

would, ere it had reached its adult size, more than likely have been thrown out of the tiny nest as it swayed about on the top of a tall tea-tree (*Leptospermum scoparium*). Why do Cuckoos place or lay their eggs in nests that are too small for their full-grown young? Since writing the foregoing, on 21st October, 1906, I visited the nest of the Blue Wren again, but there was only a clutch of Wren's eggs in the nest. During the same day we found the nest of a *Sericornis* or Scrub-Wren in which was imprisoned (if one may use such a term) a large young Fan-tailed Cuckoo. The *Sericornis*' nest was situated but a few inches above the water in the overhanging bank of a creek. Such a position must necessarily have been somewhat difficult of access to the parent Cuckoo. The opening of the nest was far too small for the Cuckoo to enter and lay its egg. The bird must therefore have used its beak to get the egg into the nest, an act which in this case must have been awkward for the Cuckoo, since the bird would have found it necessary, when placing her egg in the nest, to fly directly on to the nest, meanwhile supporting herself by an unsteady clutching of the nest with her feet. But does the female Cuckoo deposit the egg, or is it the male that deposits the egg with its beak? The *Sericornis*' nest in question was completely hidden from view, and the Cuckoo must have found out its whereabouts by observing the Scrub-Wrens coming and going as they proceeded with the architecture of their nest, just as we observed them before realising that a nest was there. The more notes that we can collate on these points, the sooner will we have some tangible evidence, some material basis, some established facts about the Cuckoo, and then we can relegate hypothesis to its proper sphere of usefulness.

Stray Feathers.

STRANGE NESTING PLACE.—I took a nest of the Black Duck, containing nine fresh eggs, last week out of an old nest of the Eaglehawk.—SEP. ROBINSON. Bathurst, 26/9/06.

* * *

A WHITE EMU.—Mr. A. C. Le Souëf, of the Sydney Zoological Gardens, draws attention to a letter he has discovered, dated Warialda, N.S.W., 3rd December, 1887, in which a white Emu is offered for sale to the society. It was about 2½ months old and stood 3 feet high. No record is given of its purchase.

* * *

BEE-EATERS IN SOUTHERN VICTORIA.—I have to report that three pairs of *Merops ornatus* appeared in this district during the first week in November. They have taken up their abode on a road cutting through a sandy rise, and their tunnel-

lings indicate that they intend to nest. They appear to be hard to please. A pair starts a burrow, and, not being satisfied with the spot, deserts it to try elsewhere. This is the first time during a residence of over forty years that I have seen Bee-eaters on the Mornington Peninsula.—G. E. SHEPHERD. Somerville, 24th November, 1906.

* * *

FOSTER-PARENTS OF CUCKOOS.—The Scrub-Wren (*Sericornis osculans*) has not previously been recorded as a foster-parent of the Fan-tailed Cuckoo (*Cacomantis flabelliformis*), but I have taken it in this district. Two new foster-parents of the Pallid Cuckoo (*Cuculus pallidus*), which I have also collected, are Orange-winged Tree-runner (*Sittella chrysoptera*) and the introduced Goldfinch (*Carduelis elegans*). I have this season seen a pair of Shrike-Tits (*Falcunculus frontatus*) feeding a young Pallid Cuckoo.—G. E. SHEPHERD. Somerville, November, 1906.

* * *

DROUIN NOTES.—I may add a few to the number of birds in this district mentioned in last *Emu*. Amongst them are the White-shafted Fantail and the Blue Wren, which keep very close in the bracken and other thick scrub, but are so curious to see what my dogs are doing that they come flitting back and peering from the shelter of the bushes, and then running away like mice. Also the dogs have put up Coachwhip-Birds in the scrub in winter; these make a hoarse mewling like a cat when disturbed. Then there are Shrike-Thrushes, Magpie-Larks, Butcher-Birds, Rosellas, and, of course, the ubiquitous Jackass. Next winter I will take more particular notice. Now also the spring birds are here. But this is not a "birdy" place.—L. H. HUTCHINSON. August, 1906.

* * *

DUCKS AND GEESE.—A Black Duck (*Anas superciliosa*) had a nest at the butt of a willow branch, where the end had been cut off and shoots had sprouted up all round. It was overhanging the creek. During the time she was sitting a flood came down, and the nest got covered by the water for the space of two hours, during which time the Duck was swimming over the site in evident distress. As the water went down and showed the eggs again, she again sat on them, and eventually hatched out nine young. It shows the vitality of the eggs that being under cold water for two hours did not destroy the life of the chick. I also used to notice some years ago Cape Barren Geese (*Cereopsis novæ-hollandiæ*) flying in considerable numbers over Mortlake from east to west during the month of October; they were apparently migrating with their young from the islands in Bass Strait to the various salt lakes in the Western District. I

remember on one occasion a pair of them that had been domesticated nesting in my garden, but the birds deserted the nest one bitterly cold, wet evening, and the eggs were left exposed all night. In the morning they were placed under a hen, and, strange to say, all hatched out.—R. V. DENNIS. Warncoort, November, 1906.

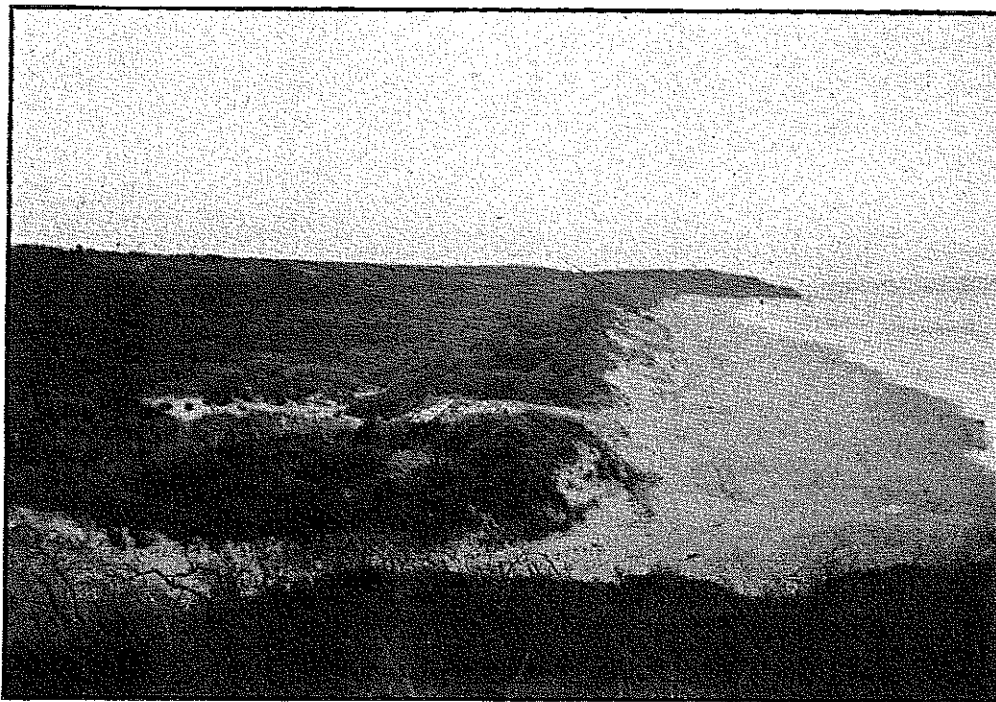
* * *

MIGRATION OF SWALLOWS.—Many years ago a pair of Swallows (*Hirundo neoxena*) built their mud nest on a rafter under the gable of the roof of Ellis's auction room at North Melbourne. There is an unobstructed view of this part of the roof, and the Swallows and their nest can be continuously observed. Mr. Ellis informs me that for the last 12 years this pair of birds has never once left the premises to migrate. They have reared their young there, and when the nestlings are old enough the parent birds have been observed to push them over the side of the nest and so teach them to fly. They have three different nests in the roof, and when the old birds consider that the young birds are old enough to look after themselves they desert the nest in which they reared the nestlings and occupy one of the other nests. This is evidently an intimation to their young to feed themselves, and also to depart from the building, and should the young birds be disposed to stay the old birds slightly coerce them until they leave. These Swallows live principally on flies which hover around an adjoining butcher's shop, and during the winter months, when flies are scarce, the Swallows nearly starve. It would be interesting to know if this pair of Swallows are begetting a non-migratory stock.—A. MATTINGLEY. Melbourne, November, 1906.

* * *

PILOT-BIRDS.—On 17th November, in the Dandenong Ranges, Mr. J. A. Ross took a pair of the acorn-like eggs of *Pycnoptilus floccosus* for his collection. Three weeks later, in the same locality, I discovered a nest being built upon the ground among thick scrub. I was astonished to see the greater part of the bulky outer structure built when I repassed the site less than 5 hours later. The female alone performed this task, bringing in long shreds of bark and grass and old leaves with surprising rapidity; the male accompanying her on her excursions, whistling cheerily, and feeding her occasionally.

When the two eggs were laid the female only sat upon them, but she came off occasionally to feed. The male bird would hop about in advance, and when he found any dainty tit-bit would come running back to put it in his mate's mouth. While searching for food the male whistled every few moments his loud, full-throated call (so strong for the size of the bird), and every call was answered quickly by the female. When she



Home of Rufous Bristle-Bird (*Sphenura broadbenti*).
Point Addis, Victoria.

FROM A PHOTO. BY A. G. CAMPBELL.



Nest of Pilot-Bird (*Pycnoptilus floccosus*),
Which contained egg of Fan-tailed Cuckoo (*Cacomantis flabelliformis*).

FROM A PHOTO. BY A. MATTINGLEY.

returned she usually carried a feather with her into the nest, which was found to be very wet and sodden underneath its thick lining. The young hatch in about a fortnight, and as soon as fledged are like their parents in plumage.—A. G. CAMPBELL. Melbourne.

* * *

PILOT-BIRD AND CUCKOO.—At the request of a friend I visited the Dandenong Ranges on 15th December to take the nest of a Pilot-Bird found building some time previously, and also to photograph the nest *in situ*. I found, beside one egg of the Pilot-Bird, an egg of the Fan-tailed Cuckoo (*Cacomantis flabelliformis*). This is the first record of this nature, but I believe the nest had been deserted as a result of the incongruous Cuckoo's egg. I observed another nest of the Pilot-Bird being built. A small opening was made in some grass about 9 inches above the ground, and the female bird was noticed carrying dead eucalypt leaves to construct the platform in front. With feverish haste the bird hopped hither and thither collecting bark and leaves for her nest. In three hours' time I visited the nest again, when all the external covering of bark had been domed over, and at this rate of progress the nest would be ready for eggs in 1½ days.—A. H. E. MATTINGLEY. Melbourne, 18th December, '06.

* * *

MALLEE (VICTORIA) NOTES, SEASON 1906.—The following migratory birds arrived here (Pine Plains) on or about the date given :—

The Rufous Song-Lark, 17th September.

The White-rumped Wood-Swallow, 18th September.

The Oriole, 1st October.

And, after an absence of four years, that most handsome bird, the Red-backed Kingfisher, made its appearance at Pine Plains. On 20th October its loud, plaintive notes were to be heard ringing through the trees.

18th October saw three young Chestnut-backed Thrushes (Ground-Birds) in the one nest. I have now found one, two, and three young ones in a nest.*

The White-eared Finch (?) made its appearance here for the first time—so far as I am aware—about five weeks ago. Has this bird been recorded as a Victorian bird?† It is a beautiful bird: the bright yellow on the wings is most noticeable just as the bird is about to rise from the ground, where it is mostly seen, feeding upon the grass-seeds, &c. The numerous colours of its plumage make the bird a most handsome creature.

* Three is a record for this species—usually only two.—EDS.

† Probably the imported Goldfinch.—EDS.

The Wedge-tailed Eagle I have seen on a few occasions this breeding season carry away young Ravens from out of their nest and take them to their own eaglets. On the 16th September I saw a large Eagle swoop down and pick up a Southern Stone-Plover from the ground, and this was also carried to the eaglets in the nest.

A few days ago, hearing the loud cries of a woman, I rushed out of the hut, rifle in hand, and was just in time to see an Eagle with a full-sized domestic fowl in its talons flying low down towards the surface of the ground, about 80 yards distant. In less time than I am writing this I put a bullet into the Eagle and saved the fowl's life, minus a lot of her feathers.

The Raven is a most destructive bird in the way of killing and eating the little young birds out of their nests. They also rob the small birds' nests of their eggs.

Twelve Silver Gulls stayed on one of the tanks here for over two weeks.

The following record of a pine tree may be of some interest. The ravages of some insects have caused the green foliage of the pine to turn into a brownish hue, for it is now partly dead. About 10 feet from the ground there is a fair-sized hole in the trunk, where a Pink Cockatoo laid its three eggs, which were taken possession of by a person on 10th September. Then, by 25th September, that handsome bird, the Many-coloured Parrakeet, had laid its pearly-white eggs, four in number, in the same hole. These also were missing, and on the 21st October following a Kestrel had taken possession of the hole and laid its full complement of four lovely eggs; and now, on one of the drooping branches, a pair of those strange birds, the White-shouldered Lalage (Caterpillar-eater) have built their neat cobweb nest, and, "to finish the contract," a pair of Bee-eaters have burrowed a hole near the butt of the same pine tree and started to lay in it. Can you beat this pine tree for such an interesting zoological record?—CHAS. H. M'LENNAN. Pine Plains, 5/11/06

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THE LINES OF EXTENSION OF BIRDS.—If the above heading seems odd, yet to the writer's thinking it is appropriate. With this short introductory sentence I will proceed to give some notes on the Straw-necked Ibis, a bird that first came under my observation when on the Murrumbidgee River in the sixties. In the year 1869, as there was a severe drought, we had to move a flock of sheep to Mt. William, near Lancefield. Lancefield is 42 miles from Melbourne by the metalled road. One day a flock of Ibis was seen making south, and I was surprised to see those fine birds come so far down into our part of Victoria; but the late Mr. Tom Kisson had noted them at

Bacchus Marsh three or four years previously. From my late brother's statement, Mr. Kissock was out with the gun, and shortly returned with two birds that he had shot, and it is evident that they were quite new to him. When he brought the birds in he remarked that they were very like "Whaups," which, by the way, is the Scottish name for Curlews, which we read frequent the seashores of the British Isles. At the period referred to, Mr. Kissock would have gained a thorough knowledge of the birds of his district, seeing that he would have known it for fully 25 years. Mr. Pinkerton, his father-in-law, according to the late Mr. William Westgarth, held his station on the Werribee as far back as 1843, but he would have settled there prior to that year.* Had the Ibis visited Melton Plains prior to the pair being shot, Mr. Kissock would have known what the birds were. When they began to come about my brother was able to identify them by those he had seen at Bacchus Marsh. Though it was in comparatively recent times that they appeared in the Sunbury region, still there is a possibility that their migratory lines were more to the west and north-east. Of course, this is mere conjecture, nevertheless the fact is clear that the Ibis has taken to wander beyond its former haunts. My people up to 1866 had 20 years' experience of the locality, during which time an Ibis was never seen nor heard of. John William and Edward Page had taken up Glencoe station in 1836, and as the first-named was a keen sportsman, had the bird been about he would have mentioned it. The brothers spoke of the shooting of a solitary White Spoonbill, but it was not till about 1859 that we saw this bird, which in later times is seen at the Melton swamps or haunting dams in Newham Shire. To return to the Ibis: it may be counted a frequent visitor to the Sunbury region, especially when the season is drougthy up north. In my opinion hard times are not solely responsible for its migrations towards Melbourne. In former days the aborigines would rob this bird's nests to such an extent that it was prevented from overlapping its food supply. Now that the blacks are extinct the birds have a chance to increase, hence it stands to reason that the line of extension must be in proportion to the higher rate of increase. Settlement in rather too many instances has caused, and is still causing, the extinction of certain birds, whereas in others it has tended unquestionably towards their increase. Here, for example, in this part of Drouin, all the adjacent areas were once a dense forest, with a tangled undergrowth of ferns and scrub. The axe, with the plough, got to work, the country was laid open, then the White-backed Magpie, the Rosella Parrakeet, the White-fronted Chat, and the cominon Ground-Lark appeared. There was no occasion to tell

* Mr. James Pinkerton first settled on Kororoit Creek, December, 1840.—EDS.

me this, because, knowing the localities they affected, I knew full well that the members of the feathered family named would not be here until the hand of man had changed the original environment. Now, with further reference to Ibis, we see a pack of them circling about, say from one to two hundred yards up, and judging by their leisurely wheelings they appear to be prospecting the ground. Those who make birds their study find that some exceed man in the two senses of sight and hearing, therefore it lies within the bounds of probability that a flock of Ibis in their wheelings have a set purpose. That purpose is to ascertain if insect life is on the surface of the ground in sufficient quantity to justify a halt. This at best is only an opinion based upon conjecture, and put forward with the hope that naturalists will follow on the track of my crude theoretical deductions. On that head, if we have laid up immense stores of knowledge with respect to fauna and avifauna, we have a great deal to learn yet, but in process of time all that pertains to the ways of birds will be made plain to those who study patiently.—ISAAC BATEY. Drouin, 12/11/06.

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THE BRISTLE-BIRD (*Sphenura broadbenti*).—In the *Geelong Naturalist* for March, 1906, Mr. C. F. Belcher gave an account of his observations of this species in the vicinity of Anglesea, to the south-west of Port Phillip. A visit was recently paid by two members of the Bird Observers' Club to the locality, and the present may be taken as supplementary to the above-mentioned article. *Sphenura* is indeed a remarkable genus. Its habits are akin to those other unique forms *Atrichia* and *Pycnoptilus*, which are ground dwellers in the densest coastal forests of Australia. Four species are known—*S. brachyptera*, in southern New South Wales; *S. broadbenti*, in Cape Otway Ranges, Victoria; *S. longirostris* and *S. litoralis*, in south-western Australia. All in the main exhibit the characters that show adaptation to environment—large, powerful legs and feet; small, feeble wings; long, bulky tail, to balance the weight of the body as the bird, rat-like, runs through the undergrowth; and a large, wide-open eye. It is the more remarkable, then, to find small colonies of *S. broadbenti* separating themselves from the main habitat and making their way into new and widely different country. From any prominence of the coast about Anglesea a splendid panorama can be obtained of the whole line of this movement. On one hand lie the bold mesozoic brows of the Otway Ranges, dipping precipitously to the sea and rising inland to an elevation of 1,900 feet. A rainfall of 40 inches and more clothes their whole mass with the thickest of forest, and in the attendant undergrowth *Sphenura broadbenti* has its true home. As in a flash the shore line changes about Point Castries into a broad and sweeping beach, with low, poorly

timbered country inland. Behind the sand dunes are thickets of tea-tree scrub matted with coastal sword grass, and into this the Bristle-Bird advanced.* But further along the vegetation alters; tea-tree clings to the foot of straggling cliffs of soft young sandstone, then undergrowth is less profuse, then the same tea-tree stands out alone in low tufts or brakes upon the rounded sides of the seaward slopes, until finally it is lost in the rolling dune sands of the Barwon mouth. This view extends over about 40 miles of coast line, and along this the Bristle-Bird has gone until it could proceed no further. It has not moved past Point Addis to the eastward. Of course, there are sundry breaks where no cover exists, but still the Bristle-Bird seems to have passed these with ease and taken up its abode wherever any inducement offered. It will be interesting to ascertain what difference exists between birds from the extreme ends of this line of march, for such movement as this, from thick forest undergrowth to sea-blown slopes, where tea-tree tufts provide a forest and an undergrowth in one, must result in some marked changes. Such difference in habitat, when long sustained, will result, in fact, in the making of a new species.

No less than eleven pairs of birds came under our observation in about two miles of scrub. In parts matted with sword grass, they were more often heard than seen, but in one or two more open places the birds, especially when nesting, could be attracted about one's feet by making a squeaking noise. One pair which had a large young one running about with them were quite pugnacious. The male, with spread wings and tail, approached to within 3 feet. The food in the stomach of one bird examined consisted of about three-parts of comminuted brown chafer beetles and one part cranberry fruits. A bird was noticed out on the beach sand in search of these beetles, which were very plentiful, but the cranberry bushes were only found in the higher land to the rear. The birds also eat earth grubs, for which they search after the manner of *Geocichla*, running along a few feet and then standing quite still, moving on again in a few seconds or digging out an insect with a probe or two of the bill. The birds rarely fly, but sometimes mount on to a prominent stick or bush to whistle. In the mornings it was noticed they were always very late with their song. Singing Honey-eaters (*Ptilotis sonora*) were very plentiful, and welcomed the daybreak in all directions with their delightful notes, but they were an hour ahead of the Bristle-Birds.

The nest of *Sphenura broadbenti* hereabouts is built of dead cutting-grass (*Lepidosperma*) leaves, a broad platform at the entrance sometimes being built of broader leaves of sword-grass carried into the structure small end first. The circumference of the nest is about 24 inches. The interior, which is built of

* See Plate X.

grass, measures about $3\frac{1}{2}$ inches across from side to side, and half an inch from the rim to the bottom. The entrance, which is roughly formed by the sides and back of the nest being extended upward and over, usually faces away from the prevalent wind, which comes from the south-west. The structure is placed about 3 feet from the ground, either in a mass of coastal sword-grass or in a dense tuft of tea-tree.

A remarkable circumstance about the eggs is that one is as a rule infertile. This is probably accounted for by the great size of the egg in comparison to the bird, with the deficiency of some important element of food. No less than five old nests contained addled eggs, and two others contained a broken shell. One new nest contained a beautiful pair of eggs recently broken and sucked by some bush miscreants, probably mice. The nest of this animal was discovered built inside another nest of the Bristle-Bird. Two other nests, in which the birds were sitting, contained each a pair of eggs, and while one egg was partly incubated the other proved infertile. As far as we could judge the female alone builds the nest and sits upon the eggs, while the male brings her food and also helps to feed the young. The call of the male bird is loud and penetrating, and is always answered by the mate, wherever she may be.—A. G. CAMPBELL. Melbourne, 15th November, 1906.

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ANNOTATIONS.—*Ptilotis fasciocularis* (Fasciated Honey-eater).—Mr. G. A. Young, Fairymead, Queensland, has kindly sent for my collection the nest and eggs of this interesting bird. His field note says that the species is plentiful in the mangroves bordering the Burnett River, where during the breeding season the Honey-eaters were continuously calling and singing. On the 13th August Mr. Young observed two nests in small, dense mangroves, each with a single egg. Returning in five days he found the nests deserted, the eggs gone, and one nest destroyed, but was rewarded by finding a third nest containing a pair of beautiful eggs. These birds appear to build at from between 4 and 6 feet from the ground, suspending their nests in the smaller mangroves.

Going out again on the 29th September Mr. Young found a fourth nest, containing two fresh eggs, suspended from a horizontal branch not more than 2 feet 6 inches above high tide mark. (Possibly the birds choose these positions to avoid such enemies as snakes or iguanas, which, no doubt, took two of the previous nests mentioned.) The specimens may be thus described :—

Nest.—Outwardly constructed of dry grass, matted with yellowish and whitish spiders' cocoons, and lined inside with finer grass, a few long hairs, and portions of thistle-down.

Dimensions over all, $3\frac{1}{2}$ inches by $2\frac{1}{4}$ inches in depth; egg cavity, $2\frac{1}{2}$ inches across by $1\frac{1}{2}$ inches deep.

Eggs.—Oval in shape, somewhat pointed at the smaller end; texture of shell, fine; surface, slightly glossy; colour, light buff or delicate fleshy tint, (1) with a cap or darker wash of the same tint on the larger end, (2) with light markings (spots) of reddish-brown and dull purple on the larger end. Dimensions in inches:—(1) .85 x .64; (2) .88 x .64.

It will be observed that these eggs, with the exception of not being so elongated, are similar to those of this species which I previously described as new from Mr. E. M. Cornwall's collection (*Emu*, iv., p. 137), to whom the species is well known. It may be mentioned that a bird for identification accompanied Mr. Young's specimens.

Chlamydodera maculata (Spotted Bower-Bird).—Mr. Thos. R. Macdougall, of Clermont, Queensland, has been good enough to send a handsome pair of eggs of this species, which, instead of possessing the usual linear markings, are more blotched and splashed, after the fashion of a type of the Satin Bower-Bird. Dimensions in inches:—(1), 1.55 x 1.06; (2), 1.5 x 1.04. The nest was constructed of sticks, and placed about 12 feet from the ground in a sandalwood.

Sphenura broadbenti (Rufous Bristle-Bird).—In my work ("Nests and Eggs," p. 219) for the "Distribution" I show Victoria and South Australia, with a query (?) against the latter State. There was no reason why this Bristle-Bird should not frequent the coastal scrub of south-eastern South Australia, which is similar to parts of Victoria, but there was no recorded instance of it having been found there. During a recent visit to Robe (Guichen Bay), South Australia, I found this remarkable bird, judging by its numerous characteristic calls, fairly plentiful. I got several glimpses of them darting through the short, thick undergrowth, or hopping over the sand between the bushes. The birds were very shy, and it was not until after six hours' patient waiting that I shot a bird, apparently a fine male, which I had pleasure in forwarding to the Adelaide Museum.

Various.—From an esteemed correspondent, Mr. E. M. Cornwall, Mackay, Queensland, I have received two "Nature Study" post-cards, interesting for their pictures as well as for their field notes. (1) Depicts a nest of a Podargus in mangroves, containing a pair of downy young. When Mr. Cornwall discovered the nest a day or two previously it contained *three* young. But when he appeared with his camera for "the record" one youngster had disappeared. Probably it had been "crowded out." (2) Is a pretty illustration of a Reef-Heron's nest, containing two eggs, ensconced among rock on an islet off Mackay. Black Oyster-catchers, Silver Gulls, Brown-winged Terns, and some Ternlets were also reported residents upon the islet, while in the

crevices of rock dozens of Swallows had built their nests. In a former communication Mr Cornwall states he has found the Nutmeg-Pigeon (*Myristicivora spilorrhoa*) in considerable numbers breeding on islands 20 miles below Mackay. This is indeed interesting news to find these fine Pigeons so far south.

Another correspondent, Mr. Isaac Batey, Drouin, Gippsland, informs me that Emu-Wrens are said to be nesting in the crops in his district, and that he suspects the Swamp-Hawk or Harrier of capturing blackfish, because he had seen their (fish) bones about the Hawk's nest. Blackfish could be easily taken in the shallow creeks.

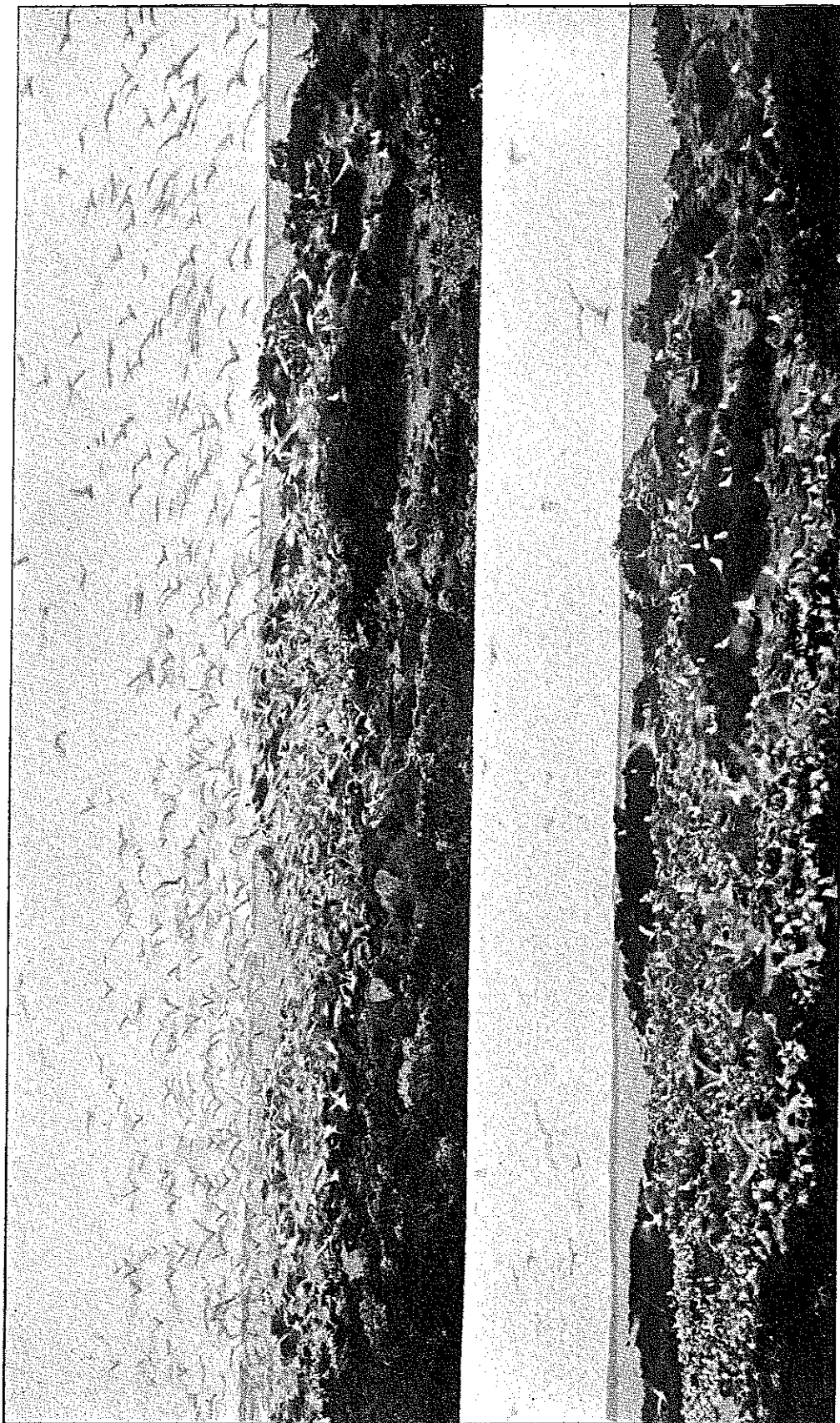
Sterna bergii (Crested Tern).—I was fortunate last month (26/11/06) in making a visit to a rookery of these beautiful sea birds. It was situated on a craggy limestone islet in Guichen Bay, South Australia. The birds were in hundreds upon fresh eggs in little, shallow hollows on the rock or sand among the short vegetation (*Helichrysum*, *Enchylæna*, *Lavatera*, &c.) on the summit of the islet. It was an impressive sight to a naturalist to witness the cloud of feathered forms rise (see Plate XI.) when an intruder approached too near. But, gaining confidence, the birds soon settled again. In the whole rookery I only observed two nests containing each a pair of eggs, the rest had the usual number—one—while the collection contained one albino egg. It was noticed that among the Crested Terns a single Sooty Tern (there might have been more unobserved) had taken up its quarters, apparently far south of its usual track.—A. J. CAMPBELL. Melbourne.

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THE WHITE-EYE.*—It seems strange that now, at the end of October, the White-eye should still appear in flocks when all other small birds have paired and are busy with domestic affairs; but it is a smart little bird, which loves society, and is loth to break up the merry, shrill-calling winter company. Mr. H. C. Thompson has found a number of nests in a thick piece of scrub in close proximity to each other, showing that *Zosterops* likes to have chums around even at breeding time, when most birds are very jealous of intrusion by their fellows. Moreover, it is inclined to be a late breeder, and in New Zealand, Tasmania, and Victoria the month of December is a favourable time to look for nests with eggs.

The nest is a good example of the "pensile" style of architecture—a kind which is rare in temperate climes, being specially adapted to puzzle those inhabitants of tropical countries, such as large tree-climbing snakes and monkeys, which have a *pen-*

* These notes are supplementary to those which appeared in the last quarterly issue of *The Emu*.



Crested Terns (*Sterna bergii*) Nesting.
Robe Rocks, South Australia.

FROM A PHOTO. BY A. J. CAMPBELL.

chant for eggs or young birds. Except the *Zosterops* and the Honey-eater *Melithreptus melanocephalus*, I do not know of any other species in our island whose nest can be called truly "pensile"—that is, sewed by the rim to supports, otherwise swinging perfectly clear, like a hammock. The Spinebill (*Acanthorhynchus*), however, occasionally adopts a somewhat similar form. In scrub near Launceston a home of this beautiful little Honey-eater was swung by the edge from tea-tree twigs, but there was also a small twig at back of nest which gave some support, and another horizontally beneath the structure. In the case of *Zosterops* building in scrub it prefers not the slightest support from beneath, and two nests found by me while among tea-tree at Table Cape may be cited:—(a.) Was swung by the rim from a very frail fork of *Melaleuca* or swamp tea-tree, the supports being barely $\frac{1}{16}$ inch thick, so that total weight of the nest, young, and parent must be extremely small; the opening, almost elliptical in form, measuring $2\frac{1}{2}$ inches x $1\frac{1}{2}$ inches inside, 2 inches deep, swelling out under the rim like an inflated ladle, and with rounded bottom. It was formed of very fine shreds of stringybark eucalypt, with somewhat thicker strips underneath, and the rim sewed to twigs by threads of bark-fibre and spider-web; three spider-cocoons were worked into the outside of nest, and the lining was horsehair. The contents were three eggs, of a delicate blue tint. (b.) Bound to two very slender *Melaleuca* twigs in same way as (a), the ends of the twigs swinging quite freely; nest rounder at top and more open, not so deep; $2\frac{1}{4}$ inches x 2 inches across top; inside, $1\frac{1}{2}$ inches; formed of coarse dry grass, lined with fine grass, a little green moss worked in, and many white spider-cocoons stuck on the outside. Bound to twigs with grass-blades and spider-web. It was a very loose structure, not nearly so neat-looking as the bark cradle; but both were constructed so lightly that they can be seen through at almost any part. Neither had the slightest sign of any support other than the very frail horizontal swinging twigs. Many of our birds, of course, suspend their habitations between upright stems, but this differs considerably from the truly "pensile" habit of swinging them by the rim only from slight horizontal twigs.

As to the propensities of the White-eye for good or evil, observers are as widely separated as the poles. At the New South Wales Fruit-Growers' Conference, in 1890, James Norton, M.L.C., condemned our sprightly little friend as "the greatest pest which gardeners in this colony have to contend with; he seems to take a mischievous delight in sampling every fruit, without regard to his own wants." A. G. Hamilton, Mt. Kembla, said, at the same conference:—"Although these little Honey-eaters are very destructive to grapes and stone-fruit, they do an immense amount of good by clearing the trees of aphides in winter and early spring. A flock of them will peep and pry

about a leafless tree and in a short time clear it of many obnoxious insects." In Victoria French marks it as one of the most destructive visitants to orchards and vineyards, while Robert Hall says—"It is the scourge of the aphid and other noxious insects when there is no fruit upon the tree," and quotes Hill, from *The Victorian Naturalist*, as writing that "the White-eye is the chief enemy of the case moth, destroying the young larvæ in great numbers; indeed, but for these useful little birds the case moths might easily become a serious insect pest." So, at a Fruit-Growers' Conference held at Dunedin, New Zealand, in 1901, one grower (very appropriately named "Grapes"), who attended and spoke, said the species was in his opinion one of the worst birds for the fruit garden, while Morrison considered that it was the best friend they had in his district (Mahurangi), although the easiest of all to poison: a great deal of spraying was done, and the insects thus poisoned were eaten by thousands.

An observer, writing in the "Transactions of the New Zealand Institute," makes the curious statement that when the White-eye grew numerous and bold, and took to invading the garden, and setting its nest in, rather than suspending it from, a bush or thicket, it laid in that case four eggs to the clutch, instead of the former three, as though the change of climate (for he believed the bird not to be indigenous) had caused it to lose its fear of marauders and also increased its fecundity. The same writer also mentions that the *Zosterops* is very easily tamed when young, and instances one which grew so familiar that it was allowed the freedom of the house, and used to hop about the table while the family was at dinner and help itself to whatever it fancied! Having heard, on one or two occasions, a sweet little strain of song, he thinks only a few individuals have this power of utterance, although it may be possessed by nearly all. My own opinion, based mainly on bush experiences at Table Cape, is that the power of song is possessed by all male White-eyes, but the strain is so inward, so subdued, that it is not heard at all unless one happens to be close to the bush in which the songster is concealed. A quite recent note on this occurrence (9th October, 1906) runs:—"A male of this species was heard to sing very sweetly in a tree-lupin near my cottage at West Devonport; the strain is very gentle and inward, and can be heard to advantage only when close to the bush, which near approach the little songster will allow, being so wrapped up in his love-ditty that he is unconscious of all else. This fact, among others, makes me discredit the assertion recently made by an English writer that bird-song is wholly induced by a spirit of emulation and self-assertion. It may well be conceded that the loud, bold whistle of the Shrike-Thrush or ringing laugh of the Butcher-Bird are actuated by the spirit of rivalry; but no one who has spent his leisure hours in watching and listening to the smaller

warblers of the bush can have the least doubt that those delicate strains, audible only a few feet from their source, are prompted by the spirit of affection, and by that alone. The poet is close to the truth when he sings of "the low love-language of the bird."—H. STUART DOVE. West Devonport, Tasmania.

From Magazines, &c.

THE REDTHROAT.—Mr. Donald Macdonald in his "Nature Notes" in *The Argus*, quotes from a correspondent ("Mallee Bird") an interesting field note regarding the Redthroat (*Pyrrholæmus brunnea*):—"It is shy and vigilant, its haunt being generally thick scrub or turpentine bush, so that it is difficult to find the nest. This is oval in shape, of great size compared with its tiny architect, wondrously compact in its blending of dry strips of bark and grass. It is warmly lined with feathers, and has an entrance near the top. Three eggs of a rather dark tint are the full complement. The nest is built entirely by the female, and, like most of the Wren family, it will, on the slightest suspicion of being watched, leave a nest half finished and begin a new one. It seldom associates with other small birds, and on a calm day its sweet, low note can be heard 50 or 60 yards away. The sound is something like that made in whistling through the teeth, yet in a high key. It might be called a warble."

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BOURKE PARRAKEET.—In May 1904 Mr. W. R. Fasey purchased in England a pair of Bourke Parrakeets (*Neophema bourkei*). He lost the hen shortly afterwards, but in March, 1905, procured six more birds, of which one hen lived. "The survivor," says Mr. Fasey in *The Avicultural Magazine* for July, "is the parent of the two strong and healthy birds now flying about as well as any birds I have. There is practically nothing to record. They appear to be easy to breed, and sit very steadily, the hen never leaving the nest even when I have tried to disturb her. They are quiet and peaceable birds, and not in the least interesting, excepting in the evening before going to roost, when they fly about very wildly. The young are marked exactly as the adult pair, the only difference I can discover being their rather smaller size. The old pair are now nesting again. Neither these birds nor any of the Grass-Parrakeets (excepting the Budgerigars) can stand much cold, and I am of opinion they cannot be kept alive for any lengthy period without growing grass to eat."