Stray Feathers.

The Rufous Bristle-Bird (Sphenura broadbenti).—With regard to this bird in the Otways, what is the extent of its range? From personal observations I find this bird at Anglesea, extending round the coast past Airey's Inlet, from there on to Lorne, and as far as the Jamieson River, to miles from Lorne. At the back of Mount Defiance, near the Cumberland River, I have seen and heard numbers of these birds. Again, along the Lorne coach road these birds are plentiful, extending over the top of the range to within a few miles of Dean's Marsh. In nearly every gully along the coast-line mentioned several pairs can be found, and I fancy they are increasing in numbers.—J. K. Russell. Barunah Plains, Hesse.

Habits of Cockatoos.—Lately, when staying at Tallarook, I noticed that a flock of about 200 Sulphur-crested Cockatoos and Corellas that lived in the neighbourhood always seemed to have their regular beat, which they go over every day, and roost in the same place at night. They also visit other places during the day in search of food. My father, W. H. D. Le Souëf, noticed the same thing with Crows in Queensland, and also that the same individual bird acted as leader every time; as it had two or three white feathers on one wing it was easily identified. It is probable that the Cockatoos and other birds, when flying in companies, have their recognized leader. I know it occurs in mobs of cattle, sheep, &c., and the leader may be either a male or female.—Cecil J. Le Souëf. Melbourne.

Gang-Gang Cockatoos.—During a few weeks' stay at Lorne I was surprised at the number of Gang-Gang Cockatoos (Callocephalon galeatum) close to the township. Every morning numbers of these birds could be heard, and also seen feeding, among the gum-trees along the foreshore. I have been at Lorne for every summer for many years past, but never remember these birds being so plentiful. My brother also mentions seeing a flock along the Barwon River, at Geelong. Another note I have from Whoorel, near Birregurra, saying that the birds were very numerous, feeding among the sugar-gum plantations. The birds had never been in that locality before. While at Inverleigh some days ago I noticed four birds flying over the cricket ground, and I also saw a single bird here on the plains. Has the food supply in the Otway Ranges anything to do with the birds appearing in these unusual places?—J. K. RUSSELL, R.A.O.U. Hesse.

Osprey Aerie, Cape Mentelle, W.A.—I was interested in this "historic nest" (vide Emu, ante, p. 126) and Mr. Hurst's picture on the opposite page (pl. xv.), and, being further inland at the time, I was not with the R.A.O.U. party. Thirty-one years

previously I photographed the same aerie (see "Nests and Eggs," p. 42). The fine figure at the nest represents Mr. A. J. Bussell, brother of the "Australian Grace Darling"—Miss Grace Bussell. Eleven years subsequently Mr. C. P. Conigrave visited the nest (see *Emu*, i., pl. ix.) It is satisfactory to learn that these noble birds are still in possession of that ancient isolated rock, which has been made a permanent reserve by the Lands Department. It is probably the smallest reserve on record, and was made on the representations of Mr. A. W. Milligan and the late Mr. Woodward (see *Emu*, ii., p. 70).—A. J. CAMPBELL, C.M.B.O.U. Box Hill (Vic.)

Terns at Bunbury.—It was my privilege, during the Union's W.A. trip, to visit the port of Bunbury, and among some of the interesting bird-notes I made there was one on a company of Crested Terns. A very cold and strong wind was blowing in from the sea, and these birds had discovered that the old piles of a one-time bath-house inside the breakwater afforded them a veritable haven of rest. Protected from the wind by the higher land on the sea side, and from human disturbers by the dilapidated state of the structure, these birds had collected in great numbers to take it easy, and thus demonstrates how typically Australian they were. I counted no less than 360 in the lot, and not one was within pecking distance of its neighbour, and every one faced the same direction, head to wind. A noticeable feature was the diversity of marking of the different birds. The crests varied from black to grey, and other dark markings were equally variable; the greys of the backs and wings also ran through many grades, no doubt due to variable ages. -G. H. BARKER, R.A.O.U. Brisbane.

Cuckoos' Eggs.—Does the Cuckoo lay its egg in a nest only before the foster-parents commence laying? This question has repeatedly occurred to me when I have noted that the Cuckoo egg is further advanced in incubation than the eggs of the foster-parents. In every instance I found that in combination clutches the egg of the Cuckoo was first laid, or the incubation of the Cuckoo's egg was of shorter duration than those of the foster-parents. Even a clutch of one Fantail Cuckoo and one of Blue Wren, taken on Kangaroo Island, bears this out, as, though the Blue Wren's egg was quite fresh, the Cuckoo's was slightly incubated. Mr. J. W. Mellor has records of Bronze-Cuckoo (Narrow-bill) hatching out two days before Blue Wrens' eggs. Has a nest been found containing young of foster-parents and egg of Cuckoo? Two or even more eggs of Cuckoos have been recorded in one nest, but, I understand, only one Cuckoo's egg was with foster-parents' eggs, the others being embedded in lining of nest. Has an authentic record been made of a Cuckoo's egg being added to eggs of foster-parents?—J. Neil M'Gilp, R.A.O.U. "Origma," King's Park, S.A.

Notes from Prairie, N.Q. - The only observation here is Peewits coming to the garden taps with grasshoppers and grubs and dipping them in the water and beating them soft. Repeatedly they will dip them until soft and apparently broken, and then fly away to the nest across the dry creek. The object is to make them easily swallowable by the young birds. Storm-Birds, or-Channelbill Cuckoos, have been numerous around the homestead; so also were the Pallid Cuckoos a few weeks ago. I am disposed to the opinion that they make their habitat adjacent to bush dwellings. Some time ago I found a very fine dead specimen of the Jabiru lying dried near a big stock tank at a windmill in dry country. The brilliant bronze-blue plumage of the head was retained in the dried skin. These birds must at times fly high, otherwise this one could not have seen the tank. I first thought some miscreants had shot the bird, but this was not so. It had simply alighted on the water and could not get out, so was drowned and thrown out. Frequently this happens to smaller birds, and I know one place where it was a morning job to clear dead flying foxes from a tank, until sticks were put in so that the wretched bats could get out.—J. R. Chisholm. The Plains, Prairie (N.Q.)

Northern Range of Geobasileus reguloides.—Mr. H. G. Barnard has been good enough to send for the "H. L. White Collection" an example of this species from the Dawson River district, Queensland. In my "Nests and Eggs," i., p. 240, I quote Mr. Charles Barnard as having observed the species nesting in the same district. Mathews, in his "Reference-list" (1912), does not indicate Queensland for the species, but more recently (Bull. B.O.C., xl., p. 106) he describes, under the name G. r. nesa, a variety from South Queensland, taken at a R.A.O.U. camp-out, and states that it "differs from G. r. squamata (De Vis) in being paler generally, the under surface only tinged with yellow, and the rump only being pale buff." Why does Mr. Mathews not compare his supposed new bird with its true type instead of with a more northern sub-species of which there is a doubt? The Dawson skin (3), compared with typical reguloides, has more yellowish upper tail coverts, and is more yellowish than buff on the under surface, notably breast and abdomen. Iris pale yellow; bill and feet dark brown. If this description agrees with Mr. Mathews's skin, his new name, nesa, may be acceptable for the variety. Those members interested in sub-species should read "The Last Phase of Sub-Species," by L. M. Loomis, of San Francisco, in *The Ibis*, October, 1920, pp. 964-966.—A. J. CAMPBELL.

Australian Bustard (Eupodotis australis).—During the last few years I have had splendid opportunities of studying the habits of the Australian Bustard, probably better known as the Wild Turkey. Seeing several notes in The Emu lately on this fine

bird, I feel sure it will interest many readers to learn that the bird still frequents, as well as breeds in, southern Victoria. The birds usually arrive here about June, leaving again towards the end of the year, although a few pairs seem to stay on right through the year. The largest number I have seen together was in 1919, when I came across a mob of sixteen; but as a rule they seem to stay in pairs. I have had the good fortune to notice several nests (if such they may be called), all containing one egg only. One egg I found on a large flat stone; another between two large stones on the top of a stony rise; and two others alongside small tussocks. The nesting months are from August to December. During the season 1920, although I did not notice any eggs, I know of four different young birds having been seen. The young Bustard has some peculiar calls, and on being surprised it utters two quick barks, which sound like the bark of a young dog. Another call is a long-drawn-out, mournful whistle, which can be heard for a considerable distance. A bird which I have mounted (shot many years ago) stands just over three feet high. Unfortunately, there is no record of weight or measurements.-J. K. RUSSELL, R.A.O.U. Barunah Plains, Hesse, Vic.

The White Honey-Eater.—One of the most interesting finds of the R.A.O.U. in Western Australia was the White or Alfred Honey-eater (Lacustroica whitei), also called the Inconspicuous Honey-eater, owing to its small size and dull mousey-grey colour. Resembling an Acanthiza, it is little wonder that the bird has rarely been procured. The first specimen—a male—was obtained in 1909 by Mr. F. Lawson Whitlock at Lake Way, in the East Murchison district. Mr. North described the bird as a new genus and species—Lacustroica whitei, after Mr. H. L. White's son Alfred. A full description appeared in the Victorian Naturalist, vol. xxvi., p. 138, and a coloured plate of the bird appeared in The Emu, vol. ix.; but this plate is somewhat misleading, as there is a certain amount of yellowish tinge about the upper surface of the birds. This is not in the live bird, there being no "adornment" whatever in its feathers. The species was not included in the list in the last issue of The Emu owing to lack of identification until after The Emu had gone to press. The bird was shot in low bushes in very dry country, and its habits and actions resemble those of an Acanthiza. The taking of the bird near Ajana extends the range of the bird a considerable distance westward on the Murchison, and nearer to the coast-line.—John W. MELLOR. Locksley (S.A.), 27/2/21.

The Gracemere Bird Reserve.—At the invitation of Mr. R. S. Archer, who has been patron of the Central Queensland Native Birds' Protection Association since its inception, a party of members of the association recently journeyed to Mr. Archer's homestead. After enjoying the hospitality of Mr. Archer and

Mrs. Archer, the members of the party took advantage of the visit to inspect the boundaries of what is known as Archer's Reserve, which, including the mere, has an area of about 1,000 acres, and is one of the first areas to be proclaimed as a sanctuary for bird-life in Queensland. Only those closely associated with the movement can realize what an immense advantage has been the fine sheet of water, known as the "Mere," of long-established permanence even in dry seasons, and the surrounding country also contained in the reserve, in preserving and perpetuating the water-birds of this country, apart from the historic aspect of the locality, where there was ended, in 1853, the overland trip of Messrs. Charles and William Archer, a notable circumstance in the settlement of Central Queensland, and where there still stands, in an excellent state of preservation, the home of the Archers. A place more charmingly situated it would be difficult to imagine. Thousands upon thousands of all kinds of birds, large and small, and of great variety, frequent this delightful neighbourhood in complete safety from the gunmen, some of whom have at times been very strongly tempted to take a shot; but, as a rule, the reserve is respected, and the birds themselves know it well.

A Hawk Irruption .- Every year, in January or February, we have a wave of Hawks, which, I think, are mostly Collared Sparrow-Hawks. I fancy they are young birds migrating from inland, somewhere where people and guns are not, for they simply rush for and take little chickens, and always try to get the Finches in the aviary on my verandah. Lately one, trying to catch Finches on a lemon-tree, came within a few feet of me. We did not shoot them, but in letters from my neighbours one mentioned shooting nine and others mention a plague of Hawks after the chickens and little Turkeys, that simply had to be shot to stop their carnage. Probably from now on only odd ones will be observed. Talking of birds travelling, last killing morning about 100 Crows stopped to eat the offal, and made a dreadful noise Next morning they were all gone, the only ones remaining being the few old residents who are always about, and who take eggs when they can find them. They show marvellous instinct in disappearing when a man goes out with a gun. Really, I am sure we do not average more than two killed by shooting each year. The Butcher-Birds (Crow-Shrikes) are very numerous and tame here, and come to be fed. One day I killed a small snake, and a Butcher-Bird came and dragged it all over the place, so I cut it into little sections, and he carried it off to his family. They sing gloriously nearly all the year round here. —(MRS.) A. BLACK. Pajingo, Charters Towers (Q.)

Four Eggs in a Clutch of the Desert Chat.—A nest with a clutch of four eggs of the Desert Chat (Ashbyia lovensis) was discovered on 14/12/20; locality, Muligan paddock, about 20 miles north

of Moolawatana station. Moolawatana station is approximately 500 miles north from Adelaide and 100 miles west from the New South Wales border. This locality is not unlike that where the type clutch was taken, being not much more than 20 miles to the westward. The country in the vicinity of the nest was in wonderfully good heart, green grass and herbage being plentiful, amongst which a plentiful supply of insect life was to be found. The nest was made of dry twigs of salt-bush and rootlets, lined with rootlets, measuring over all, in diameter, five inches, the egg cavity being 3 inches by 13 inches in depth. The nest was placed in a depression in the ground, partly under and on east side of a green annual bladder salt-bush, and the eastern side of rim of nest was extended to form a platform projecting out from the nest circle fully ½ inch; this projection was not measured when over-all diameter was obtained. This platform was fully I inch above ground surface, and also level with the rim of nest. When the nest was carefully lifted from depression a small quantity of dried flower-pods were noted in bottom of hole, which was 3½ inches in depth by 4½ inches in diameter. The female bird was flushed from the nest by the motor-car passing within 5 feet of nest. The bird pretended injury to draw attention from the nest. The eggs were about one-third incubated, and of even incubation. One of the set of eggs was much lighter in ground colour than the rest of the clutch. This, I believe, is the first record of this bird laying four in a setting. In good seasons three eggs are usually found, but in normal years two eggs are as often found as three. In bad seasons one rarely notes more than two to the clutch.--J. NEIL M'GILP, R.A.O.U. "Origma," King's Park, clutch.---J. NEIL M'GILP, R.A.O.U. S.A., 24/2/21.

The "Mutton-Bird" Pilgrimage. — Respecting the annual southward pilgrimage of the "Mutton-Bird" (Short-tailed Petrel), I have, on occasion, when schnapper fishing from rocks on the South Coast between Bermagui and Tathra, watched these birds passing all day in an apparently endless stream, about a mile out from the shore. The stream, however, is at times intersected by gaps, which, I think, are eventually filled up. Then, as Mr. Basset Hull says, the dead bodies of derelict Mutton-Birds are found strewn along the shore. These, however, are not always in low bodily condition, and, though most bear no external marks of injury, some are gashed and torn-probably by barracouta, sharks, or other carnivorous fishes. These birds may have died, not from starvation, but from the injuries thus inflicted. I have at times used flesh from the breasts of these derelicts as bait for flathead and mullet, and there was a fair quantity of it on the bones. It may be that some of the pilgrims, feeling the necessity for rest and refreshment, alight for a time on the water, and may then fall victims to ravenous fishes. The injuries which the bodies of some bear need not necessarily have been done after





Nest of the Scrub-Robin (Drymodes brunneopygius) Upper—Nest enlarged.

PHOTOS, BY H. A. PURNELL, R.A.O.U., QUELONG.

the bird collapsed from starvation. Similarly, bodies of the Little Penguin (Eudyptula minor) are often cast ashore in the same quarter, apparently uninjured. Some birds, in fact, are found alive, but in a stupefied state. I have also (once only) found the bodies of Gannets (Sula serrator) and of Albatrosses. The latter were almost buried in the sand, and decaying, but the wide-sweeping pinions still held their feathers. Other avian derelicts included a pair of Blue Mountain Lorikeets, with their bright plumage all bedraggled through tossing in the waves. Perhaps these birds, which feed much in honeysuckles on the coast, were surprised by a sudden storm, in which they perished. Most pathetic, however, was the discovery of a pair of Stints, which lay dead side by side on a coastal bluff, huddled together as though for warmth. — H. V. Edwards, R.A.O.U. Bega (N.S.W.)

Economic Section.

By A. S. Le Souëf, Taronga Park, Sydney.

Native Birds Eating the Cattle Tick.—In countries where ticks are endemic certain birds have specialized in feeding on them, notably the Ox-Bird (Textor), Cattle-pecker (Buphaga), and the Cattle Heron (Bubulcus). These birds play an important part in keeping the wild animals in Africa and India free from ticks.

Although there are native ticks in Australia, they are chiefly found on nocturnal animals and reptiles, and no birds could feed upon them, and so it is most interesting to note that since the introduction of the cattle tick into Australia two species, in the *Grallina* (Magpie-Lark) and the Ibis, have found them out and developed the habit of feeding upon them.

The Grallina in North-West Australia is now known as "the stock inspector," for dozens of them will congregate round the watering-places of the stock, and as the cattle come in to drink they will carefully examine each beast for ticks—an office which the cattle seem to appreciate. The Ibises, on the other hand, congregate on the camping-places of the cattle, and pick up any ticks that have fallen off the animals, and it is stated that the ticks form the principal food of these birds in the district.

Camera Craft Notes.

The Scrub-Robin (Drymodes brunneopygius). — The accompanying photograph is one of a series that I took on a trip to Boinka with Messrs. J. A. Ross, F. E. Howe, R. Archer, and J. J. Scarce. During our stay in this Mallee district we located many pairs of birds, and in the finding of the nests (which all contained a single egg, which is the full clutch) we noticed that each pair of birds seemed to have an allotted area to themselves. We

also observed that in nearly all of the areas an old nest or two could be detected on the ground. The old nest was considerably flattened down, but the outline could be plainly seen, and I have often regretted that I did not photograph one of these old vacated nests, for they were interesting finds at the time. Nearly all the nests were found on the ground amongst the short mallee shoots and clumps of acacia. In photographing the nests the birds became very tame, and in one instance, whilst standing over the nest with my stereo camera, the bird allowed me to get my hand to within a few inches of its body.—Herbert A. Purnell, R.A.O.U. Geelong (Vic.)

The Yellow-breasted Shrike-Robin (Eopsaltria australis).—On Monday, 19th January, 1920, whilst roaming through the dense scrubs in the quiet gullies near Sherbrooke, in the Dandenong Ranges, we noticed a young Yellow-breasted Shrike-Robin (Eopsaltria australis) which had evidently just left its nest to



Young of Yellow-breasted Shrike-Robin on side of sapling.

Photo, by d. f. f. thomson, $\Re(A,O,U)$

sally forth into the great world outside its home. The peculiar brownish-spotted plumage of the immature young offers a singular contrast to the beautiful yellow breast of the adult. This youngster was, of course, fully fledged, and was just able to fly sufficiently well to provide, between attempts to photograph

him, exciting chases amongst the thick scrub. Our efforts, however, were eventually rewarded, for, despite the parents' warning cries, the young bird posed for several pictures. One of these is of interest, as it shows the youngster in the "sidelong clinging" attitude so characteristic of this species.—D. F. F. Thomson, R.A.O.U. Canterbury.

State Secretaries' Reports.

NEW SOUTH WALES.

THE wonderful season that this State has been experiencing has had a marked effect on the bird-life, and, generally speaking, birds are recovering fast from the effects of the previous dry period. Reports from the country show that birds, especially Waders, are numerous. Ducks are reported to be scarce in many of their regular haunts, but this indicates that they are scattered far and wide on many small lagoons and flooded areas that are not usually available for them. The Royal Agricultural Society of New South Wales has instituted a series of lectures in the show-grounds on popular subjects connected with agriculture, and your local secretary has been asked to take the subject, "How to Get the Best Use from Our Birds This Year." Owing to numerous complaints of destruction of fish, young Ducks, Ibis, &c., by the Pelican, this bird has been removed from the protected list for the breeding season in the western part of New South Wales. This will enable land-holders who find them troublesome to keep them in check when the waters are low and young birds are about. Parrots have been very numerous this season in some of the fruit districts, and have also been reported as destroying maize crops, and certain species have been taken off the protected list, as the farmers had to shoot the birds in order to protect their crops. From reports to hand it seems that the Barraband Parrot is again becoming numerous in western New South Wales. This species has been scarce for many years past, many being probably destroyed by rabbit poison, and that it is now increasing is very likely due to the fact that most of the large stations in the Riverina dig out rabbits instead of using poison.

A. S. LE Souëf.

QUEENSLAND.

FROM a business point of view (as distinct from ornithology itself) the most notable happening since last report—possibly the most important development of the Union in this State—was a meeting of Queensland members, held on 11th February, in connection with the formation of a State branch of the R.A.O.U. Mr. H. A. Longman (member of the Council) was voted to the chair.

Several matters of local importance were first dealt with. These