Memorial to Everett C. Olson
1910–1993

ERNEST L. LUNDELIUS, JR.
Austin, Texas

On November 26, 1993, the disciplines of vertebrate paleontology and geology lost one of their most creative leaders with the death of Everett C. Olson at his home in Los Angeles. His career spanned nearly 60 years, during which he was a major contributor to the fundamental conceptual changes taking place at that time in the earth and biological sciences. Olson was born in Waupaca, Wisconsin, in 1910, and developed an early interest in collecting biological specimens. He entered the University of Chicago to major in chemistry but was lured into geology and paleontology by J Harlan Bretz and Alfred S. Romer. It was this broad background that prepared him for much of his later work on the Permian vertebrates and faunal evolution. He became a faculty member at Chicago in 1935 when Romer left for Harvard. In 1939 he married Lila Baker, who became a frequent companion in the field throughout their life together.

Olson's work on the Permian started with the upper part of the deltaic sequence in north-central Texas. Romer had long worked in the lower part of the sequence from the lower Clear Fork group and upper Wichita group downward into the lower Wichita of earliest Permian age. Olson worked upward from the lower Clear Fork through the overlying Vale and Choza formations. Though they were considered to be unfossiliferous, he was successful in recovering material from the upper part of this section. At this time he began investigations into the relationships of the fossils to the sediments in which they were found. Careful attention to the sedimentary facies allowed the construction of a more detailed picture of the terrestrial paleoenvironments, their changes, and the response of the fauna to these changes through a long period of time. This led to the formulation of the idea of the “chronofauna,” a term attributed by him to his friend Bryan Patterson. He also focused on the conditions of preservation of the fossils, making him an early proponent of the principles of taphonomy, an area pioneered by the Russian paleontologist Ivan Efremov.

Fossils collected from the San Angelo formation seemed to be more similar to those of the Old World than to North American fossils. This led Olson to a consideration of the relationships of the North American Permian faunas to those of Russia. During the politically delicate era of the 1950s and 1960s he made several trips to Russia to consult Russian colleagues. As a result, he established lifelong friendships with several Russian paleontologists, particularly Ivan Efremov. He became one of the few scientific links with Russian scientists during the period of the Cold War.

Olson pioneered the use of statistics to investigate problems of growth of poikilothermic vertebrates, which do not have discrete adult sizes as do mammals and birds. His quantitative studies of the organization of anatomical structures resulted in the publication of a book with Robert Miller, Morphological Integration. This was functional morphometrics before there were computers to do the hard work. With the advent of modern computers these ideas are experiencing a renaissance.

Ole, as he was known to his students after the Second World War, had 37 graduate students during his career. He probably trained more professional vertebrate paleontologists than any
other person. He started the interdisciplinary Committee in Paleozoology at Chicago, which was
one of the first of such programs. He often credited his students with teaching him. Formal
classes in vertebrate paleontology took place in an alcove in the collection range at the Field
Museum, where access to specimens was convenient. This was a conventional, well-ordered
class, although questions and discussions were encouraged. Another, very unconventional but
very important, part of his teaching took place during the morning and afternoon coffee breaks
in the preparation lab of Walker Museum. All kinds of topics were discussed at these sessions,
from vertebrate paleontology to philosophy and politics.

He gave his students very wide latitude in their thesis and dissertation topics, a reflection of
his own broad interests in vertebrate paleontology and evolutionary biology. This breadth of
interest and openness to new ideas lasted to the end of his life. He wrote the foreword to the first
compact disc publication in vertebrate paleontology (T. Rowe, W. Carlson, and W. Bottorff,
diately grasped the significance of this new technology for the dissemination of scientific infor­
mation and was eager to see it go forward. He became involved in the area of molecular evolu­
tion and sponsored a conference on the topic (1986).

Olson left the University of Chicago in 1969 to take up a position as chairman of the newly
organized Department of Biology at the University of California, Los Angeles. Here, he showed
considerable administrative skill in getting a diverse group of people to work together.

He was a charter member of the Society of Vertebrate Paleontology and served as its presi­
dent in 1949-1950. From 1986 to his death he served on the Development Committee of that
organization and was crucial to its success in establishing a permanent endowment fund. He was
a fellow of the Geological Society of America and a member of the Society for the Study of Evo­
lution (president 1964), American Society of Systematic Zoology (president 1979), American
Geological Institute (board of directors 1948-1949), American Association for the Advancement
of Science, American Society of Zoologists, and National Academy of Sciences. He was editor of

**SELECTED BIBLIOGRAPHY OF E. C. OLSON**

1944 Origin of mammals based upon cranial morphology of the Therapsid suborders: Geologi­
Transactions, ns., v. 52, pt. 2, 224 p.
1975 Permian lake faunas: A study in community evolution: Paleontological Society of India
Journal, v. 20, p. 146-163.
1981 The problem of missing links: Today and yesterday: Quarterly Review of Biology, v. 56,
p. 405-442.
1986 (and Brunk, C. F.) The evolutionary synthesis today: An essay on paleontology and molecu­