quite satisfied.

Stray Feathers

Black Kites .- Reading some back numbers of The Emu I noted in vol. ii., part 2, 1902, that the explorer Sturt apparently feared attack from the Common Fork-tailed Kite (Milvus migrans), whilst in the interior of the continent. Your contributor, "H.Q.II.," asks if any other explorer has observed this peculiar trait of the Kite. Whilst not an explorer, I can justly claim to be conversant with the habits of these birds, as I have had a life-long experience of them in the interior, and I can without hesitation state that it will not attack human beings. I have seen hundreds of these graceful birds flying at one time. When one is riding over the plains in the inland, these Kites often swoop down towards one. They do this to find out if the rider is disturbing grasshoppers; if not, they soon clear off again. Should grasshoppers be plentiful, the Kites will accompany the horseman for long distances, capturing the disturbed insects in their talons and eating them as they fly along. On many occasions the birds, in their endeavour to capture an insect, will come within arm's reach, and often, to avoid contact with the horse or rider, will spread out the tail feathers and talons, give forth a shrill whistle, stop abruptly, and shoot up into the air. The Kite is a great feeder on grasshoppers, and when this pest is plentiful one rarely notes these birds hunting for other food in the shape of offal or carrion. It is interesting to note that the Kite invariably captures the insects in the talons.

I have never observed it capture a rabbit or a bird; though its young are often fed on small rabbits, and I have noted it attempt to capture a Shell Parrot from a large flock. After many unsuccessful dashes into the flock, it gave up and flew off as if

At shearing time, which in the interior takes place from June to August, these Kites are very numerous, and hundreds may be seen on the ground or flying near the woolshed, where they pick up scraps thrown from the shearers' kitchen, or lambs' tails, etc., thrown out from the yards. I have often seen men betting on the ability of these birds to catch a piece of meat thrown up into the air. It is truly wonderful how adept these Kites are in this respect. It is amusing to see a bird that has thus caught a tit-bit chased by its companions. Sometimes when closely pressed it will allow the morsel to drop, but it is invariably caught by another bird before it reaches the ground. Though it has often been seen feeding with domestic fowls, and even venturing into a wire-netted fowlhouse, the Kite has not been seen to molest fowls or chickens.

To sum up. It is a most inoffensive bird, has no bad habits, is of great economic value on account of the destruction it causes to the grasshopper pest, and is as worthy of total protection as any bird that I can call to mind.—J. Neil, McGilp, King's Park. S.A.

Spotted Crake in a Grass Crop.—I was mowing a field of Sudan grass the other day, and the machine cut the head off a bird, and on examining it, it proved to be Porzana fluminea (Spotted Crake). I was surprised to find this bird so far from a swamp: the nearest swamp is some miles away. Has this bird been found in a similar situation before? I also found some time back a nest of the Coturnix pectoralis (Stubble Quail) containing 16 eggs. As these eggs are large considering the size of the bird, it is always a puzzle to me how the bird covers them.

—N. Geary, R.A.O.U., Mount Pleasant, Dalby, Queensland. 27/2/1922.

Australian Magpie and Sparrow.—While the bandsmen were practising in the mill one day in February, 1922, they were eye-witnesses to bird cannibalism. A White-backed Magpie swooped down on a Sparrow, killing it by picking its head, and then going behind a post tore open the Sparrow's breast and commenced to eat the flesh. When disturbed, the Magpie carried its repast to a safer distance. No doubt, owing to the dry weather and the scarcity of grubs and insects, Magpies, for the sake of sustenance, take on Sparrows or any other small birds they can get their claws on.—J. M. Sexton, State School, Henty, Vic.

Nankeen Night Herons and Young Ducks.—It is an interesting fact that as far as I can remember, for fully forty years past, and probably a great deal longer, Nankeen Night Herons (Nycticorax calcdonicus) have been roosting during the day in the Melbourne Zoological Gardens. It is quite likely they were nesting here in days gone by, but now only roosting. As soon as it gets dusk, the birds fly off in companies, sometimes two or half a dozen, as the case might be, apparently to the mouth of the Yarra, and there they evidently feed. The number varies according to the time of the year; just now there are about eighteen, that being the number that passed over in various-sized companies last evening. When the nesting season is on, there are only seven or eight birds, these being the young of the last season, and therefore, not old enough to nest. Another interesting point is that they are very keen on feeding on any young Ducks they can get hold of. One of our Ducks brought out five young ones last October; we did not know they were there, but the Nankeen Herons found out very quickly and ate the lot before we could stop them. Therefore they probably also take the young of many different kinds of waterfowl. Another fact of interest is that the Egyptian Nankeen Night Herons roost in just the same way during the daytime in the Zoological Gardens at Cairo. Their habits there are practically the same as ours here. I remember seeing them on several occasions. They also have a habit, in common with ours, of hunting round open enclosures where the birds are fed on meat in case any scraps remain.-W. H. D. LE Souer, Zoological Gardens, Melbourne.

Fossil Birds in New Zealand .- An item in a Masterton paper of April 14th, 1920, taken from the Wellington Rivening Post, is of interest to those ornithologists who study the former distribution and extinction of New Zealand birds.

"On occasions even scientists have heavy manual tasks to perform, says the 'Post.' Recently Dr. A. Thomson (Director of the Dominion Museum) and two members of his staff, Messrs. H. Hamilton and Phillips, excavated and hauled by hand from a deep fissure in some limestone rock in the Wairarapa district about seven tons of Moa bones and other valuable relies,

"About four years ago, while deer-stalking over Mr. Murdoch McLeod's Haurangi estate, near Martinborough, 62 miles north from Wellington, Mr. Walter Harrison, of Masterton, came across this fissure in a limestone ridge, in which he discovered a number of bones. He reported the discovery to the Museum authorities, and an investigation was undertaken by Dr. Thomson. The find, indeed, has proved a most interesting one.

"From the fissure were taken the remains of about twenty-five Moas and of fifteen Aptorries. The latter were extinct birds resembling the Weka, but very much larger—standing about three feet high, with sturdy limbs, and necks. Remains of the Notornis were also found. The Notornis is a bird about which there was much discussion recently owing to the discovery of a live specimen in Otago, and of which three are known to have been seen alive. About twenty of them had left their hones in this opening in the rocks. Piled up were which there are known to have been seen alive. About twenty of them had left their bones in this opening in the rocks. Piled up were also the remains of numbers of Kakapo (a Parrot), the Kiwi, extinct Ducks, and, strangely enough, bones of the tuatara lizard, which is now only found on Stephens Island, and one or two other islands round the coast. There were remains of the New Zealand Crow, the Huia, and the large Laughing Owl—a very rare bird.

"Round about were other similar openings in the rocks, but only in this one were these relics of a past age found. The scientists find it difficult to account for this fact, and for so many being accumulated there. Recently a similar discovery was made in a cave near Pahiatua. One theory is that the fissure formed a bird mausoleum, to which in a past age the birds went to die. There were no evidences of human bones, and the scientists estimate that the bones have been there for at least five centuries, and thus date back to before the coming of the Maori.

The remains have been brought to Wellington, and are at present

being cleaned, sorted, and classified.

Dr. Thomson believes there may be collections in other caves between Pallister Bay and Napier, and particularly asks that any discoveries should be reported.'

Of the above mentioned birds, the Notornis has long been extinct in the North Island, and is now believed to inhabit only the country around the rugged West Coast Sounds of the South Island. The Kakapo is extremely rare in the North Island, but is found in moderate numbers in parts of the South, while the Laughing Owl is very rare and confined to the latter island. Kiwis, Crows and the Huia, of course, still exist; but the last-mentioned is on the borderland of extinction.—R. H. D. STIDOLPH, Masterton, N.Z.

Cuckoo carrying egg.—In looking through The Emu of April, 1919, I notice a record of an observation by the late Arthur P. Ingle of a Cuckoo removing a Wren's egg and depositing one of its own, which reminds me of something similar observed by me during this season. While watching some Flycatchers, I noticed a Bronze Cuckoo (Lamprococcyx) fly from a tree with something in its bill and perch upon a limb about 50 yards distant, and upon approaching the bird it flew away, dropping an egg, which, upon examination, proved to be that of a Flamebreasted Robin (Petroica phoenicea), and upon examining the tree I found a new nest of this Robin, so it would appear the Cuckoo was clearing the way for its own egg.—W. N. Atkins.

Change in Plumage in the Koel Cuckoo (Eudynamys orientalis). When collecting some skins of the Koel Cuckoo for Dr. D'Ombrain this year, I found some interesting plumage phases. The first bird 1 shot I thought by the plumage was a female, but I found on dissecting the bird that it was an immature male.

The bird was fully fledged with no sign of quills, and was a last season's bird. It seems probable that the male Koel assumes the blue black plumage when about three years old or at the earliest at second moult.

On examining the specimen taken, the plumage was seen to differ very much from the adult female, the feathers being not pencilled so clearly as in the female, and having more black down the back of the head and back. The breast and wings, however, were the same as in the adult female.—By J. F. H. Gogerley, R.A.O.U., Ellerslie, Wallis Lake, N.S.W.

The Northern Bell-Magpie.—In the note upon Strepera graculina robinsoni (Mathews), in The Emu, vol. ante., pp. 164, 165, I remarked that, at the time, I had not examined a skin. It will interest those to whom I have sent eggs, and others, to know that a series of skins has since come to hand, and proves Mr. Mathews' sub-species to be good, though I am unable to agree with his points of difference from the type. My specimens show the northern bird as having much more white on the wings and tail, with a wing measurement of 270 mm., as against 240 in Mr. Mathews' type, and 260 for an average bird from New South Wales. The bill of Strepera g. robinsoni is longer, very much stouter, and more arched; length, 62 mm. by 26 mm. in deepest part, as against a "Belltrees" (N.S.W.) bird: 59 mm. in length, deepest part 22 mm.—Henry L. White, "Belltrees," Scone, N.S.W. 5/9/22.

Change in Colour of Bill and Iris of the Oriole.—Making a study of the Oriole (Oriolus sayittatus) through seeing both black and red-billed birds about, I thought the black-billed bird was a variety as all the birds I shot were full grown. I was all at sea with regard to the birds, when a friend came to put light on the subject. He had reared a young Oriole from the nest and said that when the bird was two years old, or at the third moult, both the colour of the bill and iris changed from black to red, and the plumage assumed a brighter tint and was more clearly pencilled on the breast. Evidently the bird starts to breed when changing, for I have seen no black-billed birds nesting at anytime: only the birds with red bill and iris.—By J. F. H. Gogerley, Wallis Lake, N.S.W.

Drongo Shrike and Hornets.—Last autumn on a cold, wet day a pair of Drongo Shrikes paid a visit to the homestead. One of the birds took up a station on a grape vine trellis and fed on the brown hornets that had built their paper-like nests all along the fascia boards on the house

The hornets were there in hundreds when the Drongo started. Before the bird had finished with them, they were practically exterminated. The bird stayed about the house for two days, but when the hornets were gone, the bird left for the north, I expect

The Drongo (Chibia bracteata) visits us every autumn or late summer for about a fortnight, and then leaves again.— J. F. H. Gogerley, R.A.O.U., Ellerslie, Wallis Lake, N.S.W.

Starlings interrupt telegraph lines.—The Postal Department has experienced considerable trouble during the past week or so through interruptions to telegraph lines between Murrurundi and Quirindi, and in a lesser degree between Murrurundi and Muswellbrook.

The authorities were for a time completely bailled in their endeavours to ascertain the reason for the trouble, which was not traceable to ordinary causes, and generally came on in the evening and disappeared before morning.

On Wednesday last the trouble arose at 5.55 p.m., and the local linesmen were instructed to proceed towards Maitland as quickly as possible. About six miles on the Maitland side of Singleton two dense clouds of starlings, estimated to number tens of thousands, were encountered, and it is considered probable that they had been disturbed from the wires between 7 and 7.45 p.m., the fault having then cleared. Action is being taken to have the particular sections in which the starlings congregate patrolled at dusk for the next few nights, in order that the birds may be scared and prevented from settling on the wires, (thus causing a short circuit).—The Maitland Daily Mercury, N.S.W., 7th February, 1922.

Starlings roost in the Zoological Gardens at night in many thousands now that the breeding scason is over. They come in companies of from five to forty odd birds from different points of the compass, where they have been feeding during the day. They very often fly round the Gardens a good deal at first, and finally settle among the trees or shrubs for roosting. Now and again they are disturbed by some Hawk, although Hawks find it easier to catch a Dove than a Starling. In the morning you can easily find out on what shrubs these birds have roosted in their huge numbers by the mess made on the ground. I do not know whether any of our friends living in Melbourne who have similar gardens have the same trouble, if it can be so called. The birds all turn out in the morning a little after daylight. —Cecil Le Souer, R.A.O.U.

Abnormal Clutches of Eggs.—Eopsaltria australis. Yellow-breasted Robin.—Four eggs taken by Mr. D. Floter at Cape Hawke, N.S.W., November 10th, 1921. Three is the usual clutch, four rarely.

Grallina picata. Magpie-Lark.—Six eggs, one of which was quite empty, though the shell was intact when taken by Mr. H. Gogerly at Wallis Lake, N.S.W., on December 4th, 1921. The

eggs were apparently laid by one bird.

Philemon argenticeps. Silvery-crowned Friar-Bird.—Two clutches of three eggs each taken by Mr. W. McLennan near Coen, Cape York Peninsula, during January, 1922. This is the first recorded occurrence of three egg clutches.—Henry L. White, "Belltrees," N.S.W. 6/3/22.

Birds on Kosciusko.—During a walk from Corryong to Kosciusko, via Tom Groggan's, at the end of December, 1921, I saw the nest of a Ground Lark (Anthus australis) at approximately 7000 feet. There were four eggs in it. For shelter that night we dropped a few hundred feet to a quiet corner. We were still above the timber line, so you may imagine our surprise to be wakened next morning by the musical crooning of a contented Magpie. Later some Gang-gangs and a few Crows were heard on the skyline, a Snipe was flushed on the last slopes of Mt. Townsend (7260 feet), and about a dozen Ducks were noticed on Lake Albina (6340 feet above sea level). On the Blue Lake (6150 feet) were also several Ducks. There was still a good deal of snow about.—R. H. Croll.

Bold Stone-Curlews.—On November 10th, 1921, I was crossing a paddock at Sherwood, near Brisbane, when I noticed a pair of Stone-Curlews. They were not so timid as usual, only running a short distance and stopping to look at me. Later in the afternoon, when it was getting dusk, I returned past the same spot. To my surprise the two Curlews came running towards me, and when I stopped to watch them, the one in advance, which I took to be the hen from her slightly duller

plumage, squatted down on the ground as if on a nest, her mate standing behind her. Feeling confident that the bird was only trying to fool me, I remained standing still, and, after a minute or so, she got up and moved a few yards before sitting down again. Being certain now that she was only putting up a bluff, I proceeded slowly on my way. Immediately the birds changed their tactics, and came running straight towards me, making a loud hissing note, the wings being slightly lifted and the tail raised and spread in a fan like that of a Turkey. About five yards away the front bird, still I think the hen, halted and spread out her wings to their full extent, twisting them at the same time so that they were held vertically, the beautifully marked under surface being directed straight towards me. The mottled brown, grey and white marks and patches beneath the wings and the black and white spots at the tips of the tail feathers were thus fully displayed, whilst the remarkable hissing sound was kept up almost without intermission. The male was meanwhile indulging in a precisely similar display, but keeping some yards behind his mate.

Each time I took a step the bird came nearer, till she was within two yards of me, and it seemed that at her next advance she would commence the onslaught that she had been threatening. The performance had, however, attracted the attention of a cow grazing in the paddock, and also of my host, who had heard the curious noise from the house several hundred yards away. These reinforcements approaching simultaneously from opposite sides frightened the birds, and they resumed their normal demeanour

It was now almost dark, so I forbore hunting for the nest, which I was convinced was close at hand, for fear of treading on it without seeing it. Less than a minute's search the following day revealed an egg and a newly hatched bird on the ground close to the spot where I had been standing. The second egg hatched next day, but this chick unfortunately died directly after leaving the egg.

I am informed by an old inhabitant of the district that he has seen the birds driving away cows from their nests by the method described, but I have not met with a description of it in print. It would be interesting to hear of other instances of these shy birds behaving so boldly in defence of their nests.—
W. B. ALEXANDER, Sherwood, near Brisbane. November, 1921.

ERRATUM.

A slight error crept into the lines beneath photographs of Tree-creepers' nests, published in *The Emu* for October. Both pictures—one by Mr. A. II. Chisholm and the other by Mr. D. W. Gaukrodger—were, as the accompanying letterpress showed. referable to the Brown Tree-creeper, not to the White-throated Tree-creeper.