

No.	Name.	Date.	Locality.	Field Notes (Hill's).*
34	<i>Malurus assimilis</i> , ♂	4/7/11	179 miles N. of N.T. Survey Camp C. IV.	
—	" " ♀	16/2/12	Sandstone ranges 10 miles S. of Borrooloola.	
29	<i>Malurus</i> , ? sp. (im- mature), ♂	12/6/11	N.T. Survey Camp C. III., Lander Creek.	
26	<i>Malurus</i> , ? sp. (im- mature), ♂	4/6/11	N.T. Survey Camp C. 2.	
—	<i>Malurus coronatus</i>	—	(No label; out of spirits.—J. A. K.)	
19	<i>Emblema picta</i> , ♂	24/5/11	Near Haast's Bluff, Macdonnell Ranges.	
17	" " ♂	23/5/11	" "	
13	" " ♀	21/5/11	Haast's Bluff.	
18	" " ♀	24/5/11	" "	

* Where details are not supplied in this column see body of Mr. Hill's article.

Stray Feathers.

White-shouldered Caterpillar-eater (*Lalage tricolor*).—About the middle of last November I received from Mr. Reg. Slater, of Kelso, West Tamar, a bird which he had shot, and which was new to him, I quickly identified it as a male of the above species, and of particular interest because it was but the second bird to my knowledge taken in the island. Although prior to it being obtained there had not been any heavy gales, without a doubt it had been blown across from the mainland.—FRANK M. LITTLER. Launceston, 11/2/13.

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Ewing Tit (*Acanthiza ewingi*).—I was much interested in reading the account of the birds observed during the recent trip of the Union to Cape Barren and Flinders Islands. A statement with reference to Ewing's Tit somewhat surprised me. I refer to the sentence—"Like Tasmania, Flinders Island abounds with this Tit." I have a very fair knowledge of the ornithology of Tasmania, and must refute the statement that *A. ewingi* "abounds." If the specific name *ewingi* be replaced by *diemenensis*, then the latter bird certainly does "abound." I should much like to know whether a slip was made in the report, as far as Flinders Island is concerned, or whether the *Acanthiza* said to "abound" was definitely identified as *A. ewingi*.—FRANK M. LITTLER. Launceston, 11/2/13.

Gulls Nesting in Captivity.—In December, 1909, when returning from Port Lincoln, I was presented with a pair of Seagulls (white, with slate-coloured backs and black-tipped feathers in the wings). These birds were only "squeakers" then, and had to be fed on raw meat daily, but gradually began to forage for grubs, &c., in my garden at Kensington Park, and now do not require to be fed at all. As they grew older they made nests in different parts of the garden, and sat at times like broody fowls for several weeks, but did not lay until the 17th July, 1912, when one egg was laid; a second egg was laid two days later. The first young one appeared on 7th August, but the second egg was hatched at least three days later. These two young birds are now fully fledged, but have a large number of brown feathers on the back. The old pair again started nesting in November, the first egg appearing on the 12th, the second four days later. Two young birds appeared on the 8th December. The old birds, taking turn and turn about, sat very closely all the time. These young ones are now running about, but are shy, and hide in the grass when anybody approaches. The nest was made of grass and feathers against a wire-netted fowl-run, backed up by some broken garden tiles. The greater part of my land is used for gardening purposes, and I have never found the birds do any damage to the young plants or be a nuisance. They will now eat almost anything, but object to hard-shelled snails, although they eat them at times if the shells are broken. I find these birds make good "watch-dogs," as they always call out when any stranger goes into the garden.—HARRY F. KING. Adelaide, 25/12/12.

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Silver Gull (*Larus novæ-hollandiæ*).—Mr. G. M. Mathews in his work, "The Birds of Australia," is setting ornithological field workers many problems, which it is hoped will be faced by R.A.O.U. workers. In part 4, vol. ii., our familiar Silver Gull is placed in the genus *Bruchigavia* of Bonaparte (1857). The genus *Larus* of Stephens dates from 1826, so that I cannot understand why Mr. Mathews has, to my mind wilfully and unreasonably, abandoned his fetish of priority. He divides the old and well-known species into five—a type and four sub-species. Those birds found round the coasts of New South Wales and Victoria are taken as the type under the cognomen of *Bruchigavia novæ-hollandiæ novæ-hollandiæ*; those round the north coast, and as far south on the eastern side as the Capricorn group as *B. n. gouldi*, while those found in Bass Strait and about Tasmania are designated *B. n. gunni*; the South Australian birds are called *B. n. ethalæ*; and lastly those found about the south-west and the north-west are set down as *B. n. longirostris*. To a great extent the variation in the markings on the four first primaries has been taken as the grounds for separating the birds.

Full size black and white drawings of the primaries of the four birds first mentioned are given by Mr. Mathews, and these show a marked difference in the "mirrors." I give the foregoing

somewhat lengthy explanation for fear there may be some interested member who has not access to Mr. Mathews' work. The two species I am most interested in are *B. n. novæ-hollandiæ* and *B. n. gunni*. This note is intended to be but a brief record of preliminary observations that I have made with a view to investigating the validity or otherwise of the two birds now ranked as a species and a sub-species respectively to remain as such. I have been able to examine a small series of skins of birds taken off the northern coast of Tasmania, and also actual live birds captured when young on different islands in Bass Strait. According to the illustrations, *B. n. gunni* shows much more white than *B. n. novæ-hollandiæ*, the 3rd and 4th primaries being almost wholly white. Broadly speaking, my preliminary survey shows that some birds closely resemble *gunni*, while others approximate to *novæ-hollandiæ*, while again there are individuals that are partially one and partially the other. I refrain, for obvious reasons, from detailing the result of my observations at this stage. I hope at a later date to have something definite to communicate on the, to me, interesting question. Mr. Mathews suggests that perhaps the Tasmanian skins he handled were from the Great Lake. I have not yet examined skins from that locality, so cannot comment on them.—FRANK M. LITTLER. Launceston, 3/13/13.

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Cuckoo Notes.—During the last four months of 1912 Cuckoos were very numerous throughout Victoria, and from all quarters came the monotonous and melancholy calls of the different species. North of Lake Tyrrell, in the Mallee country, in September, Messrs. F. E. Howe, T. H. Tregellas, and I noticed the Pallid (*Cuculus pallidus*), Fan-tailed (*Cacomantis flabelliformis*), Bronze (*Chalcococcyx plagosus*), Narrow-billed Bronze (*C. basalis*), and Black-eared (*Mesocallius palliolatus*) Cuckoos, and saw an egg of the Fan-tailed species in a nest of the Chestnut-rumped Ground-Wren (*Hylacola pyrrhopygia*), and eggs of the Narrow-billed Bronze-Cuckoo in nests of the Chestnut-rumped Ground-Wren and Tawny-crowned Honey-eater (*Glycyphila fulvifrons*). At Ringwood most of my excursions were in company with Messrs. Howe and A. C. Stone. We observed that of the above-mentioned species of Cuckoos only the Black-eared was missing, but the Square-tailed (*C. variolosus*) was there in addition. Throughout October and November it was an unusual thing to find a nest of certain species of birds which did not contain a Cuckoo's egg. For the first time during an experience extending over several years, I found eggs of the Square-tailed Cuckoo. Almost every nest of the Scarlet-breasted Robin (*Petræca leggii*) contained an egg of the Square-tailed Cuckoo or of the Narrow-billed Bronze-Cuckoo. Five cases of the former were recorded; and the same number of the latter. In the cases of the Square-tailed Cuckoo, one nest held an egg of the Robin, another two eggs of the Robin, a third three eggs of the Robin, and a fourth two young Robins;

while in the last case the egg of the Cuckoo had been placed in the nest before building was complete, and had been covered with the lining. Two eggs were found in a nest of the Little Field-Lark (*Chthonicola sagittata*), one belonging to the Lark and the other to a Narrow-billed Bronze-Cuckoo, and the last-mentioned species also deposited eggs in nests of the Blue Wren (*Malurus cyaneus*), three cases being noticed. One Sunday we watched a Brown Flycatcher (*Micræca fascians*) building its nest. A week later the nest contained an egg of the Pallid Cuckoo, which had been broken, probably by the Flycatchers. The Bronze-Cuckoos favoured the Tits—*Acanthiza chrysorrhoa*, *A. lineata*, and *A. pusilla*. On three separate occasions we found two eggs of the Bronze-Cuckoo in a nest of the Yellow-rumped Tit, and in one instance we discovered a nest of the Brown Tit containing three eggs—one of the Tit, one of the Fan-tailed Cuckoo, and one of the Bronze-Cuckoo. That we are able to record four cases in each of which two Cuckoos' eggs were in the same nest is, I think, abundant evidence that the Cuckoos, lately, have been far more numerous than usual.—J. A. Ross. Melbourne.

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Megapode Mounds and Pits.—During several years the intense industry of the Scrub-Fowl (*Megapodius tumulus*) has afforded continual entertainment. Of course, this sturdy dweller of the jungle scratches that he may live, and makes mounds of leaves and decaying wood and loam because the genius of the species dictates a method of incubation "ages ahead of the fashion" of less brainy birds. Given the inevitable duty of scratching for its food, and the brilliant idea of utilizing chemical heat rather than the heat of its own body for the hatching of its eggs, and the toil such a scheme involves, still there remains to the bird the credit of remarkable achievements, which from the human standpoint have little to do with either the obtaining of food or obedience to the second law of nature.

The bird has developed such pedal capability and such mental artfulness that the construction of mounds appears to be a mere pastime. It may, therefore, indulge in merely fanciful operations, to play with the materials it uses for the most serious of its functions, and chuckle contentedly while it plays.

As is well known, the Scrub-Fowl seldom leaves mother earth, and then only on short, bustling, laboured flights. Its diet, generally, is not of things of the air and light, but of the moist earth of the dim-lit jungle. Grubs, beetles, worms, the pupæ of ants, young snakes, centipedes, millepedes, scorpions, and other creatures for which the average man has no particular liking, are eagerly devoured. The search for such food involves the shifting of much of the rubbish of the jungle floor, so that you may come across wide spaces over which the roots of trees have been laid bare and the stones and decaying wood tossed aside.

Almost without exception the incubating mounds are located in

shady and obscure places, and are used by several birds in community. Occasionally single birds will in an outburst of superfluous energy, construct the foundations of a mound in quite an unlikely locality. Several such ill-considered enterprises have been undertaken in this locality. One which was noticed a few days ago is singular. The bird has selected a very old mound, originally in the jungle, but which has been exposed on the edge of a clearing for the last fifteen years. The apex of this mound, which time and ballistic rains have converted into solid loam, has been excavated, and rubbish from the jungle is being daily heaped up, the tracks along which the stuff is kicked being as well defined as a garden path.

One of the enemies of the Scrub-Fowl is the Grey Goshawk, but since (in the interests of domestic poultry) that bold and rapacious bird is driven off as soon as the Spangled Drongo fussily proclaims its hateful presence, the Scrub-Fowls of the jungle have ventured on to the sandy flat, where there is a fair amount of shade, and being reluctant to fly back to the jungle when in the egg-laying mood, meet Nature half-way. Digging is easy in the sand, and in the spots favoured by the birds are many shallow pits, which they have excavated in search of food. The addition of a few leaves converts the pit into an ideal nesting-place, in which the egg is laid. The blacks know the nest of the solitary Scrub-Fowl by the name of "boon-nun-gun." Often the "boon-nun-gun" is merely a pit 6 or 8 inches deep, and the egg, having been covered with leaves, is left to Providence's care. The blacks readily detect the "boon-nun-gun," and, exercising the prerogative of Providence, appropriate the big pink egg. On occasions the "boon-nun-gun" is really the beginning of a mound, and the bird may give a demonstration sometimes of the way in which the heaps of earth, sand, and vegetable matter accumulated. The material is scratched into three or four converging ramps, which are gradually worked to a common centre. Usually the structure of the ramps is anything but true, while I have seen them so regular in spacing and height that they would have done credit to a man with a rake. Though much apparent labour is required in the building of these ramps in the forest country, the superstructure is never, in my experience, completed. The birds sooner or later submit to the preconceptions of the species for the dimness and seclusion of the jungle, and repair thither for the formal fulfilment of Nature's decree. There can be little doubt that occasionally the egg deposited in a "boon-nun-gun" is hatched, in which event the chick would have just as good a start in life as if its cradle had been in the deep shade.

The laying of superfluous eggs is not strictly confined to the industrious and thoughtful Scrub-Fowl. Darwin mentions the single and scattered eggs of Ostriches* at Bahía Blanca, South America, which, he says, are never hatched out, and which are

* ? Rheas.—EDS.

called by the Spaniards "huachos." The Ostrich is considered by human beings to be a silly bird, while the Scrub-Fowl is to be honoured because of uncommon sagacity. Probably the species discovered artificial incubation, and even in idle moments may spend time in the making of an ineffectual mound. The Ostrich, with rare thriftlessness, abandons needless eggs with simpering indifference to the cheap sneers of mankind.

There is one mound of the more intelligent bird which was in use when "Tom" (an aborigine) was a boy, and he passed away at the age of about 40. It is still in splendid working order, though it lies within arm's reach from high water mark. It is on the very verge of the jungle, which at the spot overhangs the tide. Other mounds have been made, and have been used for years, and have passed into forgetfulness; but that from which "Tom's" grandfather got eggs when he was a boy—that is to say, if the legends of the camp are to be credited—still produces young Scrub-Fowls by the score every year. The "boon-nun-guns" are but temporary phases of the activities of the entertaining bird, which chuckles and crows with shocking discordances and whimpers in that high interrogative falsetto which is one of the singularities of the language of the Chinese.—E. J. BANFIELD. Dunk Island, North Queensland.

From Magazines, &c.

Breeding Wild Ducks.—In *The Outing Magazine* for November and December, 1912, appear two interesting articles by Mr. Herbert K. Job, State Ornithologist of Connecticut, United States of America. In one article the author relates how he hunted for Ducks' eggs in the marshes of Lake Manitoba, and in the other he deals with the hatching, rearing, and transporting of Ducklings. Mr. Job organized a Government expedition to the Canadian North-West last year, "the purpose being to bring back eggs or young of as many species of Wild Ducks as possible, to study methods of feeding, rearing, and breeding, and to give the results to the public in bulletins of the Storrs Agricultural Experiment Station." The expedition set out in June, 1912, for the immense marshes at the southern end of Lake Manitoba. Twelve species of Ducks were found breeding among the marshes, and eggs or young of each were secured by the members of the expedition. The eggs were hatched in an incubator. On the 2,000-mile journey back Mr. Job attended the consignment personally in the express railway cars, and he landed all but a few of the Ducklings safe at their destination. The work of hunting for Ducks' nests in the lonely marshes was full of interest, and Mr. Job and his helpers had many experiences, which all other ornithologists who hear of them must envy him. He obtained a series of photographs of nests and eggs and young birds, some of which illustrate his article.

The article which deals with the last phase of the expedition is