in this species, while he has proven this to be the case in the Willet and suspects it in the majority of the shore birds. He finds that the body temperature of birds is apparently quite independent of external temperature, records of the same species in seasons of marked heat or marked cold showing no difference. Systematically, temperatures seem in a general way, to vary from low, in groups regarded as low in the scale, to high, in those which are most specialized, but there are many discrepancies due probably to insufficient data.

Most interesting of all Dr. Wetmore's discussions are those concerning "Method of Temperature Control in Birds" and "Significance of Temperature Control." We can only touch upon a few of the points considered. Birds, as is well-known, possess no "sweat glands," while the feather covering tends to conserve the heat of the body. Their high metabolism —the tremendous development of heat due to the muscular action in flight, demands in the absence of glands, some other method of relief, and this our author considers is found in the air sacks peculiar to birds, which act as the agency of temperature control, a fact first independently discovered by Dr. Wetmore but later elaborated by others.

The difference between "warm-blooded" and "cold-blooded" animals is explained to lie, not in the actual degree of temperature, but in the ability to maintain a more or less uniform body temperature independent of the external conditions. "Cold-blooded" animals, such as reptiles, vary their temperature in direct relation of that of their surroundings and very low temperatures induce torpidity, while "warm-blooded" forms, either by glands in the skin, or the feather coating and air sack system, keep their temperature nearly constant. The origin of the "warm-blooded" condition Dr. Wetmore attributes to the struggle against enforced hibernation.

It is to be hoped that Dr. Wetmore will be enabled to carry on his researches, in this field, as he proposes, until sufficient data are accumulated to demonstrate conclusively many points that are now merely suggested. The possibilities of further study are of the utmost importance and are likely to throw light on taxonomic as well as physiological problems.—W. S.

Bangs on Birds of the American Museum's Asiatic Expedition, of 1916–1917.—The birds collected by Messrs. Andrews and Heller in Burma, Yunnan and Fokien in 1916–1917, when making explorations on behalf of the American Museum of Natural History, have been entrusted to Mr. Outram Bangs for identification and an annotated list of them is presented in the present paper[1]. The new forms described are *Pericrocotus yvettae* (p. 583), Malipa, Burma; *Turdus auritus conquisitus* (p. 591), Snow Mts., Yunnan; and *Megalurus palustris andrewsi* (p. 592), Meng-ting, Burma.

[1] Birds of the American Museum of Natural History's Asiatic Zoological Expedition of 1916–1917. By Outram Bangs. Bull. Amer. Mus. Nat. Hist., XLIV, Art XX, pp. 575–612. New York, December 30, 1921. 8vo.

A new name *Rhipidura flabellifera placabilis* (p. 583) is proposed for *R. f. kempi* Matthews and Iredale of New Zealand, which is preoccupied.

The collection contains representatives of nearly 300 species but many of them represented by only one or two specimens, which as Mr. Bangs says renders subspecific determination not always certain.—W. S.

Miller and Griscom on Central American Birds.—This paper[1] includes descriptions of several new birds mostly obtained by the authors on an expedition to Nicaragua in 1917, and here published in advance of their final report. There are also comments on the status of certain other Central American forms. The new Nicaragua birds are *Ortalis cinereiceps saturatus* (p. 1), Matagalpa; *Creciscus ruberrimus* (p. 2) Jinotega; *Gallinula chloropus centralis* (p. 3) Metapa; *Asturina plagiata micrus* (p. 4) Chinandega; and *Ictinia plumbea vagans* (p. 5) Peña Blanca.

Crax panamensis Ogilvie-Grant the authors find indistinguishable from *C. globicera*, every one of the alleged characters being matched in a series of the latter species.

Commenting on Mr. Bangs' review of the Wood Rails of Central America, they fail to find any intergradation between *Aramides albiventris* and *A. plumbeicollis* and regard them as quite distinct species. On their recent expedition, moreover, they found a new race of the latter at Tipitapa, Nicaragua, which is described as *A. p. pacificus* (p. 11). *Aramus vociferus* they divide into two races, the typical form being restricted to Florida and the other *A. v. holostictus* (Cab.) ranging over the Greater Antilles and Central America.

In discussing the status of *Gampsonyx swainsoni leonae* Chubb. the authors' ideas became somewhat involved and a new edition[2] of this note has been issued to be substituted for the original. As we now understand it they recognize *leonae* and *swainsoni* as separable but on different grounds from those given by Mr. Chubb while *meridensis* Swann is regarded as a synonyom of the former.—W. S.

Grinnell and Storer on Yosemite Birds.[3]—The publishers of Hall's 'Handbook of Yosemite National Park' have done well to secure the service of Dr. Joseph Grinnell and his staff of the Museum of Vertebrate Zoology to prepare the chapters on natural history. Too often such work is intrusted to a compiler, with unfortunate results, but in this case the best authorities on the subject have been consulted.

Four chapters have been prepared by Dr. Grinnell and Mr. Storer

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[1] Descriptions of Proposed New Birds from Central America, with Notes on other Little-known Forms. By Waldron DeWitt Miller and Ludlow Griscom. Amer. Mus. Novitates, No. 25. December 7, 1921, pp. 1–13.

[2] Errata (undated).

[3] Life Zones of Yosemite National Park. By Joseph Grinnell, Director and Tracy Irwin Storer, Field Naturalist, Mus. Vert. Zool. Univ. of Calif., Hall's Handbook of Yosemite National Park, G. P. Putman's Sons, 1921, pp. 123–132.