

institute in America; prior to that, Ditmars himself was the country's distribution center for antivenins produced in Brazil. He was a producer of influential nature films, the first in 1910 ("The Jungle Circus"), and led the development of the Bronx Zoo into the first rank of the world's zoos.

Lincoln Memorial College in Tennessee awarded Ditmars an honorary Litt.D. degree in 1930 (although he had carried the unofficial title of "doctor" for many years), but academic herpetologists still gave him grudging credit for his accomplishments. They objected to his cursory knowledge of the scientific literature and especially to his habit of exaggerating information for effect, such as maximum lengths for species, and his attribution of data on reproduction to authorities who were almost certainly fictitious. He wrote some technical papers and conducted field work in many places, including South Carolina, Florida, California, Central America, Trinidad, and Brazil, although most of his collecting was done within 100 km of New York City.

To be sure Ditmars was a showman, knowing exactly how to stage an event to maximize publicity, and he was also a dynamic speaker. To supplement his zoo income he lectured regularly to large and small audiences, resulting in chronic throat ailments which, complicated by pneumonia, eventually led to his death in New York City on 12 May 1942.

• *References*: "Raymond L. Ditmars," by Alexander G. Ruthven, *Copeia*, 1942: 131, 1942; "Raymond L. Ditmars, Aspects of an Extraordinary Career," by H. F. Osborn, *Anim. Kingdom (Bull. New York Zool. Soc.)*, 45: 82-84, 1942; "Raymond L. Ditmars. His Exciting Career," by L. N. Wood, *J. Messner Inc.*, New York, x, 272 pages, 1944; "Raymond Lee Ditmars," by C. H. Pope, *Dict. Amer. Biogr.*, suppl. 3: 228-229, 1973; "The Herpetologists—Part I," by R. Pinney, *Herp. Bull. New York Herpetol. Soc.*, 15(2): 27-43, 1980. • *Portrait* (1930s): Carnegie Museum, courtesy M. Graham Netting. • *Signature* (1929): Courtesy Roger Conant.

### RUTHVEN, Alexander G. (1882-1971).

Alexander Grant Ruthven, one of America's most influential herpetologists who later became President of the University of Michigan, was born in Hull, Iowa, near the South Dakota border, on 1 April 1882. After graduation from Morningside College in Sioux City, Iowa (B.S. 1903), he entered the University of Michigan to study with the ecologist Charles C. Adams. His doctoral thesis, for which he earned a Ph.D. in 1906, was later published as "Variations and Genetic Relationships of the Garter-Snakes" (1908), a work that had a profound influence in herpetology. Ruthven's scope was a single, well-defined genus and he thereby set the standard for a new style of Ph.D. thesis. Moreover, since many species of *Thamnophis* are common, he had a very substantial sample size which required the development of statistical methods in order to visualize geographic changes in scutellation. This enabled Ruthven to pioneer the use of biometric methods in herpetology.

After finishing his doctorate, Ruthven joined the staff of the Museum of Zoology at the University of Michigan as

Curator of Herpetology and, concurrently, Instructor in Zoology (1906). Eventually, he became Director of the Museum (1913), Professor (1915), and Chairman of the Department of Zoology (1927). The main structure of the present museum building was erected under his supervision, and under his directorship the museum became the leading center for graduate training in herpetology. The program of research, teaching, publication, and field work was clearly patterned after the plan laid down for the Museum of Comparative Zoology at Harvard College by Louis Agassiz; indeed, the principal herpetologists at the two institutions, Ruthven and Thomas Barbour, maintained the closest personal relationship and had a regular weekly correspondence for nearly two decades. As part of this development of herpetology at Michigan, Ruthven was instrumental in having editorship of the journal *Copeia* headquartered in the museum, beginning in 1930.

While he worked at the museum, Ruthven had numerous students, including Frank N. Blanchard, M. Graham Netting, Arthur I. Ortenburger, and Olive G. Stull, but he became President of the University of Michigan in 1929 and thereafter he had less time for herpetology and supervision of students. Fortunately, he had an able assistant in Helen T. Gaige, who joined Ruthven's staff in herpetology in 1910 and who became Curator of Amphibians in 1923. When Ruthven was named president, Gaige assumed responsibilities for the herpetology program and the day-to-day supervision of Ruthven's Ph.D. students after 1929: Joseph R. Bailey, Charles E. Burt, Norman E. Hartweg, James A. Oliver, Laurence C. Stuart, and Charles F. Walker. Three of these students—Hartweg, Stuart, and Walker—were to



*Alexander G. Ruthven*