ALFRED EDWARDS EMERSON, *EMINENT ECOLOGIST—1967*

Alfred Edwards Emerson was born in Ithaca, New York on 31 December 1896. He received all his collegiate education at Cornell University (B.S., 1918; M.A., 1920; Ph.D., 1925) and taught zoology at the University of Pittsburgh until 1929. That year he joined the faculty of the Department of Zoology at The University of Chicago where he remained until his retirement in 1962. Indeed, Alfred Emerson, and his charming wife Eleanor, still return to the University each January for a visit of three months. The purpose of this migration from East to Midwest is not, oddly enough, to savor our salubrious winters but, rather, to pursue research, to use the libraries, and to enjoy concerts and good conversation.

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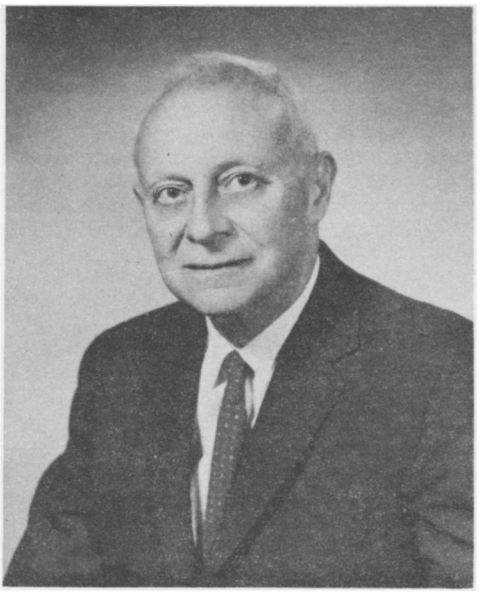

Alfred Edwards Emerson

Numerous, and noteworthy, honors have come to Dr. Emerson. I mention a few. He is a member of the National Academy of Sciences. He was a Guggenheim Fellow. He was awarded an honorary degree (Sc.D) from Michigan State University. He helped organize the Society for the Study of Evolution and became its President in 1960. In 1958 he was President of the Society for Systematic Zoology. And it is especially relevant to record here his great contributions to the growth and health of the Ecological Society of America: its Secretary-Treasurer in 1931; its Editor of *Ecology* from 1932 through 1939, and its President in 1941.

I go back in time. As a young man Alfred Emerson visited the Tropics. This generated an impression that is quite as vivid today as it was many years ago. It also introduced him to "termites"—a group he loves and understands and a group, I have come to believe, that reciprocates this feeling in some arcane way. Emerson's collecting, and museum trips, have taken him to most parts of the globe: Central and South America; the Caribbean; islands of the Pacific; parts of Asia, Africa, and Australia, and much of Europe and Britain. Always he has travelled as the professional scientist. But always, too, he has travelled as a perceptive and informed citizen of the world. A great deal of lasting value has come from these expeditions. Lasting, not only in the sense of accurate collecting, but even more in the sense of subsequent, and beautifully meticulous, taxonomy which has been invariably followed by analysis, generalization, and publication. The broad theme is evolution and phylogeny. The tools are systematics, intelligence and hard work.

To devote a lifetime to one major group should mean that the group possesses certain unique properties. It is quite obvious that Dr. Emerson recognized immediately that termites, and their colonies, are intrinsically interesting in their own right. But it is also clear from his writings, especially the later ones, that he found in termites certain attributes which lent themselves to the study of a variety of phenomena—phenomena of significance beyond the organisms themselves. Although it is inappropriate for me to dwell on this matter, I do wish to list three such attributes which I find personally appealing. The three, shamelessly pirated from Emerson, are as follows:

(1) There are many (often sympatric) species of termites within many higher taxa yet the taxonomy of the Order (Isoptera), amazingly enough, is something like 90 per cent accurate; an accuracy probably not surpassed by any other group of plants or animals.

(2) The individuals of each species are organized as social populations with striking division of labor between castes. Owing to the nature of this caste system, it is possible to separate stabile (and sometimes nonfunctional) characters from functional characters undergoing relatively rapid evolution. As Emerson has said: "The ability to study 'bradytelic' and 'tachytelic' rates of evolution within the same genotype offers an opportunity for analysis of processes."

(3) Termites live in favorable environments which they themselves construct, monitor, regulate, and defend through their own specialized behavior. Such habitats, fascinating for study in their own right, are also domiciles for a variety of other organisms which have *evolved* over millions of years to function, often mutualistically, within the termite society.

I now mention the "Emerson Collection." This will eventually become the property of the American Museum of Natural History where it will be available in perpetuity to serious scholars. The collection is remarkable. Since 1778 about 1700 living species and 75 fossil species of termites have been named and described. As of 1962, the Emerson Collection contained 1580 of these species or 89 per cent of the World's fauna! Also in the collection are numbers of new species awaiting study. Thus, through Dr. Emerson's generosity and prescience, Society gains a legacy of enduring value.

My tribute to Dr. Emerson would be incomplete without a word regarding his talent as a teacher. His record of teaching undergraduate students is long and distinguished. In his classes he encouraged dialogue; the creation of an intellectual climate that was polemic yet rational. Meritorious as this is, however, I think Emerson's greatest teaching achievement has been his ability to frequently convince advanced students that every biological phenomenon has an evolutionary dimension. The consequence of this has been to broaden the perspective of the student in such a way as to make his later research more meaningful. I would thus conclude that Dr. Emerson qualifies as a "teacher" in the true sense of the word rather than as an "educator."

Enough of Professor Emerson the scientist and teacher. Now, and perhaps tersely, a few reflections about Dr. Emerson the man. Happily, I cannot testify that he is a paragon. But I avoid here his shortcomings even though, later, he may

quietly question me about them. His virtues are many but, again, to catalogue them would be tiresome and unduly lengthy. However, Alfred Emerson has three characteristics in full measure which I greatly admire quite apart from my respect for his scholarship. These are modesty, tolerance, and bravery. He is modest in the sense that, while he justifiably is proud of his own accomplishments, he is never egocentric. He is tolerant in the sense that he respects any view contrary to his own provided that the view is sincere. He is brave in the sense that he defends his principles against all comers. He is brave, too, in the face of adversity to which he is no stranger.

It is a personal pleasure and an honor to present Alfred Edwards Emerson for the distinguished award of "Eminent Ecologist."

Thomas Park
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