

plots in the same formation 120 species were found of which the five commonest form 30 per cent., and 91 form each less than 1 per cent. Quite as striking as the wealth in species and the poverty in individuals is the variation between the different plots in the same formation.

Note has been taken of the lianes, epiphytes and herbaceous vegetation, and many valuable observations made on the foliage, bark, latex, buttresses and cauliflory of the trees. It is unfortunate that more attention could not have been given to the herbaceous vegetation.

The paper as a whole, with its abundant illustrations, gives a vivid picture of the vegetation of a region not before well known to us. Manifest importance attaches to the carrying into the tropics of the detailed and comprehensive methods of studying vegetation which have been in use in the temperate regions. The fact that our methods and our points of view are both the products of the study of temperate vegetation must compel care in the application of these in the tropics. While the method of the study of plots gives interesting results as to the wealth and composition of a tropical forest when first applied in a particular region, yet it does not give facts of the same order as those ascertained by the study of plots in the temperate zone, as may be seen by a comparison of the lists for plots in the same formations in the Lamao reserve. The reviewer doubts if the term 'climax forest' is one that would have come into existence if the first students of physiological plant-geography had resided and worked in the tropics. The term is certainly an extremely elastic one as used by Dr. Whitford.

It is greatly to be hoped that we may have in the near future further papers of this nature from members of the botanical and forestry staffs of the Philippines.

FORREST SHREVE.

THE WOMAN'S COLLEGE, BALTIMORE.

SCIENTIFIC JOURNALS AND ARTICLES.

Bird-Lore for September-October contains a well-illustrated article on 'The Home Life of the Red-tailed Hawk,' by Robert W. Heg-

ner; an account of 'The Nesting of the Arctic Three-toed Woodpecker in the Adirondacks,' by Lawrence Achilles; an article on 'The Rose-breasted Grosbeak,' by Frederick L. Holtz, and one on 'The Habits of the Black Vulture,' by A. A. Saunders. W. W. Cooke contributes the eighteenth paper on 'The Migration of Warblers.' In notes and news are the records of two plume sales in London, footing up over 35,000 birds, including 19,000 birds-of-paradise. The Audubon leaflet is devoted to the blue jay.

The Zoological Society Bulletin for October has an article, with a good illustration, on the African pigmy Ota Benga, and there are good papers on 'The Collection of Reptiles,' 'How Seals are Trained,' 'The White Peacock' and 'How Birds get Their Food.' The capture of two tarpon in New York Bay is recorded and there is a description of a new sea-horse from Bermuda to which the name *Hippocampus kincaidi* is given. Judging from the figure, it should belong in another genus. There is probably a slip of the pen in the statement under the cut of 'One of the Largest of Our Tortoises' that 'The growth of this specimen has been so great as to oppose the theory of the great age which these reptiles are supposed to attain.' What is doubtless meant is that great size does not necessarily mean great age, for these tortoises have been known to live over one hundred years.

The Museum News of the Brooklyn Institute Museums for October begins its second volume with a brief summary of the summer's work. In the section devoted to the Children's Museum is a good account of Tadourac and the Saguenay River, in which the occurrence of the killer, *Orca*, is noted. The museum has a living specimen of *Hyla andersoni*.

SOCIETIES AND ACADEMIES.

THE ST. LOUIS CHEMICAL SOCIETY.

THE first meeting after the summer recess of the St. Louis Chemical Society, was held on Monday, October 8. A report 'On the National Pure Food and Drug Law, and On the Recent Hearing by the Official Commis-