

BOOK NOTICE.

A Year of Costa Rican Natural History, by Amelia Smith Calvert, Sometime Fellow in Biology, Bryn Mawr College, and Phillip Powell Calvert, Professor of Zoölogy, University of Pennsylvania. The Macmillan Co., New York; The Macmillan Co. of Canada, Toronto Feb, 1917. xix+577 pp., with maps and numerous illustrations from photographs, including coloured frontispiece. Price \$3.00.

The single year (May 1, 1909 to May 10, 1910) spent by Professor and Mrs. Calvert in Costa Rica was a full one indeed, to judge by this interesting chronicle of their experiences in that remarkable land. To have gathered, in a single year, the vast quantity of information contained within its pages must have demanded great concentration of effort, both mental and physical. This information concerns not only the animals and plants of the country, in which the authors were chiefly interested, but also the climate and topography, the life and customs of the people, conditions and methods of travel, and many other matters of interest to the visitor.

As the main object of the trip was the study of the dragonflies of the country, the references to these insects are proportionately numerous, and among the more interesting discoveries in this field were the finding and rearing of the larvæ of *Mecistogaster modestus*, which breeds in the water between the leaves of epiphytic bromeliads (plants belonging to the Bromeliaceæ or Pine-apple family), the larva of Coça, which possesses lateral abdominal gills, recalling those of the mayflies and Sialids; and the habits of certain waterfall dwellers belonging to the genera *Thaumatoneura* and *Argia*. These have already been described at length by Dr. Calvert in a series of papers published in the Entomological News.

A great many other matters of interest to entomologists were brought to light, not only concerning dragonflies but numerous other groups of insects, e. g., observations on the swarming and migratory flights of butterflies and day-flying moths, the habits of leaf-cutting ants and the curious relationship between the ants found upon the Bull's Horn Thorn and their host tree, interesting cases of apparent mimicry and protective coloration, curious and striking insects of various kinds, such as the huge horn-bearing Scarabæidæ, (*Dynastes*, *Megaceros*, etc.), strange lepidopterous