MEMORIAL

RALPH WILLARD IMLAY (1908–1989)

Ralph W. Imlay, one of the world's most distinguished authorities on Jurassic and Lower Cretaceous ammonites, bivalves, stratigraphy, and paleontology, died on March 4, 1989, in Santa Barbara, California, at the age of 81. Ralph led a brilliant and productive life equalled by few in American paleontology. The scientific excellence of his work, based on meticulous collection and interpretation of data, has served as a model to generations of students and colleagues that have followed his footsteps through the Americas and the Caribbean Province.

Ralph was born on February 21, 1908, in Hampton, Iowa, and shortly afterward his family moved to Reed Point, Montana, where he received his primary and secondary education. He attended The University of Montana, receiving his B.Sc. in Geology in 1930, and then moved to the University of Michigan where he studied with the renowned E. C. Case and L. B. Kellum. This was the time that Kellum was engaged in his pioneer geological and biological studies of interior Mexico. Through his Doctoral thesis work and subsequent contributions, Ralph became an integral part of the University of Michigan's Mexican Research Team, having primary responsibility for Jurassic and Lower Cretaceous regional geology, stratigraphy, and paleontology. His research in Mexico was to become the first comprehensive study of the middle Mesozoic in this region. It had such a profound and lasting impact on the geological development of that nation that, in 1968, Ralph was made an Honorary Professor of Geology at the University of Mexico. This award was only the fourth such honorary professorship to be granted in the history of this, the oldest University in the Western Hemisphere, since its establishment in the 1500's.

Ralph received his Ph.D. from the University of Michigan in 1933, and after two years of teaching at Rutgers and four years at Michigan, he joined the Paleontology and Stratigraphy Branch of the U.S. Geological Survey in Washington, D.C. Initially, he continued his pioneering work in Mexico as part of the U.S. Government's Point 4 Program. In 1940, Ralph began entirely new research on the Jurassic and Lower Cretaceous of the United States Gulf Coastal Plain and nearby Caribbean islands. Through integration of surface and subsurface data Ralph delineated the complex Mesozoic geologic history of this important province. He was subsequently a leading figure in the formulation of the Geological Society of America-sponsored correlation charts for this region as well as for Mexico, Central America, and the Jurassic of North America. In 1945, Ralph began a 38-year investigation of the Jurassic stratigraphy, paleontology, and paleogeography of the Western Interior, Pacific Coast, and Alaska regions of North America, which culminated in his world-known synthesis The Jurassic Paleogeography of the Conterminous United States and its Continental Setting, published as U.S. Geological Survey Professional Paper 1062.

Ralph's international reputation as a Mesozoic paleontologist and stratigrapher led to a series of justly deserved awards, including an honorary Ph.D. from the University of Montana in 1959, his election as President of The Paleontological Society in 1964, his Honorary Professorship at the University of Mexico in 1968, and his receipt of the U.S. Department of the Interior's highest honor, the Distinguished Service Award, in 1974. He was an elected Fellow of the Geological Society of America and



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the Society of Economic Paleontologists and Mineralogists; he was an early moving force in the JOIDES Deep Sea Drilling Program and an original member of its Paleontology and Stratigraphy Panel. In 1982, during his last year of reasonably good health, Ralph, along with J. A. Jeletzky, was honored with a special Symposium at the Third North American Paleontological Convention, in Montreal, Canada (Geological Association of Canada Special Paper 27, 1984).

Ralph Imlay's contributions to our science were especially immense in the fields of systematic paleontology, biostratigraphy, paleogeography, and regional geology. His impact was far greater than the more than 100 major publications, 2,500 pages, and innumerable maps and charts he published. He will long be remembered as a one-man service organization for field geologists working in Jurassic and Lower Cretaceous rocks throughout North America. Identifying fossils, interpreting stratigraphy and paleoenvironments, providing dates and precise correlations, and generally counseling the geologists of the North American Jurassic community was Ralph's passion for over thirty years. Evidence of this service and his hidden impact on our science lies among the reams of unpublished reports for field geologists, housed in the files of the U.S. Geological Survey, that, in magnitude, exceed his published work.

Ralph described and named more molluscan species, and had more named after him, than almost any single Mesozoic pale-ontologist now alive. The material he described was almost all collected by himself. He was an indefatigable field geologist with a great love for the natural beauties of the areas in which he worked. Even when not in the field he spent many weekends with his wife Bertha, camping and hiking the trails of the nearby

Appalachians. He took pride in having seen and personally collected from virtually every major area of Jurassic exposure from Alaska to the Cordillera of Mexico. Hopefully, a new generation will produce a successor that will match the breadth of his field experience and be so willing to share his knowledge.

Ralph retired from the U.S. Geological Survey in 1983, but remained an active member of the research community as a Senior Scientist (USGS) and Honorary Research Associate of the Smithsonian Institution until 1986, when poor health forced

him to leave Washington to spend his final years with his family. He is survived by his three sons, Mark, Richard, and Gary.

We have lost a giant in our science. His excellence and dedication to paleontology are sorely missed.

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