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THE SCOPE OF PROTOZOOLOGY[1]

TWENTY-ONE years ago when I first began the study of protozoa, biologists in general were inclined to look upon these animals mainly as a means of entertaining amateur microscopists in their idle hours. Since then the subject has developed in widely different directions and protozoa have found a place in the deeper problems of biology; indeed, they are considered important enough to warrant the establishment of several chairs of protozoology in different parts of the world.

I am frequently asked to tell what protozoology is, and occasionally find difficulty in correcting the impression that a protozoologist is a primitive and undeveloped zoologist; but difficult as this sometimes is, I find even greater difficulty in giving an adequate idea of the scope of protozoology. I have chosen, therefore, as the subject of this lecture, this very general topic. In it I have no pet hypothesis to develop, nor scientific nut to crack, but desire only to point out the nature of the work done in protozoology as a basis for a definition of its scope.

Up to 1890 the work on protozoa was largely descriptive. The first discoveries by Leeuwenhoek in 1675 gave a new lease of life to the theory of spontaneous generation which had received some hard knocks through the direct experiments of Redi, Malpighi and Harvey. The new discoveries with the microscope merely added fuel to the fire of the later nature philosophers, which, however, mostly went up as smoke theories, such as that of organic transmi-

[1] Lecture delivered at the Marine Biological Laboratory, June 30, 1911.