Correspondence

PROTECTIVE ADAPTATIONS

To the Editor

Sir,-Printing of the present comment on McKeown's article (The Emu, vol. xxxvi, pt. 1, July, 1936, pp. 21-30) relating in part to my writings should be appreciated. occasion for reply is a common one in controversies, namely, that statements of the adversary are misquoted or misinterpreted. For instance, it is stated that my arguments apparently are based on "the premise that birds are the chief-perhaps the only-enemies of insects and some other forms of life." Careful reading of my paper (Smiths. Misc. Coll., 85 (7), 1932) should have prevented that assumption, for discussion of enemies other than birds was included for nearly all of the groups treated, a special section of the report (pp. 136-140) was devoted to such predators, and the statement was made (pp. 142-143) that "Among parasitic and predacious organisms . . . most of the groups can play only minor roles in the whole drama . . . and . . . insects must occupy the center of the stage, regardless even of the superior individual size of the chordates.

Again I am credited with appearing "to consider that protective adaptation must confer 'immunity,' a conclusion which, so far as I am aware," writes McKeown, "has never been put forward even by the strongest supporters of the theory." There is in this case also no basis for the conclusion in anything said in the Smithsonian paper, the whole trend of which was to deny such immunity. If what is meant was that I consider the conferring of immunity necessary, from a theoretical point of view, to success of the so-called protective adaptations, the reply is that I am well enough acquainted with the theory not to make that mistake. Such claims have been made by various enthusiasts, but more thoughtful adherents of the theory recognized that this tended to defeat the hypothesis that protective adaptations had been developed by "selection."

McKeown's statement that if the protection were complete "there would be no control upon the multiplication of the protected form," ignores the importance of self-regulating factors of animal populations, and of the sweeping reductions caused by climate, diseases, and other agents against which protective adaptations of the types discussed are no

defence.

These comments refer to matters of fact, not of opinion, and I avoid certain debatable points that might be considered in the "opinion" category. McKeown's paper started out apparently as an attack on mine, but the factual data it presents (about 70 per cent. of the whole) corroborates my showing that birds feed freely on "protected" insects.

That point in the Smithsonian article was, however, only incidental to showing that birds as a group are more or less indiscriminate, that birds and other predators combined are still more so, and that predators plus all other eliminative agents probably are completely indiscriminate, so far as protective adaptations are concerned. The larger principles, predation proportional to population, and survival of the ordinary, developed in the 1932 and subsequent papers, are fundamentals of the writer's criticism of natural selection theory in general.—Yours, etc... W. L. McATEE.

U.S. Dept. of Agriculture, Washington, D.C. March 12, 1938.

LAKE CLARENDON

To the Editor

Sir,-May I have space to thank Mr. N. I. Westergaard Neilsen for correcting the error I made in The Emu (vol. XXXVII, p. 238), wherein I stated that the Lake Clarendon Sanctuary—or rather the breeding-ground fenced off within the sanctuary—had been enclosed by "public" subscription. I should have realized that to invite subscriptions from individual members of the public did not necessarily mean a "public" subscription. A distinction there certainly iswithout very much difference.

My notes (appended) on two visits to the Lake during 1936-37, seem to bear out the correctness of Mr. G. H. Barker's statement regarding the condition of the lake for at least some period of that time. Mr. Barker tells me that on his last visit-at, he thinks, the latter end of 1936-there was no water in the breeding enclosure, and very little in the lake. The ground in the breeding enclosure was (at that time) almost bare of grass and much trampled by the cattle

which he observed pasturing within it.—Yours, etc.,

South Brisbane, Qld. 18/5/38.

L. M. MAYO.

My notes read:

"October 22, 1936.—Visited Lake Clarendon in company with the Hon. Secretary of the Queensland Naturalists' Club; very little water except in centre of lake, and neither water nor birds in the breeding enclosure. Many cattle feeding in the latter (with the gate shut). Shores of lake dry for a long way in, and the ground very broken and full of cracks. Found nest (?) of Spur-winged Plover on dried mud well out on bed of lake. Two chicks just hatched and one egg chipping-fourth egg infertile. A good many bird species listed on water remaining in lake."

"February 11, 1937.-Together with a bird-loving member of the Brisbane Press, visited Lake Clarendon again. Entering outer paddock a small flock of Straw-necked Ibis—about 20—took flight. Grasshoppers were plentiful underfoot, and a very few Spur-winged Plovers were feeding amongst them. The lake seemed quite dry—from far out on the bed of the lake a man with horse and cart was (presumably) drawing water from a well. Five Ducks—two White-eyed Ducks and three Black Ducks—took rapid flight when I lifted my walking stick to show their position. Not another bird to be seen—all very desolate."

Annual Camp-out

Owing to organizing difficulties, the proposed visit to the Bass Straits Islands this year has been cancelled, and arrangements are being made to hold the next Congress of the Union in Hobart and the Camp-out on Bruny Island, southern Tasmania, towards the end of November. The exact dates, and all further details available, will be supplied on the annual notice paper to be sent to members shortly.

The Camp will be held on the shores of Adventure Bay, a place of great historical interest, and a good district for birds. Most of the indigenous Tasmanian birds are found in the forests of the island and lagoons adjacent to the bay. The locality is noted for fine scenery. The southern end of the bay is flanked by the sheer cliffs of Fluted Cape and Cape Conella, at the foot of which lies Penguin Island, which can be reached easily at low tide. At the northern end of the bay, which sweeps around in a great crescent, is Cape Frederick Henry, where the Short-tailed Shearwater has a large breeding colony, and where Cormorants and Silver Gulls also nest, as well as a few Fairy Penguins. Oyster-catchers, and Hooded Dotterels breed on the beach, and the Black-cheeked Falcon in the cliffs.

Bruny Island is divided into two parts, and the connecting link consists of a long sandy neck, very narrow in parts, and composed of tall, weed-covered dunes, among which the Fairy Penguin breeds. A shallow bay on the western side, facing D'Entrecasteaux Channel, is the feeding place of the Black Swan, Musk Duck, Caspian Tern and others, whilst out to sea, on the other side, are Gannets, Albatrosses and Petrels. To the south of Adventure Bay lie the Friars, a group of rocks where Prions are known to nest.

Adventure Bay is reached by comfortable channel steamers from Hobart in a few hours. A landing is made at Lunawanna on the sheltered side of the island, and passengers are transported by vehicles for about seven miles across the island to the bay. There is swimming to be had, as well as fishing, and timber tracks leading inland

provide easy walking for the bird-observer.