

Memorial to Jasper Leonidas Stuckey 1891-1979

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North Carolina lost its most widely known geologist on August 1, 1979, with the death at age 88 of Dr. Jasper L. Stuckey. He had devoted essentially his entire adult life to the study of North Carolina geology and to development of its mineral resources. For nearly 60 years, he had been a state investigator and administrator, a college professor, and an author whose work focused on his native state. No other person has had so great an effect on publicizing and promoting the use of North Carolina's mineral wealth.

Jasper Leonidas Stuckey was born on 24 July 1891 on a small farm in easternmost Johnston County, North Carolina. His parents were John Haywood Stuckey and Betty Eliza (Bunn) Stuckey; he was the oldest of seven children. During his boyhood, he at-

tended the local rural school and worked on his father's farm. He graduated from the Smithfield (N.C.) high school in May 1914 and entered the University of North Carolina that fall. Through the chance influence of Professor Collier Cobb, he majored in geology. During 1917-1918, he was superintendent of a lime plant at Bridgeport, Tennessee, operated by the North Carolina Department of Agriculture; while employed there, he completed his A.B. degree requirements by correspondence.

In 1918-1919, Stuckey served as a rifleman in the 81st Division, American Expeditionary Forces in France. During the spring of 1919, he studied at Grenoble University.

Following his discharge in July 1919, he re-entered the University of North Carolina and obtained the A.M. degree in 1920. He was employed by Colonel J. H. Pratt, State Geologist, as an assistant geologist on the North Carolina Geological and Economic Survey during 1920-1921 and also during the summers of 1922 and 1923; from January to June of 1921, he was also an instructor in geology at the University. He assisted Professor W. S. Bayley of the University of Illinois during the summer of 1921 on a U.S. Geological Survey investigation of iron ore in Cherokee County. Bayley convinced Stuckey that he needed further training, and so that fall he entered Cornell University. He worked chiefly with Dr. H. Ries in economic geology and with Dr. A. C. Gill in mineralogy and petrography. He was a laboratory assistant in 1921-1922 and an instructor in 1922-1924. His dissertation was concerned with the Carolina Slate Belt and the pyrophyllite deposits in Moore and Chatham Counties. Cornell awarded him the doctorate in June 1924.

Returning to North Carolina, Stuckey was again employed as assistant geologist on the North Carolina Geological and Economic Survey, and Raleigh became his residence for the remainder of his life. He became State Geologist in 1925 in the newly formed Department of Conservation and Development; he was Acting Director of the department from August to December of 1925. During 1924-1926 he extended his pyrophyllite

study; investigated sand, stone, brick clays, feldspar, and kaolin; and prepared a summary of the state's mineral industry for 1918 through 1923.

In September 1926, Stuckey was appointed Associate Professor of Geology in the Agronomy Department at North Carolina State College of Agriculture and Engineering. In the following year, he became Professor of Geology and Head of the newly formed Department of Geology. Except for student laboratory assistants, he was the sole member of the department until 1935. For nearly a decade, he taught all of the geology courses for a B.S. program in geology and for numerous non-majors, as well as giving special work for ceramic and mining engineering students. After the mid-1930's, with gradual additions to the staff, Stuckey concentrated on economic geology, mineralogy, and petrography, always his chief interests. He actively carried on instruction by means of correspondence courses and by off-campus evening extension classes in the eastern part of the state.

Stuckey was again asked in 1940 to become State Geologist on a part-time basis in addition to his college position. Throughout his time at State College, Stuckey carried a heavy load of administrative and committee work, as well as student advising and teaching. Nevertheless, he continued investigation of mineral deposits across the state and produced numerous publications.

The Department of Geology in 1954 was absorbed into a new department, and Stuckey's college administrative activities ended. In July 1955, he took leave of absence from the College and resumed full-time status as State Geologist.

When Dr. Stuckey became State Geologist on a part-time basis in July 1940, state support of geological and mineral resource work was at a low ebb. Appropriations were less than \$8,000, and his staff included, besides himself, only an assistant geologist, a chemist, and a stenographer-clerk. As the war in Europe intensified the demand for information on strategic and critical minerals, he attempted by various means to expand the work of his division and sought collaboration with other agencies. As a consequence, Tennessee Valley Authority financed cooperative investigations between 1941 and 1953 on various western mineral resources. Also beginning in 1941, and continuing for many years, a cooperative program with the U.S. Geological Survey resulted in many detailed maps and reports, initially on pegmatite minerals and later on others across the state. These projects stimulated a revival of interest by many individuals and organizations in the geology of the state and region.

Concurrently with the minerals program, Dr. Stuckey was able to initiate cooperative studies with the U.S. Geological Survey on ground water. Reports covering almost every county were issued between 1941 and 1959, before this work was transferred to the new state Department of Water Resources. Dr. Stuckey also served during 1941-1943 as Federal Emergency Coordinator of Mines for North Carolina.

Because of the World War II shortage of steel, Governor J. M. Broughton hired the H. A. Brassert and Company engineering firm to study the state's iron, coal, and olivine resources. Dr. Stuckey was designated to coordinate and assist the survey. This led to drilling by the U.S. Bureau of Mines on several iron deposits and the Deep River coal field in 1943-1944, and to later Bureau projects on other minerals.

In 1946, Dr. Stuckey became first Director of the Minerals Research Laboratory in Asheville, established by the state and TVA to provide mineral beneficiation studies to help the region's industry. Its work was an immediate success; it revolutionized the feldspar industry and made significant contributions to utilization of many other minerals. When TVA withdrew its financial support in 1954, direction of the laboratory was transferred to the Department of Engineering Research at North Carolina State Col-

lege, but Dr. Stuckey continued to influence its operations as a member of its Advisory Committee for the rest of his life.

Dr. Stuckey's persistent efforts through the Board of Conservation and Development during the 1950's and 1960's gradually resulted in increased appropriations. These permitted modest staff increases, the establishment of a regional office in Asheville at the Minerals Research Laboratory, more rapid extension of topographic mapping, and conduct of mineral commodity studies and detailed geologic mapping. A landmark accomplishment of this period, one in which Dr. Stuckey felt great satisfaction, was the publication in 1958 of the Geologic Map of North Carolina at scale of 1:500,000 with its descriptive text, of which he was senior author.

A large phosphate deposit in Beaufort County, discovered as a consequence of the cooperative ground-water program with the U.S. Geological Survey, attracted industrial interest in the early 1960's. Dr. Stuckey was made responsible by the Board of Conservation and Development for the leasing of state-owned lands beneath the Pamlico and Pungo Rivers. His assistance and cooperation with industry were credited as a significant factor in starting the phosphate industry in North Carolina.

Dr. Stuckey retired as State Geologist on 16 July 1964, but at the request of the Board of Conservation and Development, he remained with the Division of Mineral Resources in a consulting capacity. He completed his comprehensive treatise, *North Carolina: Its Geology and Mineral Resources* in May 1965. Although he officially retired from the Division in March 1965, he continued to work there on an informal basis. During the next 11 years, he completed an updated bulletin on pyrophyllite, a review of the state's mineral industry from 1960 through 1967, and a summary report of the 1943 Brassert survey. During his career, he was author and co-author of more than 50 publications, essentially all of which were devoted to North Carolina geology and non-metallic minerals.

Dr. Stuckey was directly responsible for transforming the Division of Mineral Resources into an effective state geological survey whose work is held in high esteem by the professional community and which has contributed significantly to the enrichment of the people of North Carolina.

Not content to rest, Dr. Stuckey continued an active interest in professional practice up into his last year. He was frequently employed as a consultant in various matters, notably regarding ground-water supplies and geological factors affecting sites of nuclear power plants. His wide knowledge of the state, his good judgment and sound common sense, and his unquestioned honesty and modest self-confidence made his work and opinion widely sought.

Among the many professional organizations to which Stuckey belonged, those in which he took most active interest were the American Institute of Mining Engineers (member 1929; chairman of Eastern North Carolina subsection, 1957 and 1969; Legion of Honor, 1979), Geological Society of America (Fellow, 1933; vice-chairman of Southeastern Section, 1952-1953; and chairman, 1964-1965), North Carolina Academy of Science (member, 1926; President, 1941), Carolina Geological Society (charter member, 1937; President, 1947), Society of Economic Geologists (member, 1933), Mineralogical Society of America (Fellow, 1939), Association of American State Geologists (member, 1940; President, 1958-1959), and mineral collectors clubs. He was a charter member of the Civitan Club of Raleigh (its President in 1933-1934) and a member of the Torch Club, Executives Club, Sigma Chi, and the Masons. His honorary societies included Sigma Gamma Epsilon, Phi Kappa Phi (President of North Carolina State College chapter 1934-

-1935), Sigma Xi (President of North Carolina State College club 1938-1939), and Kermos. He received the North Carolina Distinguished Citizens Award in 1964, was granted an honorary Doctor of Science degree in 1965 by North Carolina State University, and was made an honorary member of the Association of Engineering Geologists in 1978.

After being active in the Methodist Church much of his life, he became converted about 1951 to the Church of Jesus Christ of Latter Day Saints. He was Patriarch of the Raleigh Stake after 1962; in 1975-1976, he served a missionary term at the Mormon temple in Washington, D.C.

Dr. Stuckey married in 1920 Anabel Stephenson of Smithfield, North Carolina. She died in 1935; they had no children. He married in 1936 Gladys I. Brinkley of Stem, North Carolina. They had one son, William Jasper Stuckey, born in 1942. Dr. Stuckey died of cancer on August 1, 1979, following a three-month illness. He was buried in Montlawn Memorial Park in Raleigh. He is survived by his wife, his son, one sister, and one brother.

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