

departure on October 31. During this time the study of these birds was the observer's chief object; his record of their movements sometimes began at 3 A. M. and continued until the birds had left the roost, and in the evening he was again at his post to note their return. We have, therefore, a detailed history of the lives of these birds during their presence on their breeding grounds, by an ornithologist whose enthusiasm permitted no relaxation in the care with which his observations were made, and whose experience fitted him to direct his efforts most effectively. His study shows that "during courtship and nesting, each occupying about two weeks under normal conditions, none of the Grackles flock together to pass the night, whatever they may have done previously; but as soon as incubation has well begun the old males seek the shelter of some convenient grove and pass the night there with others of their kind. As soon as the most forward young are able to fly, they are escorted to the common roost by the old male, or if the whole brood should develop at the same time, by both parents; and where there is any marked difference in the development of the young of the same brood, the later ones, accompanied by the old female, bring up the rear. The young are fed for some days after they begin to roost with the old ones. . . . In general, the birds depart from the roost with the rising sun, and return to it at sunset. Singing and calling begin with the break of day, and continue until the birds depart for their feeding grounds. At night there is comparatively little singing, and all noise and shifting about cease as darkness falls. Early in the season the birds arrive and depart independently of each other, but with the advancing summer flocking increases, until finally all move as one individual." The paper is to be commended for its clear presentation of an admirable piece of field work. — F. M. C.

Cory's Shore Birds of North America.¹ — This work is constructed on the same lines as the author's 'How to know the Ducks, Geese and Swans,' and his 'Key to the Water Birds of Florida,' published originally in his 'Hunting and Fishing in Florida' (reviewed in this Journal, XIII, 1896, pp. 246, 247). It is intended, the author says, "to meet the wants of a large number of persons, especially sportsmen, who are interested in birds and would like to know their names, but often find it no easy task to identify them by the 'bird books.' To all such I offer this Key, in which the species are arranged in groups according to size," etc. The work consists of a few introductory pages, describing how to measure birds, a glossary of technical terms, and an 'Index to the Key,' followed

¹ How to know | the Shore Birds | (Limicolæ) | of | North America | (south of Greenland and Alaska) | all the species being grouped according to size and color | — | By Charles B. Cory | . . . [= 9 lines, titles and list of the author's principal publications] | — | For sale by | Little, Brown & Co. | Boston | 1897 — Small 4to, pp. 89, with numerous illustrations.

by the 'Key to the Species' (pp. 13-29), and then by formal descriptions, in systematic sequence, of the North American species of Limicolæ. Both the 'Key' and the body of the work are profusely illustrated with half-tone and line cuts of heads, feet, tail-markings, etc., with some full-length figures, which, with the key and the descriptive text, must serve to make identification a simple matter. Besides the technical descriptions, a brief account is given of the distribution and life history of each species.—J. A. A.

Chapman's 'Handbook,' 4th Edition.¹—The increasing demand for ornithological text-books is shown by the fact that the publishers of this work have issued a fourth edition of this work within two years of its publication. The present edition differs from the preceding ones through some slight alterations in the text and in the addition of an 'Appendix,' giving a list of the numerous changes in nomenclature, etc., which have occurred since the appearance of the first edition.—J. A. A.

Hartert on the Podargidæ, Caprimulgidæ and Macropterygidæ.—The first part of the division of 'Das Tierreich' devoted to Aves is by Mr. Hartert, and includes the three families Podargidæ, Caprimulgidæ and Macropterygidæ, or the Goatsuckers and Swifts.² For this work Mr. Hartert is especially fitted, being the monographer, five years ago, of these same groups for the British Museum 'Catalogue of Birds.'³ The considerable number of species described since the appearance of the 'Catalogue,' are here duly interpolated, but there are comparatively few changes in nomenclature. *Nanochordeiles* is a new generic division for *Chordeiles pusillus* Gould, while *Cosmetornis* is suppressed. The family name Cypselidæ gives place to Macropterygidæ, and we have *Apus* in place of *Micropus*, and Apodinæ in place of Cypselinæ,—these changes being adopted from Dr. A. Reichenow, but they are apparently not tenable.⁴

The text consists of brief diagnoses of all the groups, from families to subspecies, with analytical tables, and the citation of the synonymy

¹ Handbook of Birds of Eastern North America. . . . By Frank M. Chapman. 12mo, pp. xiv + 431. Fourth Edition. New York. D. Appleton & Co. 1897. \$3.00.

² Podargidæ, Caprimulgidæ und Macropterygidæ bearbeitet von Ernst Hartert, Direktor des Zoologischen Museums in Tring (England). Mit 16 Abbildungen im Texte. Berlin: Verlag von R. Friedländer und Sohn. = Das Tierreich. Eine Zusammenstellung und Kennzeichnung der rezenten Tierformen. Herausgegeben von der Deutschen Zoologischen Gesellschaft. General Redakteur: Franz Eilhard Schulze. — 1. Lieferung. Aves. Redakteur: A. Reichenow. — 8vo, pp. viii + 98. (Subscription price, 4.50 marks.)

³ Cf. Auk, X, 1893, pp. 67, 68.

⁴ Cf. Stejneger, Science, N. S., V, No. 126, p. 847, May 28, 1897.