

## Memorial to Byron Nelson Cooper 1912—1971

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A life of feverish and fruitful professional activity came to an end when Byron Nelson Cooper died of a heart attack March 26, 1971, at the age of 58. In 25 years of dedicated service to Virginia Polytechnic Institute and State University, he built a struggling two-man department into a Department of Geological Sciences acknowledged by many to be one of the strongest in the United States. Aptly, Dr. T. Marshall Hahn, Jr., President of VPI&SU, described Byron's death as a devastating blow to both the university and the Blacksburg community. He further acknowledged the service Byron had rendered as an outstanding consultant to business and industry and to state and local governments.

Byron Cooper contributed significantly to the development of geology in the southeast and to the establishment and growth of the Southeastern Section of The Geological Society of America. The VPI&SU Department of Geological Sciences had the pleasure of hosting the inaugural meeting of the Southeastern Section held in Roanoke, Virginia, in 1952, of hosting a second meeting there in 1963, and the meeting held in Blacksburg in 1971. Byron served as chairman of the Section in 1956 and as councilor of the GSA, 1956-1959.

Byron loved rocks and fossils and particularly those that told the geologic story of the Appalachians. He was first introduced to Virginia geology while attending the Oberlin College field camp prior to graduation with honors from DePauw University in 1934. He obtained his M.S. degree from the University of Iowa in 1935, and for his thesis he studied the geology of the Pulaski, Virginia, quadrangle, and in so doing came into contact with Charles Butts. Later, as a geologist with the Virginia Geological Survey, he worked with Butts, and that inspiring experience laid a strong foundation for Byron's continuing Appalachian studies. Among these studies, many geologists know of Byron's study of the Burkes Garden quadrangle, Virginia. That study, made under the auspices of the Virginia Geological Survey, constituted his dissertation at the University of Iowa, from which he obtained his Ph.D. degree in 1937. In that study he devoted much time and thought to the subdivision and mapping of the different units that make up the Middle Ordovician group of limestones. His promise and professional talents were recognized early when in 1939 he was made a Fellow of The Geological Society of America.

His interest in carbonates continued and broadened with the study he and Ray Edmundson made of the limestone and dolomite resources of Virginia for the Virginia Geological Survey. He left the Virginia Geological Survey in 1946 to become head of the geology department at VPI&SU, and then ensued 25 years of devoted, tireless, and imaginative work. Like all too few geologists of his generation, he believed geology had to be sold to the public, and he made the most of every opportunity to emphasize the important role geology should play. As a consultant to many industries, he was well aware of the favorable reception of geology there and perhaps this heightened his impatience with city planners and others who did not appreciate the many ways in which a knowledge of geology could serve them. His personal assistance to numerous local government officials centered mainly on water supply, site locations, and subsidence and slump problems. He was active in the formation of the Virginia Association of Professional Geologists at a time when geologists were bemoaning the taking over of their rightful functions by licensed non-geological professionals.

In 1957 as a Distinguished Lecturer for AAPG he spoke on syntectonic sedimentation in the Appalachian geosyncline, and the important substance of that paper, entitled "Relation of Stratigraphy to Structure," was printed later in *Tectonics of the Southern Appalachians*. In his lecture and in his graduate course in Appalachian geology, he paid tribute to Edmund Spieker for understanding the role played by deformation contemporaneous with sedimentation in the Wasatch Plateau of Utah. Byron's final tribute was never delivered, but in the abstract of his paper entitled "Bailey Willis Revisited," printed in the *Abstracts with Programs* of the Southeastern Section, 1971, he expresses his great respect for the insight that Bailey Willis had in regard to the development and evolution of the Appalachian geosyncline, and, in particular, the importance of syntectonic sedimentation. Byron would have been very proud to know that his esteemed friend and antagonist, John Rodgers, was to pay him tribute by substituting for him and delivering a brilliant lecture on "Bailey Willis Revisited" at the "Symposium on Appalachian Geologic History of Southwestern Virginia," held in connection with the meeting of the Southeastern Section of the GSA at Blacksburg in 1971. This symposium provided the framework for field trips the following day. Byron's trip was led by William A. Thomas, whose dissertation under Byron dealt with the role played by Carboniferous tectonism along the structural front between the Folded Appalachians and the Appalachian Plateau. It will be through the continuing studies of such students of Appalachian geology as Thomas that the exact role of tectonism in the development and evolution of the Appalachian miogeosyncline will be worked out, and the time and effort contributed by Thomas in order to assure the success of Byron's trip was a fitting tribute to the respect held for Byron by many of his former students.

Byron promoted much interest in Appalachian geology in general and that of Virginia in particular by leading many field trips for budding as well as professional geologists. Included were pre-convention field trips for both the GSA and AAPG and the guidebooks he prepared helped advertise Appalachian geology and bring recognition to the VPI&SU Department of Geological Sciences.

Byron did much for Virginia geology and in turn it did much for him. Early it brought him to Virginia where he met and fell in love with Elizabeth Doyne, whom he married in 1935. He always said that his wife Betty was responsible for much of his success. Their son John was born in 1939, and it pleased Byron that his son became interested in geology. Undoubtedly one of Byron's proudest moments was when John phoned in August 1970 to tell him that he was to receive his Ph.D. in geology from the University of Texas. Byron was equally proud of his daughter, Patricia Ann, born in 1949. It was at least in part through her interests that he became involved with the aspirations of certain campus youth groups. His interest in and support of youth did not weaken his personal support of the needy both within the community and surrounding districts. Many of his colleagues within the department, as well as professional friends elsewhere, knew nothing of this side of Byron. I first learned of it one dark night when I helped him and Betty locate a hungry family in the hill country outside of Blacksburg. Following Byron's death, I learned that he was almost solely responsible for the organization of "United Christian Aid." His and his wife's role in the community's civic and social affairs was attested to by the great number who attended his funeral. Friends have started a memorial fund whose money is to support United Christian Aid and Campus Christian Life. The meeting house for the Campus Christian Life organization has been named the Byron N. Cooper Center for Campus Ministry.

Many of Byron's former students and colleagues journeyed to Blacksburg on very short notice to pay their respects, and a Byron Cooper Geology Memorial Fund is growing and its funds are specified for the support of graduate students working on Appalachian geology.

Byron took great pride in the successful fight he led to keep a major cement company from locating in a valley adjacent to Blacksburg and the campus. From his personal experience he knew full well the pollution and havoc that would descend on the college community. As a geologist, he realized the obligation geology has to help industry, but as a citizen he knew we have to protect our environment. Because of past consulting activities, many false charges were leveled at him. He took them in stride without making any recriminations. At no other time has the Blacksburg community been so united in action. He remarked to me that the support he received in this fight, both professional and lay, helped to restore his faith in American democracy at the local level.

Byron was guest lecturer at NSF summer institutes at the University of Mississippi in 1958, Clemson in 1959, and American University in 1960, and was a visiting geoscientist lecturer for the American Geologic Institute for many years beginning in 1964. He served on the American Committee on Stratigraphic Nomenclature starting in 1961, and was a member of the Virginia Governor's Advisory Committee on Geology from 1953 to 1962, the Committee on Stratigraphical Paleontology of the National Research Council, the Governor's Advisory Council on Virginia's Economy, the Paleontological Society, the AAAS (councilor 1956-1958, vice-president and chairman of Section E, 1958), the AAPG, the Society of Economic Geologists, the Virginia

Academy of Science (chairman geology section 1949, councilor 1955-1957), the AIME, the AIPG, the AAUP, Sigma Xi, and Sigma Gamma Epsilon, as well as others such as the American Platform Society and the American Arbitration Association (technical panelist).

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