

in 1951 the majority of the birds were still with us at the close of the year. Had they abandoned nesting for the season or completed these duties abnormally early before coming south?

Wood-Swallows are very irregular in their appearances here. The Dusky (*Artamus cyanopterus*) is a resident, but White-browed (*A. superciliosus*) and Masked (*A. personatus*) come and go presumably as conditions suit them. They were all here in numbers early in October, but in two weeks had completely disappeared. Mr. Claude Austin, 50 miles north of Portland, recorded, at that time, flocks of both species flying from south to north. On December 5 an advance guard of all three species appeared near Cape Grant and from then on the birds were here in thousands. They were spread over the whole district. We have never seen such flocks, White-browed largely predominating. At the close of the year many were busy nesting.

Currawongs are common birds in our forests, where we have Black-winged (*Strepera melanoptera*), Grey (*S. versicolor*) and Pied (*S. graculina*), but during the spring and early summer of 1951 it was a rare thing to see a bird of any species in a day's outing. The birds are supposed to be stationary, but they certainly disappeared, as stated. If any readers in adjacent districts have noticed a large influx of currawongs to their localities it would give us an idea of their movements.

As the long run of good seasons in what we vaguely term 'the north' inevitably switches over to drought, we may expect a tremendous influx of water birds to southern Victoria. Perhaps the numbers reported above are the advance army of such a movement.

Stray Feathers

Polygamy Among Ground-frequenting Birds. — When writing in the *Victorian Naturalist* (Sep. 1942 and Apl. 1943) on the birds of Wattle Park, Melbourne, I gave notes on the nesting of the Rufous Song-Lark (*Cinclorhamphus mathewsi*), and raised the question whether the species is ever polygamous. That point still remains to be determined, for although the latest writer on the species (J. V. Ryan, in *The Emu* for August 1952) submitted some informative notes on nesting habits, he gave no indication of supposing that the male bird ever possessed more than one mate.

The basis for the question is, chiefly, the apparent fact that grass-frequenting birds seem to be more apt to break from monogamy than do arboreal species. For example, the male Corn-Bunting is recorded in Britain as having as many as eight 'wives' at a time, and in Australia at least

two
ove
Wa
whi
Son
the
I h
enc
N.S
his
the
inc
ma
A
pol
of
(N
not
sup
goc
16/
Y
mig
the
cor
vol
'Mi
47,
Ap
Bla
fee
on
to :
a p
wh
shr
wir
I
app
of
the
60
of
nor
7
of :
not
anc
Bu

two species of quail are known to be polyandrous. Moreover, I have evidence suggesting that the little Fantail Warbler (*Cisticola exilis*) is sometimes polygamous, and, what is even more to the point in regard to the Rufous Song-Lark, another member of the genus *Cinclorhamphus*, the Brown Song-Lark, is also reported to practise polygamy. I have no knowledge on this subject from personal experience of the species, but Mr. Lewis Hanckel, of Henty, N.S.W., told me some years ago that close observation in his area had convinced him that, in some instances at least, the male bird has more than one mate. It is to be noted, incidentally, that in both species of *Cinclorhamphus* the male is larger than the female.

Another ground-frequenting species alleged to practise polygamy is the Superb Lyrebird. J. Gabriel, a Victorian of considerable bush experience, is quoted by A. J. North (*Nest and Eggs*, vol. 2, 1909), as saying: "The birds do not pair, but are polygamous". Is there any evidence to support that bald statement? Certainly it does not hold good in all instances.—A. H. CHISHOLM, Sydney, N.S.W., 16/9/52.

Yellow-faced Honeyeaters Migrating. — A northward migration of large numbers of honeyeaters, principally the Yellow-faced and White-naped species, has been recorded (McGill, A. R., 'Migrating Honeyeaters', *The Emu*, vol. 47, pt. 1, July 1947, pp. 56-7; and Hindwood, K. A., 'Migration of Two Species of Honeyeaters', *The Emu*, vol. 47, pt. 5, May 1948, pp. 391-3) in New South Wales during April and early May. The points of observation were Blackheath (3,500 feet) in 1946, and Bundanoon (2,300 feet) in 1947; these two places are some 70 miles apart on the presumed line of migration. The movement appears to follow the highlands of the Great Dividing Range, with a probable progressive dispersal eastward to coastal areas where a plentiful supply of food, in the form of flowering shrubs and trees, is available throughout the autumn and winter months.

During September 1952, I observed, at Mittagong, what appears to be the return movement or southward migration of Yellow-faced Honeyeaters. Mittagong (2,070 feet) is on the southern highlands of the Dividing Range; it is some 60 miles south of Blackheath and about 20 miles north-east of Bundanoon. It lies between the two points where the northward migration has been observed.

Throughout the morning of September 7, 1952, flocks of from ten to fifty or more Yellow-faced Honeyeaters were noted flying in a general southerly direction. Their actions and calls were much the same as those observed by me at Bundanoon in 1947. The birds were flying from one tree

to another a few hundred yards apart. An air of urgency seemed to pervade their movements and calls. A week later (September 13) the migration was still in progress, but was much less noticeable and appeared to have almost finished.

No evidence was obtained that any White-naped Honeyeaters were migrating in association with the Yellow-faced Honeyeaters, as was the case during the northward autumnal migration. Both species were fairly common in the forest country near Mittagong. They may have been birds that were nesting, or were about to nest, in the area. The cheery 'chick-up' or 'wit-chu' calls of the 'resident' Yellow-faced Honeyeaters were in contrast to the rather plaintive, almost querulous, notes uttered by their migrating relatives.

The evidence, scanty though it is, points to an extensive northward movement of both the Yellow-faced and the White-naped Honeyeaters during April and early May (autumn), and a return movement, or southward migration of at least one of the above species, the Yellow-faced Honeyeater, in September (spring). The line of migration appears to follow the highlands of the Great Dividing Range, but its extent is not known.—K. A. HINDWOOD, Sydney, N.S.W., 20/9/52.

River Pollution and Birds.—The upper reaches of Lane Cove River, an arm of Sydney Harbour, are skirted by mangroves, with a back-scene of forest country. The river flats and slopes are touched by settlement. A golf course, picnic grounds and boatsheds seem to fit in well enough with the surrounding bushlands, but less so a flour mill and a chemical works. The fresh-water section of the river, above the weir, built in 1933, is a national park, and one could not wish for a more peaceful and agreeable spot. Below the weir, close to Fuller's Bridge, the water is salt and tidal. Mangroves and mud-flats, fresh and salt water, and forests and rocky slopes, are the haunts of many kinds of birds whose songs and movements give pleasure to a wandering nature-lover.

In April 1951, a jarring element, for the human population at least, intruded into this sylvan scene—industrial waste, in more than normal volume, was discharged into the tidal portion of the river. The polluted water turned a dark purplish-brown and the decaying aquatic vegetation gave off an offensive odour, said to be sulphuretted hydrogen, and referred to by discomforted residents living within half a mile or so of the stream as a stench resembling rotten eggs.

Fish, eels and other forms of water-life suffered almost total extermination in the affected area of some three or four miles between Fuller's Bridge and Fig Tree Bridge. In the early days of the pollution mullet in thousands came

Vo
1
to
sc
fl
fc
sp
ea
pc
re
N
W
tv
m
co
ea
ri
ar
pr
of
gr
di
in
K.
wi
ma
sid
an
be
we
ma
tar
wi
(le
Go
inc
fee
Soi
par
Th
mo
the
hea
it
ind
I
in
are
mil

to the surface gasping for the want of oxygen in the water; soon they littered the banks of the river or were to be seen floating belly upwards in the backwaters.

Such a bountiful feast was not overlooked by birds, nor, for that matter, by feral cats and rats. An influx of several species, usually seen here only in small numbers, occurred early in May when the total bird population in the polluted portion of the river must have been considerable. On one reach of about half a mile I counted some thirty Nankeen Night-Herons, several Little Grebes, a few Moorhens and White-faced Herons, a couple of Mangrove-Herons, one or two Azure Kingfishers, a White-bellied Sea-Eagle, and more than one hundred Silver Gulls.

The stupified and dying fish were easy prey for the cormorants, whilst those strewn along the banks were eaten by the Herons, Gulls and Ravens. Large gums and river oaks bordering the stream provided handy resting and roosting places for this gathering of birds, whose presence was made more obvious by the 'white-washing' of the leaves of the trees. As days passed the tidal waters gradually purged the river; just as gradually the birds dispersed, leaving only the regular inhabitants and bringing back to the river its usual atmosphere of tranquility.—K. A. HINDWOOD, Sydney, N.S.W., 2/6/52.

Crested Hawk at Chinchilla.—During an acquaintance with the Crested Hawk (*Baza subcristata*) dating back for many years, I had previously seen it only on the coastal side of the Great Dividing Range. I was therefore surprised and pleased to find it resident in fair numbers in the timbered forest country of the Chinchilla District, 100 miles west of the range at Toowoomba. Its distinctive markings make it easily identified at first sight, and even at a distance its equally distinctive habits place it at once. The wings are short and rounded, with a low aspect ratio (length to chord), the tail much shorter than that of the Goshawk, and the body rather plump. It must be the most inoffensive of all hawks, and spends most of its time feeding on insects among the outer leaves of tall trees. Some insects are caught in the bill, the bird often hanging partly or completely inverted to pick them off the foliage. The larger insects are usually disturbed by the birds' movements through the leaves, and are then caught in the talons on a short flight.

The species is much harried by Noisy Miners, Leather-heads and Blue-faced Honeyeaters, but I have yet to see it attack any species of bird. In fact, its immobility and indifference while being attacked resemble that of an owl.

It is sometimes seen in pairs, rarely singly, and usually in parties of from four to six. It is probable that these are family parties, as there is often a gap of at least two miles between territories. Within a radius of a mile or

so these parties move about freely, and are seldom seen twice in the one spot.

In October 1951, a small nest was found, with a bird brooding. It was almost 100 feet from the ground in a dwarf (!) apple tree (*Angophora intermedia*)—and by no means easy of access. However, the temptation to look into the nest was too strong, and I spent a strenuous morning succumbing to it. At close quarters the nest proved to be a little more substantial, but not much larger, than a pigeon's. It had a few leaves as lining, picked green but now half dried, and contained one newly-hatched chick, covered in whitish down, and two pale blue eggs, one chipping. The sitting bird flushed when I was about ten feet away, at which distance the pale yellow iris was clearly visible. The sexes are not readily distinguishable, but I believe, from its size, this bird was the female. It remained in a nearby tree, occasionally flying past, just above the nest, with a shrill, cackling call, rather like that of the Sparrow-Hawk when disturbed. I was unable to visit this locality for some weeks, by which time even the nest had disappeared, so the fate of the family is unknown.

In February, a single bird was observed, soaring in wide flat circles about 200 feet above the trees, and gradually drifting away till out of sight. Presumably nesting was then completed.

Mr. E. A. R. Lord has recorded some spectacular displays of aerobatics by this bird, at Murphy's Creek, but in four years of observation here, I have seen nothing of that kind. Otherwise, habits of the coastal and inland birds appear identical.—A. C. CAMERON, Chinchilla, Qld., 30/4/52.

Field-Wren's Habitat.—Small, insectivorous, ground-feeding birds being few both in species and individuals in Tasmania, the observer is inclined to take special notice of those which are seen, here and there, in bush and paddock, because they impart animation and interest to places sometimes almost bare of birds. One that interests me a good deal is the Striated Field-Wren (*Calamanthus fuliginosus*), which, though given to hiding in tussocks and rank herbage, is nevertheless a friendly little creature once its confidence is obtained. This is when it comes out of its retreats to study one at close range, perched on a post or stick to show its stripes which are its only prominent feature, and, at times, to feed at one's feet by the edge of a marsh; and its song is particularly appealing.

Normally, the Field-Wren is found in and about samphire marshes, where the nest is well concealed in rush or reed-clump, though it can be located by flushing the sitter. This is its commonest habitat, and I know where several pairs can be seen within 20 minutes' car run from Hobart.

By no means is it confined to such places, however. On the Midland plains, between Ross and Conara, an area swept by bitter winds, it is found among sag-bush and tussock, in typical sheep country where there are few other ground-feeding species except Spur-winged Plover.

Once I never thought of looking for a nest far from water, such as lagoons, tidal marshes and lake edges, but although minor droughts often affect the Midlands and water holes go dry, the species remains in the district, breeding in the fields and on the sheep runs. At Wilmot, on the slopes of the northern highlands, I have seen it among bracken well up in the hills. One chance upon it in diverse places. Light forests are even favoured, particularly in small natural clearings, and button grass plains are especially attractive for it. In the winter it is seen running hungrily about on snow where the herbage and its food supply are buried several feet. In the snow also, following its instinct to dart for concealment when disturbed, and failing to find it here, it is seen trying to take advantage of the scant cover afforded by a few gum leaves draped from a sapling shoot an inch or two above the surface, quite out of its element. It will run here and there across the snow, seeking concealment beneath other clumps of leaves which never really hide it, but it seems distressed and confused with its larder locked in the reeds and rank grasses under the snow.

In a Bridgewater marsh one day I flushed a Field-Wren from a little distance ahead, and, flying up above the reeds, it stopped and remained fluttering in the air. Going closer, I saw it had staked itself between the eyes on a barbed wire fence, and I was about to reach out and release it when it freed itself and flew off. The barb was covered with blood.

The species begins to breed in August and has at least two broods. It sings all the year. Tasmania appears to be the stronghold of the species.—MICHAEL SHARLAND, Hobart, Tas., 27/8/52.

Luminosity in Birds. On the death of the late F. L. Berney, a few years ago, certain of his books and papers came into my possession, including his 'Nature Diaries' which I still have, and a book entitled *Broadland Naturalist*, by Stanley A. Manning, 1948, being a biography of Arthur H. Patterson, a Norfolk birdman whose hunting grounds were those of young Berney before he came to Australia. There is a reference in the volume to a controversy regarding a 'luminous owl', seen at Twyford, Norfolk, during 1907. Patterson was sceptical to a degree, and made fun of the suggestion of Dr. Sydney Long, a man with whom Berney corresponded all his life, and later President of the Norfolk

and Norwich Naturalists Society, that the owl had been in contact with luminous fungi. "Maybe the owl was taking a field mouse home for his supper," he wrote, "wrapped in a luminous mushroom, as we wrap up hot 'chips' in paper".

I remembered a reprint in my possession of an article in *The American Midland Naturalist*, vol. 38, no. 1, pp. 207-213, by W. L. McAtee, entitled 'Luminosity in Birds'. In the selected references to that paper there are included two items by persons mentioned by Manning, Sir Thomas Pigott and R. J. W. Purdy, both in 1908, and dealing with the particular occurrence(s). More to the point was a pencilled note by Berney in *Broadland Naturalist* reading 'See my own notes and experience on this subject recorded in one of my Diaries'.

I searched through Berney's diaries and found two references—one a mere statement that "one of these luminous birds [Barn-Owl] flew past", the other a little more detailed, reading "The bird was a Barn Owl. The luminosity of the bird when on the wing in moonlight is very weird; it seems almost phosphorescent" (Feb. 20, 1932).

The paper by McAtee deals with the matter historically, and mentions accounts of luminous birds from England, France, Spain, Paraguay, North America and Japan. According to J. A. Harvie-Brown, luminous Barn Owls had been reported as far back as 1866, the local names of 'lantern bird', 'glim ullert' (shining owl) and 'glimmer gowk' suggesting considerable observation of the phenomena. J. H. Gurney, writing of the Norfolk reports, also suggested contact with luminous fungi in tree hollows, which certainly appears feasible.

McAtee included 53 references, most of which concern the Barn Owl, and, in America, various herons including a night heron and the American Least Bittern. Some of the Bittern accounts predate those of the Barn Owl, extending back to 1829. Some authors claim that the powder-down tracts in birds possessing them are luminous in mature birds. McAtee accepts the testimony of a number of the observers but states that he and several other ornithologists whom he names, such as Coues, Gross, Forbush, and Wetmore have sought in vain to 'see the light'. He concludes that some birds are sometimes luminous but probably not intrinsically so. Light-giving fungi and bacteria are suggested as a possible explanation of the phenomena.

Have Australian ornithologists any records of luminosity in birds? This query is not concerned with the light spots in the mouths of nestlings of some finches (probably first recorded by Butler—in 1898), or with other matters of

light reflecting as distinct from light production.—C. E. BRYANT, Melbourne, Vic., 14/7/52.

Oriole killing Nestling.—On October 18, 1951, while strolling through the bush in the Warramite hills area, I noticed an Olive-backed Oriole (*Oriolus sagittatus*) smashing against the high branch of a manna gum on which it was perched, a large object which it held in its beak. A pair of White-naped Honeyeaters (*Melithreptus lunatus*) were darting at the Oriole meantime, but it ignored them and continued with its activities, giving its call of 'Or-ree-or-ee-ole' the whole time.

Curious as to the object being so maltreated, I managed, with a luckily directed missile, to alarm the Oriole into dropping it. On investigating I found that the subject of all the smashing was a naked White-naped Honeyeater nestling.

I venture no explanation of what I imagine was rather unusual Oriole behaviour, but would record that a nest of the species was suspended from the end of a branch of another tree some 20 yards distant.—D. C. GREY, Moonee Ponds, Vic., 30/9/52.

Obituaries

DR. J. L. PETERS

The curator of birds at the Museum of Comparative Zoology, at Harvard University, James Lee Peters, died at Cambridge, Massachusetts, on April 19, 1952, in his 63rd year. Peters was already an acknowledged authority in the field of bird taxonomy, when, in the '20s, he conceived the idea of writing a 'Check-List of the Birds of the World'. The first volume appeared in 1931, with additional six volumes during the years 1934-51. To complete the work eight to ten more volumes will be needed. The great accuracy of this work, and its modern standards, have made it an indispensable tool of all ornithologists, and it will presumably remain the standard reference work in bird taxonomy for many decades to come.

Peters was a quiet and retiring person, but with a rare sense of humour. He was always helpful to those who sought his advice, provided they shared his deep interest in ornithological science. There is hardly another ornithologist left who has as balanced a knowledge of the birds, both of the Old and the New World, as Peters had. His death leaves a gap which cannot be filled.—E. MAYR.

ERWIN NUBLING

Mr. Nubling was born on July 26, 1876, at Ebensee in Upper Austria, where, as a youth, he became associated with the steel industry. He came to Australia in 1901 and,