## Memorial to Wallace Woodrow Hagan 1913–1997

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Wallace W. Hagan, a director and state geologist of the Kentucky Geological Survey, died July 18, 1997, in Lexington, at the age of 84. He maintained an active role in Kentucky geology until his death. Warm humor, cheerful disposition, enthusiastic storytelling, and great knowledge of geology were his trademarks, and he is missed by all who knew him.

He was born in Griggsville, Illinois, February 3, 1913. Upon the untimely death of his father, Wally's mother, Mabel Hagan, moved with her two sons, Wallace and Richard, to Urbana, Illinois, where the boys attended public school. For a time, the Hagan family had a small apartment in the Simon home in Urbana. It is quite a coincidence that two of the young boys who lived in this house would become state geologists of neighboring states: Wally



Hagan for Kentucky and Jack Simon for Illinois. A further coincidence was that the Simons' next-door neighbor at this time was Gilbert Cady, for whom the GSA Coal Division's highest award is named.

Wally received his bachelor's (with high honors, 1935), master's (1936), and doctoral (1942) degrees in geology from the University of Illinois in Urbana-Champaign. He was a summer field assistant for Harold Wanless under a Geological Society of America grant in 1936. Before coming to Kentucky, he worked as a field assistant at the Illinois State Geological Survey, as a park geologist at Mesa Verde National Park in Colorado, and for companies in Michigan, Indiana, Oklahoma, and Illinois. He was a well-known petroleum geologist in Owensboro, Kentucky, and was active in developing oil reserves in western Kentucky in the 1950s before he became state geologist.

Wally's Ph.D. thesis on the geology of the Cub Run 15-minute quadrangle of Kentucky set the stage for him later, as the state geologist of Kentucky, undertaking one of the largest geologic mapping programs ever conducted. His Ph.D. advisor was Arle H. Sutton, who had conducted extensive geologic studies, including geologic mapping, in Kentucky. These mapping experiences were key to the successful U.S. Geological Survey–Kentucky Geological Survey areal geologic mapping program in Kentucky, which Wally conceived in 1960. It was a bold, and for its time expensive, program of areal geologic mapping, and it has been a tremendous benefit to the citizens of Kentucky. He fought for and won funding from the Commonwealth of Kentucky and the U.S. Geological Survey to map the surface geology of the entire state at a scale of 1:24,000. Wally presided over this program, which required 661 professional person-years and \$21 million to complete; by most accounts, a similar program today would cost ten times this amount. The program resulted in the publication of 707 of the 7.5-minute geologic quadrangle maps and approximately 150 professional reports. The information collected for the project is on file at the Kentucky Geological Survey, and it has been used by thousands of people.

The geologic mapping program serves as a basis for continuing programs for economic development and environmental protection in Kentucky. The geologic maps have been instrumental in coal-resource assessment, oil and natural gas exploration, mineral resource development, water-quality protection, identifying areas prone to landslides, siting landfills, and assessing earthquake hazards. The maps are used by engineers; developers; miners; ecologists; federal, state, and local government agencies; and many other individuals and organizations. They are a lasting tribute to Wally's dedication and vision. In recognition of this achievement, he received the John Wesley Powell Award from the U.S. Department of the Interior and the U.S. Geological Survey in 1972.

Wally was a gifted administrator of the Kentucky Geological Survey for 20 years. Although geologic mapping was the principal activity during his tenure, from 1958 to 1978, investigations into stratigraphy and structural geology, coal, minerals, oil and natural gas, and water were also conducted. The Kentucky Geological Survey during the Hagan years produced 25 Special Publications, 23 Information Circulars, 21 Reports of Investigations, 5 Bulletins, and 49 Reprints (not including the products of the mapping program previously mentioned). These were truly fertile years for the Kentucky Geological Survey.

After his retirement as director and state geologist, he served on the Survey Advisory Board and saw the first conversions of printed geologic maps to digital format for use in computer applications and geographic information systems. Because of Wally's legacy, Kentucky is on the verge of being the first state in the nation to have a statewide geographic information system for geology.

Throughout his career, he received numerous awards. He was chosen Distinguished Scientist of the Year in 1977 by the Kentucky Academy of Science. He was granted the American Association of Petroleum Geologists Public Service Award in 1982. He received the Kentucky Geological Survey Distinguished State Geologist Award in 1993 and the Distinguished Service Award in 1997. He had been president of the Association of American State Geologists and served in various leadership roles for the American Institute of Professional Geologists, which honored him with its Lifetime Achievement Award in 1996.

Wally was a 50-year member of the Geological Society of America. He was also an Honorary Life Member of the Geological Society of Kentucky and an active member for more than 30 years. He was instrumental in bringing about legislation in Kentucky in 1993 for the registration of professional geologists.

He was an active member of First United Methodist Church, and a past-president of Methodist Men. He was a Rotary Paul Harris Fellow in the Lexington Rotary Club. He is survived by his wife of 57 years, Mary Elizabeth "Betty" Hagan; two daughters, Karen Rea Hagan and Elizabeth Annette Hagan; two grandchildren, Elizabeth Wade Hall and James A. Wade Jr.; and a brother, Philip R. Hagan.

Wally was a true blue University of Kentucky Wildcats basketball and football fan despite his Illinois roots and alma mater. He never missed a game, even if it meant sitting in the rain at Commonwealth Stadium or plowing through the snow to get to Rupp Arena. When his health deteriorated and forced him to stay home, he remained a loyal Cats fan, following the games on the radio and often staying up past midnight to watch tape-delayed games on television, even if he already knew the score.

Wally also didn't let his diabetes keep him from enjoying another favorite pastime—sneaking sweets. He knew all the hiding places for the Christmas cookies, and when he was at Rotary and church meetings, he was known to snatch a sliver of pie.

Wally's parents' work in education—his father was a superintendent of schools in Illinois and his mother was a professor at the University of Illinois—influenced his decision to seek a career at a university and fueled his desire to always help young people get an education. It is

fitting, then, that a scholarship for geology students at the University of Kentucky has been established in Wally's name. Contributions may be made through the UK Department of Geological Sciences at 101 Slone Research Building, University of Kentucky, Lexington, KY 40506-0053, phone (606) 257-3758.

## SELECTED BIBLIOGRAPHY OF W. W. HAGAN

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