

Memorial to Arle H. Sutton 1896-1972

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Dr. Arle Herbert Sutton was born at Jonesville, Indiana, on August 4, 1896, and died on October 9, 1972, at his home in Columbus, Indiana. He was preceded in death by his wife Ilah in 1960. His surviving family consists of two brothers and one sister.

Arle was the second son of a family of five boys and five girls who grew up on a farm near Jonesville. As a youngster, he worked on the farm, but his work was interrupted by service in the U.S. Army in 1918 to 1919.

His early education was attained in a small rural Indiana school, but his high school years were spent at Columbus High School, ten miles north of the family home. He continued his Indiana education receiving an A.B. degree from Indiana State Teachers College in Terre Haute in 1921.

His first job was as a teacher and basketball coach at Rushville High School, Indiana, in the early 1920s. When school at Rushville opened in the fall of 1921, Coach Sutton found an atmosphere of defeatism among the students and apathy concerning the basketball team, which had no regulars returning to it from the previous year. Sutton turned out to be a remarkable coach. In the first year, he won 24 out of 30 games and in the second year, 29 out of 33; his team outscored opponents 1,053 points to 580. With an inexperienced team from a small town school, Rushville entered the state tournament winning the district and regional meets, but losing the state tournament by one point. Some of the scores are interesting—particularly in this day of high scoring basketball: Rushville-38—Opponents-3; Rushville-39—Opponents-3. Sutton was long remembered at Rushville High School as the man who put them on the basketball map of the state of Indiana.

In 1924 to 1925, he spent a year as assistant professor of geology at Colorado College, Colorado Springs, Colorado. Leaving Colorado College in 1925, he entered the University of Chicago to work under Dr. Stuart Weller. There he received a Ph.D. degree in 1927. He accepted a position as assistant professor of geology at the University of Illinois in the fall of 1927 and remained on the staff until the fall of 1946, at which time he resigned to become Chief Geologist for the Mining Division of Alcoa in Pittsburgh, Pennsylvania, where he remained until his retirement in 1958.

In June of 1929, Arle married Ilah Mendenhall of Pennville, Indiana. This was a happy marriage; though it did not result in children, Arle and his wife had many

things in common, the love of travel and sports, especially golf. Ilah was an excellent golfer and the two spent much of their time participating in this sport. In addition, they were both excellent bridge players. Arle's early love for basketball carried over into his years at the University of Illinois where he served for some time on the University Faculty Athletic Committee. Upon his retirement to Columbus, he and Ilah were the most enthusiastic fans at the local high school games. In addition to sports, he found an outlet in a farm which he purchased just south of Columbus. He constructed two lakes on the land, built up a herd of cattle and found many leisurely moments in farm life. He was always interested in local and civic affairs, especially the Baptist Church and the Masonic Lodge.

The senior writer (Scott) was a student of Sutton's at the University of Illinois and has firsthand knowledge of the quality of his teaching. He was an excellent teacher, quiet and unassuming in his approach, and he taught not only from the literature, but he also drew heavily upon a wealth of information gained from his own field experiences, especially in western and central Kentucky.

Undoubtedly through the influence of Stuart Weller, Sutton joined the Kentucky Geological Survey as a summer field geologist and continued this work for many years. He concentrated upon Mississippian rocks, and this resulted in several papers in paleontology and stratigraphy.

During his career, he published 34 papers. In the 1920s, he concentrated on the production of geological maps on the state of Kentucky, primarily Hardin, Meade, Christian, and Hopkins Counties. In the 1930s through the 1940s, he concentrated more upon paleontology and stratigraphy. Among the outstanding contributions were those on Chesterian stratigraphy and the classification of the Productidae. In addition, he worked on both Devonian and Silurian stratigraphy in the Midwestern region. After leaving the University of Illinois for commercial work, most of the remainder of his publications pertained to the fluorspar district of southern Illinois and Kentucky.

In the summer of 1941, he was employed as Consulting Geologist by the Fluorspar Division of the Aluminum Company of America, working out of the Rosiclare, Illinois, office. His principal assignment was to discover new reserves of fluorspar, and in this attempt he most effectively and successfully applied his knowledge of structure and stratigraphy gained largely from earlier field experience. He was so successful in his endeavor that the company offered him permanent employment in 1946.

This proposal confronted him with a major problem. Should he accept this fine opportunity to spend the rest of his professional career in commercial work or, now that the war was over, should he return to an active status on the staff at the University of Illinois? It had always been his intention to return to academic life because he had thoroughly enjoyed his earlier years of university work. But when, in his negotiations with the university, his extremely reasonable and modest request for salary increase was not met, he decided to stay with industry. The senior author was present at the time the negotiations were held, and he has commented many times that, "The university lost so much for so little."

He was always ready and willing to work with his students, and they in turn always considered him a loyal and highly respected advisor. They have frequently recalled the many personal things he did to help them in times of need. He was a very generous and sympathetic person and had many friends among the faculty, students, and townspeople. He was always willing to serve on local and university committees and to carry more than his share of the load.

Arle Sutton contributed much to the welfare of society. He was an excellent teacher, a sound research scientist, a dedicated public servant, and a man who had the respect of his profession both in academics and industry. If one accomplishment was to be cited which had the greatest effect upon the most people, it would probably have to be his discovery of major deposits of fluorspar. With these discoveries, he was able to furnish industry with some of its basic raw materials and thereby contribute his share to the welfare of human beings.

BIBLIOGRAPHY OF A. H. SUTTON

- 1927 Map of the geology of the Dawson Springs quadrangle, Caldwell, Hopkins, and Christian Counties, Kentucky: Kentucky Geol. Survey, ser. 6, scale 1:62,500.
- (with Romer, A. S.) A new arctoid carnivore from the lower Miocene [Wyoming]: Am. Jour. Sci., 5th ser., v. 14, p. 459–464.
- (with Weller, S., and Crider, A. F.) Map of the area and structural geology of Caldwell County, Kentucky: Kentucky Geol. Survey, ser. 6, scale 1:62,500.
- 1928 Preliminary map of the area and structural geology of Christian County, Kentucky: Kentucky Geol. Survey, ser. 6, scale 1:62,500.
- 1929 Geology of the southern part of the Dawson Springs quadrangle, Kentucky: Kentucky Geol. Survey, ser. 6, v. 31, p. 169–280.
- (with others) Geologic map of northern Hardin County, Kentucky: Kentucky Geol. Survey, ser. 6, scale 1:62,500.
- 1930 (with Wagner, Oscar Emil, Jr.) Geologic map of Meade County: Kentucky Geol. Survey, ser. 6, scale 1:62,500.
- 1931 A reconnaissance survey of the geology of northern Hardin County: Kentucky Geol. Survey, ser. 6, v. 37, p. 267–299.
- (with Wagner, Oscar Emil, Jr.) New species of Chester fossils: Jour. Paleontology, v. 5, no. 1, p. 23–33.
- Fracturing and movement in rocks without apparent displacement: Science, new series, v. 73, p. 263–264.
- A pre-Cretaceous soil horizon in western Kentucky: Am. Jour. Sci., 5th ser., v. 22, p. 449–452.
- 1932 (with Weller, James Marvin) Lower Chester correlation in western Kentucky and Illinois: Jour. Geology, v. 40, no. 5, p. 430–442.
- 1934 Stratigraphy of the Okaw in southwestern Illinois: Jour. Geology, v. 42, no. 6, p. 621–629.
- Evolution of *Pterotocrinus* in the Eastern Interior Basin during the Chester Epoch: Jour. Paleontology, v. 8, no. 4, p. 393–416; Illinois Acad. Sci. Trans. [abs.], v. 25, no. 4, p. 152; Geol. Soc. America Proc. [abs.], 1933, p. 370.
- 1935 Stratigraphy of the Silurian system of the Upper Mississippi Valley: Kansas Geol. Soc. Guidebook, 9th Ann. Field Conf., p. 268–280.
- Oviviparous reproduction of Miocene Turritellidae: Am. Midland Naturalist, v. 16, no. 1, p. 107–109; Illinois Acad. Sci. Trans. [abs.], v. 27, December 1934, no. 2, p. 118.

- 1937 4th annual Tri-State (Ill., Iowa, Wis.) geological field conference: Science, new series, v. 85, no. 2194, p. 76.
- 1938 Taxonomy of Mississippian Productidae: Jour. Paleontology, v. 12, no. 6, p. 537-569; additional note, v. 13, no. 4, p. 466, 1939; Geol. Soc. America Proc. [abs.], 1937, p. 289.
- 1939 (with Hagan, Wallace W.) Inadunate crinoids of the Mississippian; *Zeacrinus*: Jour. Paleontology, v. 13, no. 1, p. 82-96.
- (with Williams, John R.) Ostracoda from the Weches formation at Smithville, Texas: Jour. Paleontology, v. 13, no. 6, p. 561-574.
- 1940 (with Williams, John R.) New names for Weches Ostracoda: Jour. Paleontology, v. 14, no. 2, p. 163.
- Time and stratigraphic terminology: Geol. Soc. America Bull., v. 51, no. 9, p. 1397-1412.
- (with Winkler, V. D.) Mississippian Inadunata, *Eupachyocrinus*, and related forms: Jour. Paleontology, v. 14, no. 6, p. 544-567.
- (with Weller, J. M.) Mississippian border of Eastern Interior Basin: Am. Assoc. Petroleum Geologists Bull., v. 24, no. 5, p. 765-858; correction, no. 6, p. 1133.
- 1942 *Worthenella*, *Setigerella*, and new productid species: Jour. Paleontology, v. 16, no. 4, p. 464-470; correction with title, *Marginicinctus* versus *Worthenella*, no. 6, p. 777.
- 1943 (with Summerson, C. H.) Cardinal process of Productidae: Jour. Paleontology, v. 17, no. 4, p. 323-330.
- 1944 The Devonian system of Indiana, in Symposium on Devonian stratigraphy: Illinois Geol. Survey Bull. 68, p. 162-173.
- 1948 Memorial to Thomas Edmund Savage (1866-1947): Geol. Soc. America Proc. 1947, p. 173-176.
- (with Weller, J. M., and others) Correlation of the Mississippian formations of North America (chart no. 5): Geol. Soc. America Bull., v. 59, no. 2, p. 91-106.
- 1951 Ste. Genevieve-Chester contact in Illinois-Kentucky fluorspar district: Am. Assoc. Petroleum Geologists Bull., v. 35, no. 7, p. 1661-1668.
- (with Weller, S.) Geologic map of the western Kentucky fluorspar district: U.S. Geol. Survey Mineral Inv. Field Studies Map MF 2, with section and text, scale: 1: 62,500.
- 1952 (with Oesterling, W. A.) Lithologic character of Chester rocks in Illinois-Kentucky fluorspar district: Am. Assoc. Petroleum Geologists Bull., v. 36, no. 9, p. 1777-1801.
- (with Weller, J. M., and others) Geology of the fluorspar deposits in Illinois: Illinois Geol. Survey Bull., no. 76, 147 p.
- 1953 Fluorspar resources of the Southeast, in McGrain, P., ed., Proceedings of the Southeastern Mineral Symposium 1950: Kentucky Geol. Survey, ser. 9, Spec. Pub. no. 1, p. 139-149.