(Malurus cyaneus), White-shafted Fantail (Rhipidura albiscapa), Black-and-White Fantail (R. tricolor), Brown Tit (Acanthiza pusilla), Yellow-rumped Tit (A. chrysorrhoa), Buff-rumped Tit (A. reguloides), White-browed Scrub-Wren (Sericornis frontalis), Coachwhip-Bird (Psophodes crepitans), Rufous Song-Lark (Cinclorhamphus rufescens). Striated Field-Wren (Calamanthus fuliginosus), Rufous-breasted Thickhead (Pachycephala rufiventris), White-throated Tree-creeper (Climacteris leucophæa), Orange-winged Tree-runner (Sittella chrysoptera), White-fronted Chat (Ephthianura albifrons), White-backed Magpie (Gymnorhina leuconota), Butcher-Bird (Cracticus destructor), Yellowbreasted Shrike-Robin (Eopsaltria australis), White-eye (Zosterops cærulescens), Yellow-faced Honey-eater (Ptilotis chrysops), Red Wattle-Bird (Acanthochæra carunculata), Brush Wattle-Bird (A. mellivora), Orange-tipped Pardalote (Pardalotus assimilis) (?), Swallow (Hirundo neoxena), Fairy Martin (Petrochelidon ariel), Pipit (Anthus australis), Wood-Swallow (Artamus - sordidus), Sacred Kingfisher (Halcyon sanctus), Laughing Jackass (Dacelo gigas), Pallid Cuckoo (Cuculus pallidus), Bronze-Cuckoo (Chalcococcyx plagosus), Fan-tailed Cuckoo (Cacomantis flabelliformis), Crimson Parrakeet (Platycercus elegans), Rosella (P. eximius), Bronze-wing (Phaps chalcoptera), Stubble Quail (Coturnix pectoralis), Bald-Coot (Porphyrio melanonotus), Coot (Fulica australis), Pied Oyster-catcher (Hæmatopus longirostris), Hooded Dottrel (Ægialitis_cucullata), Red-capped Dottrel (Æ. ruficapilla), Curlew (Numenius cyanopus), Snipe (Gallinago australis), Painted Snipe (Rostratula australis), Silver Gull (Lurus novæ-hollandiæ), Pacific Gull (Gabianus pacificus), White-fronted Heron (Notophoyx novæ-hollandiæ), White-necked Heron (N. pacifica), Black Cormorant (Phalacrocorax carbo), Little Cormorant (P. melanoleucus), Little Black Cormorant (P. sulcirostris), Gannet (Sula serrator), Pelican (Pelecanus conspicillatus), Little Penguin (Eudyptula minor), Black Swan (Chenopis atrata), Cape Barren Goose (Cereopsis novæ-hollandiæ), Wood-Duck (Chenonetta jubata), Mountain-Duck (Casarca tadornoides), Shoveller (Spatula rhynchotis), Grey Teal (Nettion gibberifrons). —G. F. HILL. 17/1/09.

From Magazines, &c.

In The Avicultural Magazine in the issues of August, September, November, and December of last year, Mr. D. Seth-Smith, F.Z.S., the editor, gives the first instalments of a series of Australian field notes and bird observations. It will be remembered that Mr. Seth-Smith visited Australia in the interests of the Zoological Society of London, and that he returned to England with a splendid collection of live stock for the Gardens. The field notes above mentioned, which are written in an extremely entertaining manner, refer to his brief sojourn in Western Australia, and were made chiefly in the company of Messrs. E. A. and L. Le Souëf, of the Perth Zoo. Mr. Seth-Smith enjoys the reputation of being a successful aviculturist. He now proves himself expert in the art of field observation. Readers will look forward to the balance of Mr. Seth-Smith's notes as they appear from time to time.

"A DESCRIPTIVE LIST OF THE BIRDS NATIVE TO VICTORIA, AUSTRALIA."—This important publication has been issued as a supplement to The Education Gazette and Teacher's Aid, 16th December, 1908, and is compiled by Mr. J. A. Leach, M.Sc., the organizing inspector of Nature-study, Education Department, Victoria. The "List" will surely be fruitful of much good, and if it be all imbibed by the rising generation there will be little need for Bird Protection Acts. The "List" is very plain and concise. In parallel of columns—(1) there is the number of the species found in Australia; (2) number of the species in Victoria; (3) names—vernacular, local, and scientific; (4) dimensions of the birds in inches and parts thereof; (S.) occurrence south of the Divide; (N.) occurrence north of the Divide; (5) kind of country in which the species is usually seen; (6) general description, &c., of the bird. Mr. Leach is to be congratulated on the compilation of such an extremely well-thought-out and useful list. The only item with which the reviewers are inclined to disagree is the occurrence of too many local trivial names, such, for instance, as "Tom Pudding" for the Hoary-headed Grebe, "Painted Lady" for the Avocet, "Go-aways" for the Babbler, &c. As the "List" is issued primarily for educational purposes, why not insert the correct or accepted vernacular, and educate the students up to it?

HYBRID WOOD-SWALLOW.-Mr. North remarked that in the first edition of "Nests and Eggs of Australian Birds" (p. 44, 1889) he had recorded that the late Mr. George Barnard, of Coomooboolaroo, Duaringa, Queensland, had on one occasion found the adult male of Artamus superciliosus paired with the adult female of A. personatus. Mr. North then exhibited a specimen of unusual interest, an hybrid adult male, Artamus superciliosus × A. personatus, obtained by Mr. H. Greensill Barnard, of Bimbi, Duaringa, Queensland, on the 9th September, 1908. Also, for comparison, adult males of A. superciliosus and Mr. Barnard came across a flock of A. A. personatus. superciliosus nesting about five miles away from home, and among them was the hybrid, which was mated with a female of A. superciliosus engaged in building a nest. It resembles A. superciliosus on the upper parts, has the forehead, lores, cheeks, ear coverts, and throat black, passing into blackish-grey on the fore-neck; remainder of under surface ashy-grey with a slight vinous wash; under tail coverts pale ashy-grey; over and behind the eye a distinct white eyebrow, but not extending so far on to the sides of the crown of the head as in A. superciliosus. Total length 7, wing 4.85 inches.—Proc. Linn. Soc. N.S.W., xxxiii., p. 735.

A HIBERNATING HAWK .- In an article in the Agricultural Gazette of Cape Colony for December the following appears: "All birds ought to be looked upon as friends of the farmer and enemies of locusts, and more especially the Brown Hawk with his V tail (Dutch name Kaken Valk, Kaffir Ntyoyieja). Owing to his habit of catching his food on the wing, I have timed this Hawk, and found him to catch 50 or 60 locusts per minute. He stores his food for winter in hollow trees. Another peculiarity of this bird is, it loses all its feathers while lying dormant during the winter. I recently came across one of these birds in its winter quarters, where I found he had collected thousands of locusts, grasshoppers, beetles, grass snakes, lizards, toads, and a few chickens. Surely this bird ought to be better protected, being both a vermin-killer and a scavenger. I will be pleased to communicate to you further observations I may make. as I consider the subject (locusts) one that every person ought to do what he can to facilitate the extermination of-this terrible plague to our agricultural industry in the colony." I have read of squirrels and other quadrupeds storing up food for winter consumption, but this is the first instance of a bird doing so that has come to my knowledge. Putting off his clothes when he goes to sleep in winter—I don't know what to think about that! Do you know anything about this Brown Hawk with the V tail?—"A.O.U." Rockhampton.

* * *

DISCOVERY OF THE NESTS AND EGGS OF TWO RARE BIRDS.—In The Proc. Linn. Soc. N.S.W., xxxiii., p. 799, the important announcement is made that "Mr. North exhibited the nest and eggs of Newton's Bower-Bird (Prionodura newtoniana, De Vis) and of the Tooth-billed Bower-Bird (Scenopæetes dentirostris, Ramsay), together with skins of the females, shot near the nests. They were obtained, through the instrumentality of Mr. Robert Grant, from Messrs. John and George Sharp, of whom the latter procured them respectively on the 9th and 7th November, 1908, on the Bellenden Ker Range, after waiting near the nests for over an hour, and flushing the females from them several times, before shooting them and taking the nests and The nest of *Prionodura newtoniana* is an open cupshaped structure formed externally of dead leaves and portions of leaves, including fragments of stag-horn ferns and a small quantity of dried mosses, and is lined inside at the bottom with thin dead twigs. Externally it measures $5\frac{1}{2}$ inches in diameter by $2\frac{1}{2}$ in depth, the inner cup measuring $4\frac{1}{2}$ inches in diameter by $I_{\frac{1}{2}}$ in depth. It was built about the centre of an opening 4 feet long and about 6 inches wide, inside in a rotten tree, 3 feet from the ground, and contained two eggs. The eggs are oval in form, the shell being finely granulate, lustrous, and of a uniform

fleshy-white. Length (A) 1.4 × 0.98 inches; (B) 1.38 × 0.97 inches. The nest of Scenopæetes dentirostris is a slightly concave structure, formed throughout of twigs; coarser ones below, and finer ones above, as a resting place for the eggs; it is most flimsy and loosely built, and resembles one of the smaller Pigeon's, or a Dove's nest, and averages 5 inches in diameter by 2 inches in depth. It was placed in a low, thickly-foliaged tree, about 17 feet from the ground, and in the most dense part of the scrub. The nest contained two eggs, which are oval in form, the shell being very finely granulate, lustrous, and of a uniform creamy-brown colour, resembling very much the eggs of Aelurædus maculosus, but of a more distinct brownish hue. Length (A) 1.63 × 1.1 inches; (B) 1.62 × 0.9 inches. Subsequently Mr. Sharp found other nests and eggs of the same species."

In The Victorian Naturalist, xxv., pp. 160-168, Mr. North gives more elaborated accounts of the finding by Mr. Geo. Sharp of these rare nests, illustrations of which are also given.

In his interesting notes Mr. Sharp states:—"I had a surprise visit one day while at Evelyn from a collector who had been staying at Atherton for some time, and who also was in quest of Tooth-billed and Newton's Bower-Bird's nests and eggs, but who had failed to locate either. I gave him one of the nests of the Tooth-billed Bower-Bird, and gave him instructions how and where to look for them. Later on he photographed my black boy, Norman, half-way up the tree in which the first nest of this species was found, and then I took him out to the bower of Newton's Bower-Bird, which he had hitherto never seen, and, after our felling trees to obtain a good light, he photographed it with a group of my boys in the background."

It was natural and kind of Mr. Sharp to assist a brother naturalist in the field of exploration, but there was not the slightest necessity for either Mr. Sharp or Mr. North to suppress his name, as he was a well-known Sydney collector and field naturalist—Mr. S. W. Jackson. Moreover, it was well known that Mr. Jackson was in the northern scrubs specially in the interests of Mr. H. L. White, Belltrees, Scone, N.S.W. Mr. White has been good enough to place the whole of Mr. Jackson's valuable notes and photographs at the disposal of the A.O.U. These will appear as a special number of *The Emu*, which will immediately follow this issue, and will form part v. of the

present volume.

THE WHITE-EYE IN NEW ZEALAND.—The following notes by Mr. J. Drummond, of Christchurch, which, under the heading "An Australian Settler in New Zealand," appeared in the English *Field* of 19th December last, will be read with interest:—

"Fifty-three years ago a little olive, grey, and yellow bird, with white 'spectacles,' which is now quite common in New Zealand, was unknown to either Europeans or Moaris. In the winter of 1856 the lighthouse-keeper on Dog Island, in Foveaux Strait, which separates Stewart Island from the South Island of New Zealand, found one morning in the gallery of the lighthouse towers scores of these birds lying dead. They had arrived in the night, or early in the morning before the lights were extinguished, and had dashed against the lantern. They had come from Australia, and, flying day and night without finding a resting place, had crossed 1,000 miles of ocean before sighting New Zealand's shores. Members of the flock that survived the dangers of the voyage settled in the southern part of New Zealand, and ever since have occupied an honourable place in New Zealand's avifauna. For several years these little birds remained in the southern district of the Dominion, but gradually spread towards the north, until they were to be found in all parts of the South Island. Although they had involuntarily crossed 1,000 miles of water in the Tasman Sea, they hesitated before crossing 20 or 30 miles of water in Cook Strait, which separates the South Island from the North. At first they crossed in small numbers, again retired to the south, and eventually advanced in force. Their arrival was recorded simultaneously by a Maori mailman at Waikanae, a small coastal village in Wellington province, and by Sir Walter Buller, author of 'A History of the Birds of New Zealand,' in Wellington city. They flocked through the northern provinces to Wanganui, Taranaki, Hawke's Bay, Poverty Bay, and Auckland, making friends with the native resident birds, and also with those which had been imported from England, wandering to the remotest outskirts of the Dominion in the Chatham, Auckland, the Snares, and Campbell Islands. New Zealanders have given this little bird a number of popular names. It is the 'White-eye,' Silvereye,' 'Ring-eye,' 'Wax-eye,' the 'Blight-Bird,' and the 'Winter Migrant.' The Maoris call it 'Tau-hou,' which means 'stranger,' and scientists know it in New Zealand, as well as in Australia, as Zosterops (i.e., girdle-eye) carulescens. The genus Zosterops ranges over a large part of the world, commencing in Africa south of the Sahara, and extending to Madagascar, the Indian Peninsula, Ceylon, the Burmese countries, the whole of China, Japan, Formosa, the Malayan Peninsula and islands, New Guinea, the islands of the Pacific, and Australia and New Zealand. There are no fewer than eighty-five species in the genus, and one of these (cærulescens) is the species which belongs to Australia, and which, following a remarkable and mysterious impulse, has settled in New Zealand. When New Zealand colonists in the 'early days,' as they like to call them, decided the question whether the 'White-eye' was indigenous or a

visitor from some distant country, they agreed that it should be given a welcome, partly because it did not shun civilisation, like some of the native birds, and partly because its presence gave an additional charm to the sylvan scenes wherein it was to be Before long they began to regard it as a nuisance. Invading their orchards, though insectivorous, it pecked the plums, cherries, and apples unwarrantably. Its romantic arrival was regarded as a curse rather than a blessing. Presently, however, the landowners changed their opinion. Their apple trees were attacked by the American blight (Schizoneura lanigera), and the 'White-eye' dealt with this pest so thoroughly and effectively that it completely cleared many orchards, and left them clean and sweet. Since then it has been treated almost with affection. In recognition of its excellent work in this direction it is now known as the 'Blight-Bird.' At one time public feeling was so strong against it that a crusade was organized for its destruction; but now it is allowed to live without molestation. Although not protected by law in New Zealand, it is not rare. Its greatest enemies are the Maoris, whose custom was to preserve large numbers of '.White-eyes' in fat every year as a supply of food. The bird is so small that the Marois gave it no further preparation than plucking the feathers. Head, bones, feet, and all were It is, nevertheless, now firmly established as a New Zealand bird, and is both ornamental and useful. Most New Zealanders gladly allow it such fruit as it takes in return for its pleasant company and for the quantity of blight that it destroys."

Reviews.

["A Monograph of the Petrels (Order Tubinares)." By F. Du Cane Godman, D.C.L., F.R.S., &c.]

PREVIOUS notices of this classical work have appeared in *The Emu*, vol. vi., p. 205, and vol. viii., p. 45. The reviewers now have pleasure in acknowledging part iii. of the "Monograph," which upholds the excellence of its preceding parts. The following Australasian birds are dealt with in part iii., namely:—

Priocella glacialoides, Priofinus cinereus, Majaqueus æquinoctialis, M. parkinsoni, Estrelata macroptera, E. lessoni, E. rostrata, E. mollis, E. solandri, E. neglecta, E. incerta, and E. brevipes.

No doubt, through the efforts of Mr. Tom Iredale and his enterprising party, who were camped on the Kermadec Islands for the most part of last year, much information will be added to the life-history of the E. nigripennis (Kermadec Fulmar), E. cervicalis (Sunday Island Fulmar), and E. neglecta (Phillip Fulmar), with its perplexing phases of plumage. Regarding

Œ. mollis, a frequenter of southern seas, chiefly between south latitudes 20° to 50°, can it really be the species which the Messrs. Layard found breeding "in burrows in great numbers about the summit of Mont Moa, in New Caledonia"? Comer, the collector, is supposed to have secured an egg referable to this species when on the far-south island, Gough. Is the same species likely to be found breeding within the tropics as well as within the temperate zone? While on the subject of breeding-places, it would have been interesting had Dr. Godman mentioned, in connection with Priofinus cinereus (Great Grey or Brown Petrel), Macquarie Island, where this fine bird was observed by Mr. J. Burton for several seasons (see "Nests and Eggs," Campbell, p. 896).

["The Birds of North and Middle America." By Robert Ridgway.]

In continuance of the acknowledgment of this famous work (vide Emu, vol. v., p. 99), part iv. has been received. It contains the following families, namely:—Turdidæ—Thrushes; Zeledoniidæ—Wren-Thrushes; Mimidæ—Mocking-Birds; Sturnidæ—Starlings; Ploceidæ—Weaver-Birds; Alaudidæ—Larks; Oxyruncidæ—Sharpbills; Tyrannidæ—Tyrant Flycatchers; Pipridæ—Manakins; and Cotingidæ—Chatterers.

In the four volumes published there have been described no less than 1,675 species and sub-species, or somewhat more than half the total number of North and Middle American birds. It is sincerely hoped that the indomitable author will be spared to see the completion of this great "Bulletin" of the United States National Museum.

["The Kea: a New Zealand Problem." By George R. Marriner, F.R.M.S., Mem. Aust. O.U., Curator Public Museum, Wanganui, N.Z., late Assistant in Biology, Canterbury College, Christchurch, N.Z. Marriner Bros. and Co., Christchurch. 1908.]

NEW Zealand possesses many peculiar forms of bird-life, not the least interesting among them being the subject of Mr. Marriner's excellent monograph, the Kea (Nestor notabilis), the notorious sheep-killing Parrot. The author has spared no pains to make himself acquainted with the whole story of the Kea, and he has presented it to his readers in very attractive form. Although this bird was first discovered in 1856, it was not until some 12 years later that it was first suspected of attacking sheep. Its natural food consisted of berries, seeds, roots, honey, grubs, and insects. Various theories have been advanced to account for its remarkable change of diet, but the most feasible appears to be that it first acquired a taste for flesh by pecking at the carcasses

of sheep hanging at the slaughtering-places on the sheepstations, and tearing off the scraps of flesh and fat adhering to the skins thrown on the fences to dry. From that to attacking the living animals when these were half-buried in snow and unable to resist, the transition was easy. For forty years the bird has been banned, with a price on its head (varying from 2s. 6d. to 10s.), and at first, while the birds were plentiful, station hands carried firearms and destroyed large numbers, the rewards making a substantial addition to their ordinary earnings. Afterwards, as they became less numerous, men were employed specially to hunt them. Mr. Marriner, in search of information, visited the "Kea country"—the region of the snow-clad mountains of the South Island—and in addition was assisted by numerous correspondents located in the area inhabited by the The evidence was carefully sifted, and the author, while believing that the depredations of the Kea, like those of most outlaws, were greatly exaggerated, says :- "I think I am justified in saying that, as far as human evidence can be relied on, I have conclusively proved that the Kea has not only taken to meat-eating, but that it does actually attack and kill sheep." Not all the birds, however, appear to take part in the killing. Mr. Marriner compares the culprits to the man-eating tigers, declaring that a few old birds usually kill the sheep, while the others join in the feast. Their attacks are usually made at night or in the early morning, and the mode seems to vary but little. Jumping on the animal's back, generally on the rump, where they appear best able to retain their hold, they first pull out the wool, then tear the skin and flesh, continuing the attack until the sheep either falls exhausted, or, rushing frantically about in a usually vain effort to dislodge its tormentor, it falls over a precipice and is killed, in which case the bird lets go its hold when the animal begins to fall, but follows it to enjoy its ill-gotten meal. Sometimes making its escape after being cruelly lacerated, the victim suffers from a festering sore, and finally succumbs to blood-poisoning. Although animals other than sheep are rarely interfered with, instances are reported of attacks on horses, dogs, and rabbits, and in one case the body of a man who had met his death by accident was mutilated by the birds. The Kea breeds in winter, nesting in crevices of rocks, the white eggs (as many as four have been found in a nest) being deposited on a small quantity of tussock-grass sometimes 6 feet distant from the entrance. That the birds are still common in the mountainous parts of the South Island the author attributes to the fact that their nests are very difficult to Apart from its scientific interest, as a sportive, inquisitive bird—it is even said to indulge in occasional practical jokes it has such diverting ways that its extermination should be guarded against, and this perhaps could be most easily done

by adopting Mr. Marriner's suggestion to provide a home for it on one of the outlying islands, where it could do no harm, and where circumstances might compel its return to the "simple life." The book is well printed on good paper, and the illustrations, though for the most part small, are numerous and well executed. It may be purchased for 10s. 6d.

Notes and Notices.

TASMANIAN FIELD NATURALISTS' CLUB proposes holding an Easter camp-out on Freycinet Peninsula and Schouten Island, East Coast, to which members of the A.O.U. have been kindly invited.

EXPEDITION TO BASS STRAIT.—Referring to this account (pp. 195-207), Mr. A. H. E. Mattingley has prepared a "Photographic Souvenir" of the trip, containing 100 choice half-tone reproductions, depicting incidents, sights, and scenery of the Strait. The album, which is handsomely got up, may be obtained by members and friends of the expedition on application to Mr. Mattingley. Price, 22s. 6d.

"AN EXCITING EMU DRIVE—490 BIRDS KILLED!"—Such is the awful heading in a recent number of *The Pastoralists' Review*. It gave an account which appeared in the Goondiwindi Argus of a shameful slaughter of noble and defenceless birds in Queensland. Because they spread "the cursed prickly pear," forsooth! Emus did not introduce the prickly pear into Australia. But what are the authorities doing in Queensland by allowing the destruction of Emus, which are supposed to enjoy protection under the Game Laws?

AMERICAN MUSEUM OF NATURAL HISTORY.—The "Gallery of the Habitat Groups of Birds" was opened with great *eclat* on Thursday, 25th February, when President Henry F. Osborn and Mr. John L. Cadwalader entertained visitors to afternoon tea.

MR. TOM CARTER, M.B.O.U., of Broome Hill, W.A., after a brief visit with his family to the eastern States, has left by the s.s. *Medic* for England. Mr. Carter hopes to return to Australia within two years.

A MEMBER OF THE A.O.U. HONOURED.—Mr. A. H. E. Mattingley, recently hon. secretary of the A.O.U., has been elected an Honorary Fellow of the Royal Society for the Protection of Birds. This influential society has for its president Her Grace the Countess of Portland, while the vice-president is the Earl of Stamford.