## Further Notes on the Spotless Crake (Porzana immaculata).

By (Miss) J. A. Fletcher, R.A.O.U., Boat Harbour (Tasmania).

To a previous issue of *The Emu\** I contributed some notes on the Spotless Crake (*Porzana immaculata*), and now have the pleasure of adding a little more to the knowledge of the life-history of these interesting birds. I have been able to study them through three seasons, one of which was normal, another very dry, and the third (that of 1915) exceptionally wet.

In the 1915 season continuous floods delayed nesting, so far as these birds were concerned, fully six weeks in comparison with previous years. On the other hand, some of the clutches were above the average. The question then arises—When a season is thus likely to be shortened, will one clutch only be reared by each pair of birds, and that clutch be larger in numbers? My

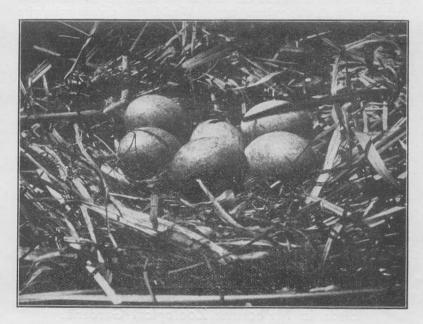
experience tends to show that such is the case.

As with all birds, the more the Crakes are studied the more fascinating does the observer find them, the difficulties of their habitat only adding to the zest one feels in the study. More than once I have had the great pleasure of watching one of these little birds busy at its toilet, standing on the edge of a tiny open space of water preening its feathers. One has to remain very quiet to see this, and the best position is on a log overlooking a glimpse of water in a mass of reeds. These Crakes are fond of sunning themselves, and have their favourite spots for this. Sometimes a stick partly out of the water is the chosen perch; at other times a clod of earth, or a bare point at the base of the reeds, and always near to cover.

Early morning and evening are the best times for studying the Crakes, and these are also the honrs when nest-building takes place. Several trial nests are made before the main one is built, and these, though discarded for eggs, are nevertheless used as resting places, and bear traces of constant occupation. It is also worth noting that, should the main nest be inspected too much, the owners will leave it, and probably choose one of the "dummy" nests. I have found the nests placed at heights varying from 3½ feet down to ground-level. It has always been a puzzle to me how the owners of the high nests can climb up, as all of the structures do not have a staging. I remember one nest which had three stagings attached to it, and two "ladders" are not uncommon. I have noticed that when a Crake begins to weave the rushes down as a cover to the nest the eggs will shortly be laid. It is very difficult to determine whether a newly-found home is old or not. The material used in their construction is nearly always dead reeds, and when the eggs are hatched the female throws out every particle of shell. Even the tiny chippings seem to disappear.

<sup>\*</sup> Emu, vol. xiii., part 4, pp. 197-202.

Unless disturbed, the chicks remain on the nest for a day, and the parents feed them there. A fellow ornithologist spent a delightful quarter of an hour watching a pair of Crakes carrying food to their young. He was standing above the swamp level by the railing of a culvert, waiting for signs of life in the reeds below. Out from the rushes walked a Spotless Crake; it crossed a strip of sand and disappeared under a clump of blackberries. It reappeared with a worm, which it carried into the rushes it had recently quitted. Presently its mate came out, and the two kept journeying backwards and forwards, carrying the worms for their family. The call used to gather the chicks together,



Nest and Eggs of Spotless Crake.

FROM A PHOTO, BY (MISS) J. A. FLETCHER, P.A.O.U.

especially when they have been separated through fright, is an exact imitation of water gurgling over stones into a rocky basin.

Generally speaking, these birds avoid travelling in the swift flow of the water, and have runaways just on the edge of the stream. Yet they do not hesitate to plunge boldly into deep water should occasion arise. Even chicks two days old will brave the crossing of a fairly swift channel. Spotless Crakes sometimes wander away from their swamps, and I have several times seen them cross the road. This they do in a crouching, hesitant run, in much the same way as a Quail which has hidden its brood and runs to have attention taken from their where-

abouts. A fact worth recording is that Crakes are partial to ripe blackberries, and I have flushed them from the tops of low, tangled masses of the hrambles when the plants were covered

with fruit, in early autumn.

Two seasons' experiences among the Spotless Crakes seemed to indicate that three eggs form the normal clutch; four is an exceptional number, and frequently only two are laid. heavy, continuous spring rains of last season (1915), as already stated, delayed the nesting, but larger clutches were observed Among those noted were several nests containing five eggs, and in three cases six formed the clutch. Of these latter, one clutch contained a double-volked egg. Would the clutch otherwise have been seven? There is much variation in the eggs, and to a certain extent the colours harmonize with the surroundings of the nest. I have seen one clutch of a uniform pale green colour, and the nest was hidden under a luxuriant growth of summer grass growing in a hollow of the creek's bank, and was made of the same material. When rushes and reeds form a decaying. matted mass, the eggs laid in nests thereon are a darker brown, and not attractive in appearance. Again, where the surrounding herbage and grasses are more open, with shafts of sunlight filtering through, the markings on the eggs laid in these sites resemble those of our Large-billed Ground-Thrush (Oreocincla macrorhyncha). Some of the specimens have a brown cap on the larger end. Variations exist in the shape also. Many of the eggs are round and chubby; others elongated and swollen.

Studying Spotless Crakes, one suffers discomfort and disappointment. But how quickly one forgets the long hours of wading, or standing knee-deep in mud, the sharpness of the frosts in the early morning, and the frights with snakes, when a nest

is found or the birds are seen!

## Birds in Melbourne Zoological Gardens.

By D. LE SOUEF, C.M.Z.S., THE DIRECTOR.

Australian Honey-eaters are comparatively casy to keep in captivity provided that they have suitable food, and we find them quite hardy in our large flight aviary (50 feet x 25 feet x 30 feet high). Despite the number of hirds in it (about 100), both the White-naped Honey-eater (Melithreptus lunulatus) and White-plumed Honey-eater (Ptilotis penicillata) hred last year and reared their young. As is well known, many birds, especially Finches, have, when in aviaries, a habit of pulling other birds' nests to pieces and building their own with the material stolen, but with Honey-eaters this does not seem to occur often. In the same aviary the Pied Grallina (Grallina picata) also builds its mud nest, and successfully rears its young.

In the young White-naped Honey-eater the top of the head