

Mathews' 'The Birds of Australia.'¹—Mr. Mathew's great work continues to appear notwithstanding the fact that the author is making a tour of Australia, the results of which we trust will be of benefit to the book, the author and Australian ornithology. The present part completes the Ibises, Spoonbills and Storks and makes good progress with the Herons. We note no new names that have not already been characterized in the author's previous papers and only one point in nomenclature with which we cannot agree. The generic name *Herodias* Boie 1822 is used for the large White Egrets as in the A. O. U. Check-List. We have always held that this name was a synonym of *Egretta* Forster, 1817, in-as-much-as Gray in 1841 designated as its type *Ardea garzetta* L. His subsequent designation of *A. egretta* in 1855 we hold was invalidated by this previous action. The case was submitted to the International Commission on Zoölogical Nomenclature six years ago and an opinion has just been rendered (Op. 62, March, 1914) sustaining our contention. It will thus be necessary to employ *Leucophoyx* for *Ardea egretta* L. and its allies.—W. S.

'Die Schwalbe,' the Austrian Bird Migration Report.²—This important publication appears at irregular intervals under the auspices of the Ornithological Section of the Royal Zoological and Botanical Society of Vienna. The present number comprises 'The Question of the Harmfulness of the Dipper (*Cinclus cinclus*) by Dr. L. v. Lorenz; 'Observations and Investigations on the Jay,' by Curt Loos; 'The First Arrival Dates of Various Migrant Birds in the Spring of the Years 1887 [= 1897] to 1903 by Dr. Ludwig v. Lorenz with the coöperation of Dr. Morez Sassi; 'On the Influence of the Weather on the Arrival of Migrant Birds in Spring,' by Dr. A. Defant.

The last two are of particular interest to all students of migration. Dr. Lorenz had at his disposal the records of no less than 442 observers located in an area about equal to that of the state of Arizona. Apparently only the date of first arrival is recorded by each observer and the mere tabulation of these for the thirty species considered, forms an immense mass of records. The graphic representation of these data is ingenious. A map is devoted to each species for each year and the date of arrival at each station is indicated by a colored dot. Red represents an arrival between March 2 and 6; orange, March 7-11; yellow, March 12-16; etc. to blue and violet, in the order of the spectrum. An early year shows a preponderance of red dots while in a later one yellow or green dots will prevail.

¹ The Birds of Australia. Vol. III, Part 5. Witherby & Co. London, March 26, 1914.

² Die Schwalbe. Berichte Komitees für Ornithologische Beobachtungs-Stationen in Österreich. Redigiert von Dr. Ludwig Ritter Lorenz von Liburnau. Neue Folge III, 1902-1913. Herausgegeben von der Ornithologischen Sektion der K. K. Zool.-Bot. Gesellschaft in Wien. pp. 1-157, pl. 9.

Dr. Defant's report on the influence of weather conditions on migration deserves careful study. It is interesting to note that in tabulating the data to show which days are characterized by the greatest number of arrivals he adopts the same plan used by the Delaware Valley Ornithological Club in 'Cassinia,' except that he does not reject the obviously 'late dates.'—W. S.

Grinnell on the Mammals and Birds of the Lower Colorado Valley.¹—The latest of Dr. Grinnell's studies of California birds and mammals and their distribution has to do with that portion of the Colorado River valley which forms the southeastern boundary of the state. The expedition which furnished most of the data and material for the present report was made possible by the generosity of Miss Annie M. Alexander, founder of the California Museum of Vertebrate Zoology. Dr. Grinnell took personal charge of the field work and was assisted by Messrs. Frank Stephens, Joseph Dixon and L. Hollister Jones. The party descended the river by boat from Needles nearly to the Mexican line below Yuma, making twenty-nine stops, and occupying three months' time, from February 15 to May 15, 1910. A collection of 1272 mammals and 1374 birds was secured as well as many other specimens.

To the carefully prepared annotated list are added chapters on the 'Zonal and Faunal Position of the Region'; the 'Associational Areas'; 'The Colorado River as a Highway of Dispersal'; and as a 'Hindrance to Dispersal' and 'The Problem of Barriers with Regard to Birds and Mammals.'

Under these headings Dr. Grinnell continues the discussion of the problems and principles of distribution which has characterized his recent papers. Attention is called to the "two schools of faunistic students," one of which regards temperature as the chief factor in controlling distribution while the other advocates "a composite control, of many factors resulting in ecologic 'associations,'" and the author attempts to bring these views into accord on the theory, which we heartily endorse, that they are due simply to "difference in perspective." He recognizes again zones due to climatic differences; faunas, due to differences in humidity; and associations, due to environmental conditions—both inanimate and animate.

Eleven different associations are recognized—the River, Willow-Cottonwood, Tule, Arrowweed, Quail-brush, Mesquite, Saltbush, Creosote, Catclaw (or Wash), Saguaro, and Encelia (Rocky Hills)—with lists of characteristic birds and mammals. The species are separated into several categories according as whether they are exclusively restricted to the given 'association' or are at their maximum or minor abundance there. The

¹ An account of the Mammals and Birds of the Lower Colorado Valley, with Especial Reference to the Distributional Problems Presented. By Joseph Grinnell. Univ. of Cal. Publ. in Zoology, Vol. 12, No. 4, pp. 51-294, pls. 3-13, 9 text figs. March 20, 1914.