from using English words, preferring to form arbitrary syllables which represent the bird notes as they sound to him.

The usual data of time of occurrence, relative abundance etc., are given, but the keynote of the whole paper is field identification; a subject to which we cannot give too much attention in these days, when sight records are becoming our main stock in trade in many ornithological investigations. Mr. Sawyer's paper on the drumming of the Grouse, illustrated by 28 snapshots of drumming birds, is a monograph on the subject. The author has watched, at a distance of a dozen feet, at least a hundred drummings and upon the data thus secured are his conclusions based, although he also discusses the more important publications on the subject.

The main new facts that he feels that he has proven—although one of them he states has previously been assumed—are that (1) the outward and upward motion of the wings is chiefly responsible for the drumming sound, not the forward and downward stroke, the latter being practically silent; (2) the striking of the air with the wings is practically the sole cause of the sound; (3) the fluttering at the end of the drumming is devoid of the ventriloquism which marks the preceeding part of the performance; (4) frequently the bird turns completely around before drumming but faces the same way each time on a given log. The details of his observations are replete with interest and should be carefully read by all who are interested in this noble game bird. The bulletin as a whole is one of the best yet issued by the Station.

In this connection, attention should be called to a paper¹ on the 'Relation of Wild Life to the Public in National and State Parks' by Dr. Chas. C. Adams, director of the Station. This should be carefully read by everyone interested in wild life preservation. The pleas against exter*mination* of any species and against the introduction of exotic species of animals or plants into wild life preserves are points well taken and should have the widest publicity. Our National and State parks and reservations are our only hope for the preservation of any part of the primaeval wilderness and all commercialism or destruction of Nature's balance within these areas must be prevented. Certain species may be "pests" or "vermin" on the farmer's acres and may have to be killed there to allow some other species of commercial value to increase abnormally, but in the wilderness where the aim is to preserve primaeval conditions all species are on the same footing and nature who has always taken care of their interrelation can be trusted to govern them without man's interference.-W. S.

Recent Papers by Bangs and Penard.—Messrs. Outram Bangs and Thomas E. Penard have recently described a new Bee-eater² Merops

¹ The Relation of Wild Life to the Public in National and State Parks. By Dr. Charles C. Adams. Proc. Second Nat. Conference State Parks, 1922. pp. 129-147, 1923.

² A New Merops from Java, Proc. N. E. Zool. Club, VIII, p. 43, Feb. 27, 1923.

Vol. XL 1923

sumatranus coeligenus (p. 43) from Java and a Bulbul,¹ Haringtonia leucocephalus montivagus (pp. 41) from Fukien, China.

Mr. Penard has also described Leptotila verreauxi tenella (p. 35), Milvago chimachima paludivaga² (p. 36) and Empidonax lawrencei nemoralis³ (p. 63) from Surinam.—W. S.

Griscom on New Birds.—Mr. Ludlow Griscom⁴ has described the following new forms from the collections of Dr. L. C. Sanford and the American Museum of Natural History: *Dendragapus obscurus munroi* (p. 1) Queen Charlotte Isls., B. C.; *Vermivora browni* (p. 4) a remarkable unique specimen from Miquihuana, Tamaulipas, Mexico, related to V. *crissalis* (Salv. and Godm), also known from a single specimen; *Dendroica pinus chrysoleuca* (p. 5) Santo Domingo, and *Coereba oblita* (p. 7) St. Andrews Island, W. I.

Townsend on Birds collected in Lower California.—This is a belated report⁵ on the birds collected on the voyage of the 'Albatross' in Lower California waters in 1911. Collecting parties went ashore at thirty different points on the peninsula and outlying islands and secured 804 specimens, representing 159 species and subspecies. Drs. Chas. H. Townsend and Paul Bartsch and Messrs. H. E. Anthony and P. I. Osburn collected the specimens, the majority being obtained by the last two.

Data for specimens and some brief annotations accompany the list and *Pipilo fuscus jamesi* (p. 20) is described as new from Tiburon Island. A colored plate of this bird, a map, and several half-tones comprise the illustrations.—W. S.

Mailliard on Field Work in Northern California in 1921.—Mr. Mailliard presents an account⁶ of field work in Del Norte County during the season of 1921, by himself and Mr. Chase Littlejohn in the interest of the California Academy. The aspects of the country and the daily experiences of the expedition are described and an annotated list of 71 species is presented.—W. S.

New Argentine Birds.—Dr. Alexander Wetmore and Mr. James L. Peters⁷ propose the genus Nyclicryphes (p. 143) for Rhynchaea which

⁶ Field Work among the Birds and Mammals of the Northern Coast of California in 1921. By Joseph Mailliard. Proc. Calif. Acad. Sci., XII, No. 1, pp. 1–26, January 2, 1923.

⁷ New Genera and Subspecies based on Argentine Birds. By Alexander Wetmore and James L. Peters. Proc. Biol. Soc. Wash., Vol. 36, pp. 143-146. May 1, 1923.

¹ A New Bulbul from Fukien, China, Ibid, p. 41-42.

² Two New Forms of Surinam Birds, Ibid pp. 35-36, Feb. 6, 1923.

¹A New Flycatcher from Surinam, Proc. Biol. Soc. Wash. 36, pp. 63-64, March 28, 1923.

⁴ Descriptions of Apparently New Birds from North America and the West Indies. By Ludlow Griscom.Amer. Mus. Novitates, No. 71. April 30, 1923, pp. 1–8.

⁶ Birds Collected in Lower California. By Charles Haskins Townsend. Bull. Amer. Mus. Nat. Hist., XLVIII, pp. 1–26, March 9, 1923.