. Here we report cooperative feeding of fledgelings by Crested Shrike-tits *Falcunculus frontatus*, a species previously thought to breed only in pairs. To our knowledge this represents the first published example of its kind for the subfamily Pachycephalinae.

Most observations took place in Eastwood State Forest, about eight kilometres south-east of Armidale, NSW. Shrike-tits are quite common in this area; we have estimated that as many as twenty-five to thirty individuals occurred in 200 hectares. The forest itself is disturbed and rather open, dominated by Eucalyptus melliodora, E. blakelyi and E. caliginosa.

On 1 January 1979 RWH observed an adult female Shrike-tit feeding a recently fledged bird near the top of a gum, about twelve metres high. Soon the adult was joined by another female, who proceeded to feed the young bird immediately after the first had finished. Both adults were clearly visible in the same tree; so it is impossible that the two feeding episodes could have involved a single female. Eventually, a male (jet-black throat feathers) also brought food to the fledgeling. In twenty minutes, one female fed the fledgeling four (or five) times and the other female fed the young bird three (or two) times. The male, on the other hand, did so only once.

Two days later we both returned to verify this observation. This time two young birds were seen together with two adult females in a tree not far from that in the earlier incident. In the next hour the fledgelings were fed by both male and female birds but it was difficult to ascertain which of the females was involved with each feeding episode.

On 11 February 1979 RAN watched another group of Shrike-tits, consisting of two adult males, one female and two recently fledged young, in semi-cleared woodland two kilometres north of Armidale. All three adults fed the young and on two occasions both males were seen feeding one of the young birds in quick succession. The two males could be seen simultaneously on both occasions.

Shrike-tits frequently occur in groups of three to five individuals long after the breeding season (pers. obs.); so it is not surprising that cooperative feeding sometimes occurs. We suspect, however, that, as perhaps happens in many species, cooperative breeding is the exception rather than the rule. Furthermore, it is possible that we have observed some other type of behaviour, such as feeding by an unsuccessful parent with a persistent urge to assist fledgelings. In any case, the breeding biology of Falcunculus frontatus deserves further attention by ornithologists.

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22 June 1979.