Chapman on Saltator aurantiirostris.—Dr. Chapman having worked out the distributions and variations in this interesting species proceeds in the paper before us[1] to name three new subspecies and then to discuss at length the meaning of the variations and the probable origin of the seven recognized races, as well as of *Pitylus nigriceps* which he now regards as a *Saltator* closely allied to *aurantiirostris*.

The paper is worthy of the careful study by all engaged in systematic ornithology as well as those interested in the subject of the origin of species, and the author's conservatism in matters nomenclatural as well as his hesitancy to theorize too far will we think be generally endorsed.

Briefly summarized his theory is that in *aurantiirostris* we have in all probability the ancestral form of the group, a species of great individual variability. If it possessed no tendency to extend its range or if there were no available habitats into which it might spread, the history of the species would end at this point. As a matter of fact however both these conditions have been present and new environments combined with the inherent plasticity of the species have produced new races all along the Andes which show interesting and confusing departures from, or reversions to, individuals of the original variable form. His evidence and its discussion furnish an excellent illustration of the impossibility of correctly interpreting nature by merely naming variations in color and size and trying to place every specimen accordingly. To quote Dr. Chapman, "The variations exhibited by *S. aurantiirostris* are mutational in origin and have become subspecific characters under environmental conditions." We further gather from his discussion that cell variation (mutation) and environmental influence may work together in the evolution of species, which seems to us quite in accord with other recent discussions on evolution which apparently show that not one but several factors or methods, are usually involved.

Numerous text figures illustrate variations in pattern in the various forms discussed while a map gives one a clear idea of their distribution. Dr. Chapman is to be congratulated upon another contribution to the broader side of ornithology and demonstrates a comment made by the reviewer some years ago that ornithology presents some of the best material for the study of evolution if ornithologists could be induced to turn their attention to that phase of the science instead of sticking so closely to the purely systematic side.—W. S.

Griscom on Birds of Yucatan.—Two recently published papers[2] by Ludlow Griscom deal with the ornithological results of the Mason-Spinden Archaeological Expedition to Yucatan which he accompanied as a representative of the ornithological department of the American Museum of Natural History.

[1] The Variations and Distribution of *Saltator aurantiirostris*. By Frank M. Chapman. American Museum Novitates, No. 261. March 28, 1927.

[2] The Ornithological Results of the Mason-Spinden Expedition to Yucatan Part I American Museum Novitates, No. 235, November 18, 1926. pp. 1–19.
Part II. Ibid. No. 236. November 19, 1926. pp. 1–13.

Part I describes the itinerary which followed the coast of Quintana Roo and British Honduras visiting Cozumel Island and the mainland opposite. A list of the 347 species known from Yucatan is given, divided into several groups according to character of occurrence, the endemic forms numbering 44. Mr. Griscom explains that the peninsula of Yucatan is similar to a more or less arid island cut off on the southwest by a heavy rain forest and that its avifauna is largely composed of species or genera of relatively wide range in Mexico and northern Central America but absent from the rain forest, and many of the endemic forms are the result of this isolation.

Next there is an annotated list of 167 birds observed in eastern Quintana Roo of which *Dichromanassa rufescens colorata* (p. 9) and *Phoenicothraupis salvini rooensis* (p. 17) are described as new as well as *Cochlearius zeledoni panamensis* (p. 11) from Corozal, Panama and *Icterus cucullatus masoni* (p. 18) from Manatee, British Honduras.

The Osprey of the region is identified as *Pandion h. ridgwayi* previously supposed to be restricted to the Bahamas.

In Part II, there are two annotated lists. The first, covering 34 species, found on Chinchorro Bank, twenty-five miles off the coast, and hitherto unvisited by any ornithologist. An *Elaenea* obtained here allied to *E. martinica* is described as *E. chinchorrensis* (p. 3).

The second list covers the birds of Cozumel Island with remarks on the more interesting species.—W. S.

Friedmann on Testicular Asymmetry in Birds.[1]—It has long been known that the left testis in birds is often (Newton says, generally) larger than the right and Oscar Riddle has found that in hybrid Pigeons the discrepancy increases in proportion to the difference in relationship in the species involved, being greater in crosses between birds of different genera than between congeneric species. Furthermore the excess of males has been found to be correlated with the amount of discrepancy in the size of the testes.

Dr. Friedmann has examined many breeding birds both in America and in South Africa and finds that in 104 species there was no discrepancy while 60 showed the left testis to be the larger. In most cases it was obviously impossible to determine from field observations whether there was an excess of males, since male birds, being more active and conspicuous than females, are more frequently seen and collected.

In the case of the Cowbirds, however, he found that the parasitic species were usually polyandrous with a very evident excess of males and this was always correlated with a decidedly larger left testis as well as with sexual dimorphism in plumage. In the two monogamous Cowbirds, *Ageloides badius* and *Molothrus rufo-axillaris* there is no excess of males and no dimorphism in plumage, while the testes are of equal size. The former

[1] Testicular Asymmetry and Sex Ratio in Birds. By Herbert Friedmann. Biological Bulletin, Vol. LII, No. 3, March, 1927. pp. 197–207.