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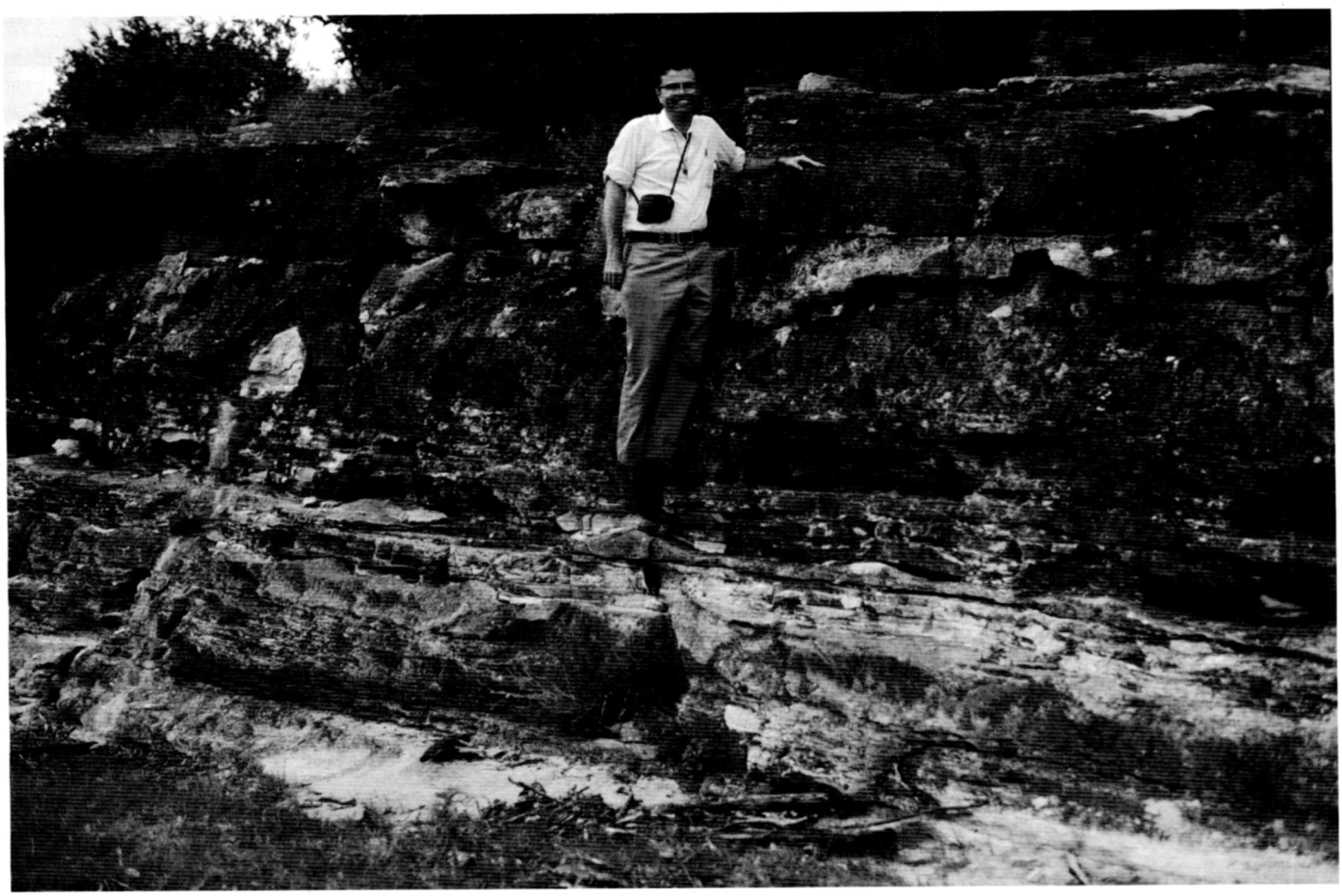
MEMORIAL

JAMES H. STITT: A DEDICATED PROFESSOR AND EXEMPLARY BIOSTRATIGRAPHER



On Friday September 17 Jim Stitt died quietly in his sleep, ending a long and characteristically tenacious battle with cancer. His passing leaves a void of great magnitude in the geological sciences and in the lives of the many people whom he influenced as family, friends, or colleagues. I was Jim's first Ph.D. student at the University of Missouri, where he spent the past 31 years as a pillar of the geology program, serving at various times as Chair and Graduate Student Advisor. Jim is well known and respected for an impressive body of meticulously crafted taxonomic and biostratigraphic studies on trilobites and brachiopods. His three monographs on faunas in the Arbuckle and Wichita Mountains of Oklahoma (Stitt, 1971a, 1977, 1983) established that area as a standard for correlation of Upper Cambrian and Lower Ordovician strata in North America. This "Oklahoma trilogy" is a treasure trove of taxonomic and biostratigraphic data that has been drawn upon heavily in numerous subsequent biostratigraphic and paleobiologic studies. It provides a biozonation of unparalleled precision for carbonate platform facies of that interval, ironically assembled in an area where rocks of that age yield their fossils only reluctantly. Jim took great pride in extracting useful information from difficult rocks. He passed that laudable attitude on to his academic offspring, along with the sense of satisfaction he derived from seeing his data put to good use in solving geologic or paleobiologic problems, in his own work and in that of others. At the same time, he was always complimentary and supportive of more theoretical or abstract research, an attitude sadly lacking in some practitioners with a bent toward applied paleontology.

Jim's contributions were not limited to taxonomy and biostratigraphy. His paper on the functional morphology of *Stenopilus pronus* (Stitt, 1976) is a classic study that illustrates the profit of attention to detail, particularly combined with a bit of actualistic insight (in this case derived from knowledge of surface sculpture and ecology of the modern mole crab *Emerita*). In the area of paleobiogeography, Jim and his students described distinctly Laurentian trilobites from the Collier Shale in the Ouachita Mountains

(Hart et al., 1987; Hohensee and Stitt, 1989), conclusively demonstrating that the Benton Uplift is not an exotic terrane. His recent collaborative work on the stable isotope record across the base of the Pterocephaliid Biomere (Perfetta and others, 1999) produced evidence of open-ocean waters invading the Laurentian platform, supporting hypotheses that link faunal change at biomere boundaries to paleoceanographic events. Nor was his work restricted to the Lower Paleozoic. A paper (Brezinski and Stitt, 1982) on the Pennsylvanian trilobite species *Ditomopyge scitula,* co-authored with then-student David Brezinski, was a valuable taxonomic contribution in itself; its ultimate impact was even greater as it inspired Dave on to a successful career as a specialist in Late Paleozoic trilobites. However, it is primarily his work on Cambrian faunas, and the biomere concept in particular, for which Jim will be remembered, and rightly so. He was the first to recognize (Stitt, 1971b) internal subdivisions or "stages" within each Cambrian biomere. His initial appraisal of the internal structure and its significance (Stitt, 1975, 1977) has drawn some pointed criticism, and debate continues regarding many aspects of the biomere concept (or even the need for biomeres as separate units). Nonetheless, many of us remain convinced that the biomere is a valid and useful unit. All would agree that Jim's papers on the topic provided an essential foundation for what remains an area of active study in trilobite macroevolution and extinction. Still, Jim's favorite areas of study were taxonomy and biostratigraphic correlation. Accordingly, his recent work and final papers deal with the stratigraphic significance of Upper Cambrian faunas in the Llano Uplift of central Texas (Stitt and Miller, 1987; Miller and Stitt, 1997) and the Black Hills of South Dakota (Stitt and Straatmann, 1997; Stitt, 1998).

His close friend Jim Miller kindly provided a picture of Jim in happy times on the outcrop in central Texas. Fittingly, he is standing astride the top of the Ptychspid Biomere, flashing his characteristic smile. The biomere boundary in this section lies at a cryptic unconformity (at about the level of Jim's knees) that was resolved on the absence of the *Missisquoia depressa* Subzone, a unit that he defined in his work in Oklahoma. Jim grew up in Pennsylvania but was a Texan at heart, having done his graduate work at University of Texas where he also met his wife Betty. He hated cold weather but was unfazed by summer heat that sent me crawling off in search of shade. All of us who worked with him left Missouri with a solid foundation for careers in geology and paleontology. We learned the value of meticulous work and the rewards of perseverance. To a person, all of us tackle difficult problems with a "Stittian" tenacity, confident that our work will ultimately yield useful results. He also taught us, by example, the importance of professionalism and civility. I vividly recall his anger at unduly acerbic and unfairly critical remarks in manuscripts that he reviewed, yet his response was always tempered and colleagial. His department and the profession will sorely miss his moderating influence.

We also learned from Jim the importance of life outside the profession. He loved his work but his family came first. He was deeply devoted to his wife and cherished his daughters, faithfully and happily attending the activities in which they participated. He revelled in their accomplishments in high school sports and in subsequent college and professional life. An avid and accomplished golfer, he also relished his regular Tuesday afternoon game. We should all embrace such healthy values and balance our commitments so skillfully. I struggle with the reality that Jim Stitt is gone, at far too young an age, but draw some solace in the fact that he lives on in his daughters Tanya and Merrilee, and in the lives and contributions of his many students. We can only hope, in following his example, to leave a legacy half as rich.

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