Biological Opportunities in Siam. By Professor Gordon Alexander. The Scientific Monthly, August, 1931.

This article contains a popular account of some aspects of the biological work which has been accomplished in Siam, with rough indications of the fields still to explore or elaborate. As a purely popular contribution it has interest, it is lavishly illustrated with photographs which would appeal to the tourist, and it is interspersed with remarks and anecdotes of a general nature. It is of value in that it brings Siam to the attention of the naturalist, but any serious worker would demand data of which no indications are given.

We are told that broadly "a very small fraction of the fauna and flora is known even by name, and that but little more than by name". If "flora" is taken to include the lower forms, certainly much work is wanting, but it is well known that the whole of Siam has been toured botanically, and it may be taken that the "Florae Siamensis Enumeratio" will contain the bulk of the flowering plants of Siam, with distribution, critical notes, etc. It seems a pity that this work, representing as it does a great expenditure of effort and money, and being probably the high-water mark of systematic biological work so far attained here, should be dismissed in a few lines. The ferns have been fairly thoroughly collected, though no enumeration has yet been published, and a paper on Siamese mosses will shortly appear in the Natural History Supplement which it is thought will include about one third of those likely to occur in Siam. The criticism offered is that it is not sufficient to consult current publications, or the few contemporaneous authorities, if a true idea of "biological opportunities" is to be given; the collecting which has been accomplished must be ascertained, and an idea given as to the work in progress on these collections. The valuable enumerations of birds receive no specific mention; the Natural History Supplement is only referred to in a footnote, and the Journal of the Natural History Society does not even receive this distinction. Both from the title of the article and the standing of the author, a more thorough treatment might have been expected, whilst, if the article is not meant to be a guide to future workers, the title is misleading.

The author evidently assumes that it is believed that "heavy rain forest" covers the whole of Siam. The government maps, of course, disprove this notion, and Dr. Credner in his "Grundzüge einer Gliederung Siams in seiner Teillandschaften" publishes a small map giving the approximate distribution of the types of vegetation.

A contradiction appears to occur with regard to climatic zones: it is stated that only small climatic differences are found in Siam, insufficient to explain "the marked faunal and floral differences between different regions of the country". Later the correct explanation (at least as regards vegetation types) is given, which is, of course, the marked differences in rainfall and the presence or

absence of a dry season.

With the opinion of the author that little beyond systematic work has been attempted, agreement is offered, but this condition must apply to vast tracts, if not to the greater part of the world.

As a serious account of "biological opportunities" the article must be considered as being so incomplete as to be misleading; should it, however, inspire others to publish a guide to the work accomplished and in progress, it will have served a useful purpose.

A. M.

Bulletin of the Raffles Museum, Singapore, Straits Settlements. No. 5, August, 1931; No. 6, December, 1931.

While most of the numerous articles in these bulletins do not relate directly to Siam, all of them have an appeal to persons interested in the zoology of Siam. Among the more important papers in the August number is one by Dr. Malcolm A. Smith on "The Herpetology of Mt. Kinabalu, North Borneo, 13,445 ft.", with descriptions of four new frogs and two new snakes. C. Boden Kloss gives "Further Records of the One-horned Rhinoceros in the Malay States," and publishes a photograph of an excellently mounted head of a Perak example of this rare and vanishing animal. The principal article in the December issue is "On a Collection of Mammals from the Lowlands and Islands of North Borneo," by F. N. Chasen and C. Boden Kloss, in which nine forms of weasel, mouse deer, squirrels, rats, and tree shrews are described. The extraordinary richness of the cricket fauna of the Malay Peninsula is illustrated by a paper by Dr. L. Chopard in which 74 forms are noted, many from Peninsular Siam. These issues fully maintain the high scientific standard and typographic excellence of this noteworthy publication.

H. M. S.

EDITORIAL.

Since the publication of the last number of the Supplement, the Natural History Section has suffered great losses in the departure from Siam of three of its active members—Dr. A. F. G. Kerr, late director-general of the Agricultural Research Department in the Ministry of Commerce and Communications; Mr. A. Marcan, late director of the Government Laboratory in Bangkok; and Mr. C. J. Aagaard, late mechanical engineer to the water-works at Samsen, Bangkok.

Dr. A. F. G. Kerr, B. A., M. B., F. L. S.

Dr. Kerr came to Siam in 1901, entered government service in 1903, and retired on pension in March, 1932. Nearly twenty years of his service were spent at Chiengmai where he held the post of medical officer of health and during those years he devoted the whole of his leisure to the study of the plants of Siam. In 1920 he