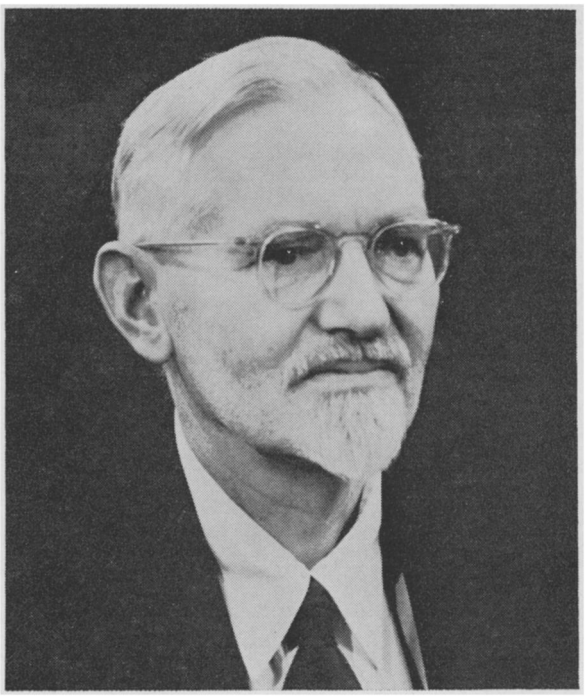
LEE R. DICE, EMINENT ECOLOGIST FOR 1964



Dr. Lee Raymond Dice was born in Savannah, Georgia, on July 15, 1887, thirteen years before the rediscovery of mendelian genetics and 28 years before the birth of the Ecological Society of America. Although his contributions to the development of Ecology have been diverse, Dr. Dice's greatest contribution has been in the area where the interests of geneticists, systematists, and ecologists overlap and become one.

Dr. Dice received the A.B. degree from Stanford University in 1911, and, after spending two years as deputy fur warden in the Alaskan Fisheries Service, he attended the University of California, where he received the M.S. degree in 1914 and the Ph.D. in 1915. After spending the years 1915-17 at Kansas State College and 1917-18 at the University of Montana, he went to the University of Michigan in 1919 as Curator of Mammals in the Museum of Zoology, and the rest of his long career has been spent at that university. In 1934 he became Director of the Laboratory of Vertebrate Genetics (later to become the Laboratory of Vertebrate Biology); in 1957 he became Emeritus Professor of Zoology and he has continued an active research program.

Dr. Dice's early publications reflect his interest in relating the distribution of mammalian species to the distribution of plant communities, and publications of this nature resulted from his stays in Alaska, Kansas and Montana, and from his early years at Michigan. A major turning point in his research career stemmed from an expedition he headed in 1927 to collect mammals in the Tularosa Basin and adjacent Sacramento

Mountains of New Mexico. There he saw firsthand the striking correlation between pelage color of mammals and soil color in an area where soil colors vary tremendously within short distances. A second major turning point was his decision to accept and expand the stocks of **Peromyscus** that F. B. Sumner, who had pioneered evolutionary work with this group, found it necessary to discontinue. The Laboratory of Vertebrate Genetics, originally devoted to house-mouse genetics, became a laboratory of **Peromyscus** biology, devoted in large part to measurement of geographic and microgeographic variation of populations in relation to environmental variables, particularly those of soil color. One of the most widely cited results of this work is his 1937 publication with Philip M. Blossom entitled, "Studies of mammalian ecology in southwestern North America with special attention to the colors of desert mammals" (Carnegie Inst. Wash. Publ., No. **485**). This and a long sequence of papers published mostly in the Occasional Papers of the Museum of Zoology and in the Contributions from the Laboratory of Vertebrate Biology clearly demonstrated the sensitive relationship between genotype and environment, and as a consequence our concept of species and of subspecies could never again be the static one of nineteenth century systematists. Perhaps of equal importance is the fact that his establishment of a laboratory of living "specimens" rather than museum ones stimulated many generations of his graduates students to concern themselves with the **in vivo** and populational attributes of a complex group of organisms.

Investigation of natural populations of mammals through mark and recapture methods had its U. S. beginnings, preceded only by Dennis Chitty's pioneer work in England, under his stimulus. Behavioral studies, including those pertaining to behavioral isolating mechanisms, have found fertile ground in which to flourish in his laboratory, and since his formal retirement he has devoted his time to comparative behavioral studies of **Peromyscus.**

Dr. Dice has had a long continuing interest in biogeography and in orderly expression of the major patterns formed within the continuum of organisims and physical environment. His early disenchantment with the Life Zone concept of Merriam and his followers, with its overly simplified base, was expressed in a 1923 paper entitled, "Life zones and mammalian distribution" (Jour. Mammalogy, Vol. 4). He contributed a more realistic classification in 1943 with his publication of "The Biotic Provinces of North America" (Univ. Michigan Press). He summarized his ecological thinking in 1952 in a book ("Natural Communities," Univ. Michigan Press) written simply and straightforwardly and essentially without the jargon that has plagued so much of ecological writing.

Throughout his career, Dr. Dice has felt the responsibility of the ecologist to speak out on matters of public affairs that are within his professional competence. He spoke out strongly against the predatory animal control and rodent control programs of the U. S. Biological Survey as being carried out in ignorance of their real effects (Jour. Mammalogy, 1925; Bird Lore, 1938). He took the chief of the Biological Survey to task (American Forests, 1939) for an article blaming montane erosion in the West on pocket-gophers without any basis in scientific evidence. In 1926, at a time when human population pressures were infinitely less than they are today, he was urging the establishment of state preserves in his adopted state of Michigan (27th-28th Ann. Repts. Mich. Acad. Sci. Arts, and Letters, 1926).

Dr. Dice has served many scientific societies and has been honored by many. Not the least of these was his presidency of the Ecological Society of America in 1953. Now it is our pleasure to bestow on him the highest honor that our society can bestow — Eminent Ecologist for 1964. (Citation by W. Frank Blair, Chairman, Committee on Nominations.)