

by the chattering of a number of these Honey-eaters I was attracted to an Owl hidden in the leaves of a tree. The notes of the birds are identical, from the usual one to an occasional clear liquid whistle. Occasionally, just as does *P. penicillata*, a bird will be seen to mount into the air by a series of ladder-like rises, meanwhile uttering a peculiar liquid note, and then suddenly dive down into the bushes. Middle of August.—Nest with two fledged young in bulrushes over water. September.—Old nest in paper-bark tea-tree (*Melaleuca*), about 15 feet high, near main stem. 23rd September.—Nest in overhanging branch of eucalypt, about 8 feet from ground, with two fresh eggs.

Nest and Eggs of Emblemata picta.—On 11th August Mr. H. M. Giles, F.E.S., my companion, found the nest of this rare species by the female flying out of it. Later on we secured the female on the nest. There was an unfledged nestling and two eggs, both of which we succeeded in blowing, the young bird being preserved also. The nest, composed of grasses, was situated in a coarse tuft of spinifex (*Triodia*), not far from a dry watercourse. In the photograph* the orifice of the nest in the tuft of spinifex can be seen. The nest has been deposited in the Western Australian Museum. Mouth of nest consists of fine flowering ends of spinifex (*Triodia*). Body of nest—about size of closed fist—buried in the spinifex tuft, and composed of woolly tufts of hair and woolly leaves of plants to form a compact nest. Eggs.—Colour pure white; with lens, surface has a dull gloss with occasional small pits. Shape, roundish oval, one egg larger than other; size, in lines (12 lines to inch), 6.1 x 5, 6.8 x 5.4.—(DR.) J. BURTON CLELAND. Perth, W.A.

From Magazines, &c.

WOOD-SWALLOWS BREEDING IN CAPTIVITY.—In *The Avicultural Magazine* for September Mr. E. J. Brook has some notes on the breeding of the White-browed Wood-Swallow (*Artamus leucorhynchus*) in his aviary. The birds nested in a piece of tree-root with a rotten, cup-shaped hollow, in which they placed a few very small sticks, but made no regular nest. Of three eggs laid the first proved clear; the second, laid three days later, was broken; while the third, laid after an interval of four days, was successfully hatched. "Both birds sat, relieving each other at short intervals. The egg hatched on the 14th day, I think, and the young bird left the nest 14 days later. Both parent birds fed the young one, but the male was the best feeder, and much the keenest to find tit-bits, such as small flies, &c.

* Dr. Cleland kindly sent a photograph of the nest *in situ*, but as the picture was evidently taken under difficulties it was not suitable for reproduction.—EDS.

Only live insects were given to the young bird until it left the nest, but since then the male has given it occasional morsels of the ordinary insectivorous mixture." The young bird was fed principally on meal-worms, other suitable insects being scarce.

At the time of writing Mr. Brook supposed that his was the first record of a Wood-Swallow being reared in captivity, but in the October number of the *Magazine* Mr. Henry Scherren writes:—"Looking over some old Reports of the Zoological Society, I came on the entry of *Artamus superciliosus* among birds bred at the Gardens in 1870."

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"A BIRD ENEMY—THE GOANNA."—Under the above heading "Goulburnite," in *The Argus* (Melbourne) of 5th December, 1908, thus graphically describes the operations and final discomfiture of a rascally nest-robber:—"Near my camp is a small dry box that was ringed years ago, and has gradually lost the greater portion of its head. The short broken limbs which project from the trunk are mere shells, and till last year these were tenanted by a Sparrow community, busy, yet squalid little beggars. Straws stuck out of the cracks, leaves, pieces of paper, and other litter were heaped at the entrances; and here and there, fluttering in the wind, were scraps of hayband and other fibrous nesting material, completing a picture of poverty-stricken decrepitude.

"One broiling day in summer there was great excitement in this bush slum. Panting birds were soon congregating from all quarters, the Miner, as usual, being well to the front, vociferously encouraging the Magpies and other fighters to the onslaught. The goanna* was bent on plunder, and took little heed of the outcry, silently making from one limb to another, and visibly swelling as he cleared out each domicile. I made many attempts to dislodge him, but handy missiles were scarce, and my aim faulty. His tail would dangle from a hollow for minutes, then out he would back, bloated, but alert, and at my throw would quickly dodge to the other side of the limb, and craftily crawl to the next aperture. He had gone the whole round of the tree, and, fully gorged, was quietly awaiting my retirement before descending. The birds were sitting about, inactive, and for the most part exhausted and voiceless, and I was glad to take refuge from the glaring sun in the shade of a neighbouring tree. As I moved for shelter, the goanna changed his position on the tree, and this brought him within view of a Kestrel. From her nest-hole in a tall gum near the river bank she spied the fat rascal, as he hugged a branch, lazily moving his head from side to side, and in an instant his demoralization was complete. There was a lightning-like flash, and with

* A large lizard, sometimes reaching 6 feet in length.—EDS.

almost equal rapidity the scared robber touched the ground, and scurried into the adjacent scrub, where he made good his escape. Strange to say, the Sparrows immediately deserted the locality, and the hollows of the old box have ever since been tenantless."

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THE PARTRIDGE-PIGEON (*Geophaps scripta*).—Mr. T. H. Newman, F.Z.S., M.B.O.U., in *The Avicultural Magazine* for October, writes of the nesting of this Pigeon, and, in some interesting notes, refers to the belief which has obtained, and for which Gould was largely responsible, that the young differs from that of other Pigeons in being clothed with down when hatched, and being able to fly strongly while still in the "down" stage. Mr. Newman says:—"They have nested freely this summer, and I hope my notes, made during the rearing of the young, may be the means of clearing up some of the mystery which has hung round the nesting of the genus *Geophaps*, for apparently the young of no other Pigeons have excited so much difference of opinion, and the statements that the young 'are hatched clothed with down, like a Quail,' and that they 'fly strongly when they are only as large as a Quail,' have led to the belief that these birds, which so wonderfully assimilate a Partridge in appearance and habits, are really more Partridge than Pigeon. It would be hard to find another case among birds of one group approaching another so closely in superficial details as the genus *Geophaps* does the Partridges. Yet in no point do they really differ from the more typical Pigeons." Dealing with the supposed precocity of the young, Mr. Newman quotes Mr. A. J. Campbell's* comments on Gould's statement, with the field observations of Messrs. Charles and Harry Barnard, and states that these are in agreement with his notes. Mr. Newman's pair of birds nested in April, 1908; on the 24th of that month a broken egg was found, and on the 26th another was laid, but the birds did not sit. Early in May they were found to be sitting on two eggs, and on the 23rd a young bird emerged. The writer says:—"On the 23rd May one young one was hatched; the other egg contained a nearly full-sized dead chick. This is my note, made the same day:—'Young covered well with rather dark fawn down, but not more so than many other Doves; bill dark brown, almost black on edges of mandibles, a white knob on *both* mandibles at tip, tips of bill very pale grey, feet greyish pink.' A later note from another young one adds, 'the down is paler (pale yellow) on under surface,' and that there is 'a bare line down breast and abdomen.'" It is pointed out that "the young is no more clothed with down like a young Quail

* "Nests and Eggs," p. 690.

than many other species of Pigeon." Attention is called to "the presence of an egg tooth on both mandibles; the upper one is of the usual triangular shape, while the lower one takes the form of a flattened semicircular nail." Mr. Newman continues:—"I am not aware that an egg-tooth on the lower jaw has been recorded in any species of bird, but it is evidently not so uncommon among Pigeons, as I found it present in the newly-hatched young of the Brush Bronze-wing (*Phaps elegans*), but very much smaller, and, to my surprise, I could just detect it in two young Picui Doves (*Columbula picui*), and in a young Diamond Dove (*Geopelia cuneata*). I think we shall hear more about this later on, as I have sent a two days' old young Partridge Bronze-wing to Mr. Pycraft, and he has promised to describe it to us." The young bird hatched on 23rd May was first noticed out of the nest when twelve days old, when it could run very fast. On 7th and 9th June, when this young one had left the nest two or three days, the old birds laid again, and another young one was hatched on 26th June; "on 30th June its eyes were opening, and feathers beginning to sprout, body sparingly covered with fawn-coloured down." On 5th July it first left the nest, and on 7th July ran about actively. Mr. Newman's notes will be continued.

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* "THE HOUSE-SPARROW IN NEW SOUTH WALES."—The Department of Agriculture of New South Wales has issued in pamphlet form a report on the above subject, reprinted from *The Agricultural Gazette*, and prepared by Mr. C. T. Musson, of the Hawkesbury Agricultural College, Richmond, N.S.W. The author has had the assistance of nearly 400 correspondents in different parts of the State, who, in response to circulars, supplied much valuable information dealing with the bird from every point of view. The House-Sparrow (*Passer domesticus*) is said to have been introduced into New South Wales about 45 years ago, and is believed to have been brought to Victoria about the same time. It is only, however, within the last 10 years that it has become so numerous as to be considered a pest. While the farmer is the greatest sufferer from its depredations, owing to its destruction of grain, it is accused also of attacking soft fruits, particularly grapes, as well as destroying buds and injuring the leaves of fruit trees, eating vegetable seeds, damaging seedling plants, accumulating dirt about buildings, and contaminating the water supply. In addition it pilfers the food of domestic animals, eats useful insects, and sometimes destroys bees. As to its driving away or molesting other birds, the reports says:—"The Sparrow does drive away other birds, chiefly Swallows and Fairy Martins, often making use of their nests." To the credit of the bird may be placed the facts that

in the nestling stage the food consists largely of soft-bodied insects, and that in the adult stage considerable quantities of weed seeds are eaten, and at times aphides. In reference to the consumption of the farmer's grain, it is estimated that "they will eat $\frac{1}{3}$ of an oz. of wheat per day—that is, 50 Sparrows would eat 1 lb. of wheat per day, besides wasting, perhaps, as much or more." Some investigation into the food question was made at the College, the stomachs and crops of birds killed on the College farm being examined, with the following results:—"109 Sparrows were examined at the College between August, 1904, and October, 1905, and the result showed that much food is taken from cereal crops; grapes were attacked in only two cases; a considerable number of birds (47 per cent.) fed on weed seeds, in some cases to a large extent; $15\frac{1}{2}$ per cent. fed on noxious insects; in only one case were beneficial insects destroyed; 31 per cent. fed on small insects not known to interfere with crops in any way, and therefore must be classed as neutral; in eating them Sparrows cannot be considered as doing any good for us; 88 per cent. fed on cereal grain of some kind. These results certainly point to a considerable amount of good being done by the clearing away of weed seeds and the destruction of a quantity of noxious insects, the final results being, however, against the Sparrow." The rapid spread of the pest is explained by the following notes on their breeding habits:—"The number of broods may be any number up to six—usually three or four, with four to six young in a brood. The numbers vary considerably, but it would appear that a pair of Sparrows would raise from 12 to 15 young each season. Breeding is continuous from August to February in the warm parts of the State. They breed in and about buildings, and in trees close at hand. . . . It is difficult to give any idea as to what the bird will breed up to if left alone for another five years. Let us assume that with us each breeding pair raises 16 young in a year, and that these are half males and half females; this is, perhaps, understating the case, but will sufficiently answer our purpose. There would be at the end of five years, as the result of a single pair, if all the progeny lived, over 64,000 breeding pairs. There are, however, losses from natural causes, which reduce the numbers very much, and which make any calculations purely speculative." Mr. Musson concludes that the Sparrow has come to stay; that the damage it does far outweighs the good, probably as 8 to 2; that it has become a menace to the agricultural industry and fruit-growers, and should be promptly checked; that this can only be accomplished by organized, united, and persistent effort, renewed each year, on the part of the individual. Two main lines of work are recommended—to "prevent them breeding," and to "reduce them in number by poisoning and shooting." It is suggested that it

should be the duty of Inspectors of Nuisances, the police, and other officers to see that Sparrows are not allowed to breed about premises ; municipalities should have power to prosecute ; householders and persons in charge of buildings should be compelled to take reasonable steps to prevent Sparrows nesting and rearing their young ; agricultural, pastoral, and horticultural societies receiving grants from the Government should be required to spend a certain sum annually in fighting the pest, by offering prizes for eggs or heads, or organizing their members for the purpose of dealing with it in other ways. A " Bird Day " in schools is recommended, and the opinion is expressed that " much can be done by encouraging ' the boy ' to a life-long Sparrow war." When dealing with the birds in the breeding season it is advised to " let the birds hatch the eggs and feed the young for a week, then destroy the young before they can fly." Poisoning operations can be most successfully carried out in August. In the hope of the ultimate establishment of a fresh " balance of nature " through the agency of our native birds of prey, Mr. Musson would protect the smaller Hawks and the Butcher-Birds, as well as the Owls and Crow. It is pointed out, however, that we cannot afford to idly wait for this desirable remedy, as " it takes time for them to become accustomed to a new article of food." The same reason, it is to be feared, may delay the adoption of the recommendation that we should use the Sparrow as food. While extermination may be impossible, it is obvious that if the recommendations of the report be carried out, the result must be a sensible check to the spread of this feathered larrikin, to the advantage not only of the farmer and fruit-grower, but also of some of our native birds. Appended to the report is a diagram map showing the wide distribution of the Sparrow in New South Wales.

Correspondence.

THE WHITE-EYE *v.* ORCHARDIST.

To the Editors of " The Emu."

SIRS,—I was very pleased to read in the last issue of *The Emu** that able article by Mr. A. H. Chisholm in defence of the little *Zosterops*. I agree entirely with that gentleman when he says that these little birds do more good than harm, and not only this species, but many more of our native birds which are supposed to be harmful. And I may go further in saying that I do not believe there is a single species of our native birds that can be qualified as a pest. The reason of my writing in this strain is that it annoys one much to see articles setting forth trifling mischief that some of our birds may do ; and, worse still, these articles are written by ornithologists, who must

* Vol. viii., p. 35.