## North-Western Notes.

BY THOMAS CARTER, POINT CLOATES, W.A.

DURING the last four months of 1900, which was the wettest and "best" season (in a pastoral sense) ever known here, odd birds or pairs of the Flock Pigeon (Histriophaps histrionica) were frequently seen inland from here. The first week of this year (1901) I started for a trip to the south-west of this State. Large bush fires had been raging for some days to the east and south, burning bare a patch of country about 80 miles square. On 7th January, when approaching the Lyndon River, 70 miles south of here, the fire was burning fiercely on both sides of the road. I camped at a pool that night, and saw several large mobs of these pigeons about sunset, as usual flying at a great speed, and out of gunshot. The next day I decided to spell the horses, and walked to another larger pool. Enormous flocks of the pigeons were feeding on the freshly burnt ground, and about 8 a.m. they began to water at the pool in countless thousands. The roar of their wings was like the noise of heavy surf breaking on the beach. I sat and watched the birds for some time. As noted by other observers, they seemed to be in a frantic hurry all the time, and when a flock came to the pool they not only covered the bank at the bare side of the pool (where the ground sloped to the water, without any bush or cover), but actually settled in and on the water in thousands. After a few gulps the whole flock would rise and give place to another. As I wished to secure a specimen or two, I succeeded, after several attempts, in crawling within long gunshot of a mob, closely packed and busily feeding on the bare, burnt plain, evidently finding abundance of grass seeds in the cracks of the clayey soil. On firing, the flock rose and circled closely above my head for some time, being interested in two of the victims which were fluttering on the ground. The noise and whirr of their wings were extraordinary. My native boy was greatly excited, and kept shouting to me to shoot some more before they flew away; but one of the cartridge cases had jammed, the extractor slipped over it, and I had to laboriously unscrew and unship it with my pocket-knife, and by the time fresh cartridges were inserted the birds were out of range. Referring to Mr. North's pamphlet on the decrease in numbers of this and other birds, may it not be accounted for in some measure by the birds following rains and feed to different parts of Australia, some years, perhaps, elapsing before they occur again in any particular locality? It is many years since these birds have visited here. Of course, this will not apply to resident species.

At Carnarvon some days were spent waiting for steamer going south. Green-backed White-eyes (Zosterops gouldi) and Yellow-throated Miners (Manorhina flavigula) were abundant in the dense wattle and other scrub about the banks of the

Gascoyne River, especially in the vicinity of some gardens, where I was told these birds committed havoc with the fruit, and that until the gardens began to be productive the Whiteeyes were hardly ever seen. They were probably there but not noticed. On 2nd May, after my return here, Painted Finches (Emblema picta) were noted in some numbers, and on 11th June on the high rocky range here they were quite common, flying about in small mobs of seven or ten. The last I saw was a pair at a sand-well on the beach, 13th September. When at Cardabia Creek, 14th July, I found a nest of the Whistling Eagle (Haliastur sphenurus) with two eggs, and in the next white gum, a few yards distant, a nest of the Black-faced Cuckoo-Shrike with two eggs. The following day nests of the White-shouldered Caterpillar-eater (Lalage tricolor), with young, and Tricoloured Chat (Ephthianura tricolor), with four eggs; also of Tawny Frogmouth, with two eggs. A Darter (Plotus novæ-hollandiæ) was shot at the large pool, which, as recorded in The Zoologist for July, now contains numerous small fish. In September several Pelicans were seen there and a Pied Cormorant (Phalacrocorax hypoleucus). The Cormorant and Darter were never noted there before. On 21st and 28th July I found several nests of the Pied Honey-eater (Entomophila leucomelas) in scrub growing on the coast sandhills, near the shearing shed. The full clutch appears to be three. The nests were somewhat substantially built, and about 4 or 5 feet from the ground. One nest was in a small sandalwood bush standing apart. It contained young birds. The mother fluttered about, feigning lameness, and uttering a melancholy piping note. This bird is one of the commonest winter visitors, arriving in numbers after the first rains, usually in June. The male birds are much more in evidence than the females, as they perch on the upper twigs of bushes, and, rising to some height in the air, flutter to another perch, uttering their somewhat mournful piping song. They are usually shy and difficult to approach. In the course of shearing, a Pectoral Rail (Hypotænidia philippinensis) was seen running about and feeding in the drafting yards and brush fences. 1st September.—In some hard sandy cliffs on the beach several Black and White Swallows (Cheramæca leucosternum) had their nests. It is amazing through what hard material these apparently weak birds can drill a hole. With much trouble and the aid of a strong sheath-knife I enlarged two holes sufficiently to admit my arm. Both contained young birds. The holes were 3 feet long, the nest cavity being large and containing two or more handfuls of flat leaves, about 4 inches in length, off a species of mulga. 10th September.—I noted three nesting holes of these birds excavated in the soft sand under a large bunch of spinifex on the roadside. The wind had blown and cut away one side of the hummock on which the spinifex was growing,

leaving a fall of about 3 feet. In this the holes were made. A pair of Mangrove Kingfishers (Halcyon sordidus) were at these cliffs, but I failed to find a nest. A pair of Reef Herons had a nest containing four eggs on a shelf of the cliff. Apparently a blue bird and white were mated, the blue bird coming off the nest. Curlews arrived about 31st August, and Oriental Dottrel (Ochthodromus veredus) 10th September. 3rd October I shot a Common Sandpiper (Tringoides hypoleucus), on the beach, the first noted here. 9th November.—A female of the Stubble Quail (Coturnix pectoralis) was flushed and shot close to the house, also a first record here; the Brown and Little Quails have only been previously noted. 21st November.— Saw an Emu with four young, in down, about as large as This must have been a very late brood, the domestic fowls. usual laying season being end of May, but I have noted in other dry seasons, as this is, that Emus seem to delay their breeding.

## Protective Colouration of Australian Birds and Their Nests.

PART II.

By D. LE Souef, C.M.Z.S., &c.

(Read before the Aust. O. U., Adelaide Session, 2nd November, 1901.)

HONEY-EATERS vary much in colour, but the males and females do not as a rule vary much in markings, but by far the larger majority of hen birds have greenish or dull-coloured backs. Their nests are mostly hanging, and built in varying situations, according to the colour of the bird, and you can generally make a good guess at the shade of the owner's back by the place it builds its nest in; if among green leaves at the end of a branch the bird will probably be greenish, as for instance Ptilotis penicillata (White-plumed Honey-eater); if lower down among the dead branches, grey or brown; and if in very thick vegetation low down, the markings will be fairly conspicuous, like in Meliornis novæ-hollandiæ (White-bearded Honey-eater). Honeyeaters are a large group, but if notice is taken it will soon be seen how the various kinds are protected, mostly by the birds building in places which assimilate with the colour of their backs, as before stated.

The Ground-Lark (Anthus australis) is well known, but how often its open nest is passed by without being detected, it being made of dry grass and containing three dark grey eggs. The bird itself is as inconspicuous as its nest and egg, and would rarely be seen if it only had the courage to remain on its nest when danger threatened. Nightjars (Caprimulgus, &c.) are wonderfully protected by colouration, and would seldom be seen