

## Memorial of Edward P. Henderson 1898–1992

**BRIAN MASON, ROY S. CLARKE, JR.**

National Museum of Natural History, Smithsonian Institution, Washington, DC 20560, U.S.A.

Edward Porter Henderson, a long-time fellow of this society, died in Washington, DC on September 12, 1992, at the age of 93.

He was born on December 31, 1898, in Columbus, Ohio. He served in the U.S. Marine Corps during World War I, and after his discharge in 1919 he joined the U.S. Geological Survey as a junior chemist. While working at the U.S.G.S., he completed his B.A. and M.A. degrees at George Washington University.

During his years at the U.S. Geological Survey he collaborated with several distinguished mineralogists: with Frank L. Hess on U and V minerals from the Colorado Plateau; with Waldemar T. Schaller on the mineralogy of the K-bearing deposits of New Mexico; and with Clarence S. Ross on several investigations. In 1929, when a vacancy for a chemist in the Geology Department of the U.S. National Museum (now the National Museum of Natural History) was announced, he applied and was appointed. At the time of the appointment he was traveling in southern Africa after attending the International Geological Congress in Pretoria. He began working at the museum in November, 1929, an association that lasted some sixty years.

George P. Merrill, head curator of the Geology Department, whose special interest was meteorites, died in August 1929, and Ed (as he was always known to colleagues and friends) inherited the curation of the meteorite collection. At that time it comprised 840 specimens; when Ed retired in December 1965 it had grown to 2500 specimens.

To expand the Smithsonian collection, he began contacting owners of meteorites to see if he could obtain materials from them. Many of his deals were completed by telephone or correspondence, but often he had to take an airplane or a train to go to some remote spot where a meteorite had fallen to negotiate with the owners. Sometimes it took days of haggling.

In the 1930s the nation's leading private meteorite collector was Stuart H. Perry (1874–1957), a Michigan newspaper publisher and a vice president of the Associated Press. Through his resources and his newspaper connections he was usually the first to learn of a new fall or discovery, and he would arrange to acquire the material. Ed developed a mutually beneficial relationship with Perry, whereby a major part of every meteorite Perry acquired came to the museum. They jointly studied many iron meteorites and were coauthors of several publications.

Ed enjoyed travel, and his field work took him to Eu-



rope, Africa, the Soviet Union, the Philippines, and Australia. One trip he did not plan came in 1947, when he received a cablegram from General Douglas MacArthur asking him to come to Japan to sort and appraise a vast cache of gemstones recovered in Tokyo by the U.S. Army. At the outset of the war the Japanese government had asked its citizens to turn in their gems and jewelry as a contribution to the war effort. Many of the gems were stored during the war in buildings that were burned in the Allied air attacks. Recovered from the ashes, the gems were brought to the vaults of the Bank of Japan, where Ed and W. F. Foshag, another Smithsonian mineralogist, spent six months surrounded by guards appraising the collections. Ed estimated later that what they had handled added up to "about fifty million dollars worth—the biggest diamond job ever done."

In 1962 Ed and one of us (B.M.) were at a meeting in

Tempe, Arizona. Over an evening libation we discussed the greatly increased demand for meteorite material for research, a result of the rapidly developing space program—researchers had suddenly realized that the only tangible material from outer space resided in museum collections. We were concerned that the demand was outstripping the acquisition of new meteorites. So we brainstormed as to where we should go to collect meteorites, decided it should be a continental land surface with a desert climate, and made Australia our first choice. (We never considered Antarctica, which since 1969 has proved to be a veritable treasure chest for meteorites.) The National Geographic Society generously provided us with a Land Rover, camping equipment, and some field money. During the Australian winters of 1963, 1964, 1965, and 1967 we spent 335 days in the field (sleeping most nights under the stars), traveled almost 40000 miles, and acquired an extensive collection of meteorites and tektites. We were a very compatible team, and the experience gave Brian a tremendous respect for Ed's sterling qualities.

Ed retired at the end of 1967 but continued working at the museum as an honorary research associate until 1988. From 1969 to 1975 he was a coinvestigator of the lunar samples returned by the Apollo missions. In the first sample we received, he extracted a small metallic spherule (4 mm) whose cratered surface mimicked the Moon itself. Appropriately titled the Mini-Moon, it was the cover photograph of the first published account of the Apollo 11 collection (*Science*, v. 167, no. 3918, January 30, 1970).

Ed was an astute investor and kept a close watch on the stock market. He applied his expertise in this field to the great benefit of our Society, as chairman of the Financial Advisory Committee from 1953 to 1973, during which time the value of the Endowment Fund increased from \$79,160 to \$259,013.

He married Rebecca Rogers, a District of Columbia schoolteacher, in 1941. They had no children. Before his marriage Ed lived on a boat in the harbor, but Rebecca persuaded him to come ashore, and they lived for most of their 48 years together in a house on 16th Street NW, where they entertained many scientific visitors to the area. In 1974 they established the Edward P. and Rebecca Rogers Henderson Meteorite Fund, the first endowment specifically designated for the support of meteorite collection and research in the Smithsonian Institution.

For his distinguished contributions to meteorite research, Ed was awarded an honorary doctorate by the University of Bern, Switzerland, in 1962, and in 1970 he received the J. Lawrence Smith Medal of the National Academy of Sciences.

### SELECTED BIBLIOGRAPHY OF EDWARD P. HENDERSON<sup>1</sup>

- With C.S. Ross. Topaz and associated minerals from the Einstein silver mine, Madison County, Missouri. *Am. Mineral.*, 10, 441–443 (1925).
- With W.T. Schaller. Purple muscovite from New Mexico. *Am. Mineral.*, 11, 5–16 (1926).
- Gearsutite from Virginia. *Am. Mineral.*, 14, 281–285 (1929).
- With F.L. Hess. Fervanite, a hydrous ferric vanadate. *Am. Mineral.*, 16, 273–277 (1931).
- With W.T. Schaller. Mineralogy of drill cores from the potash field of New Mexico and Texas. *U.S. Geol. Surv. Bull.* 833, 124 p. (1932).
- With F.L. Hess. Corvusite and rilandite: New minerals from the Utah–Colorado carnotite region. *Am. Mineral.*, 18, 195–205 (1933).
- Steigerite: A new vanadium mineral. *Am. Mineral.*, 20, 769–772 (1935).
- With H.T. Davis. Moore County, North Carolina, meteorite: A new eucrite. *Am. Mineral.*, 21, 215–229 (1936).
- With J.J. Glass. Pyroxmangite, new locality: Identity of sobralite and pyroxmangite. *Am. Mineral.*, 21, 273–294 (1936).
- With C.J. Ksanda. Identification of diamond in the Canyon Diablo iron. *Am. Mineral.*, 24, 677–680 (1939).
- Chilean hexahedrites and the composition of all hexahedrites. *Am. Mineral.*, 26, 546–550 (1941).
- With F.H. Pough. Brazilianite, a new phosphate mineral. *Am. Mineral.*, 30, 572–582 (1945).
- With W.F. Foshag. Primary sublimates at Paricutin volcano. *Trans. Am. Geophys. Union*, 27, 685–686 (1946).
- With H.H. Hess. The Moore County meteorite: A further study with comment on its primordial environment. *Am. Mineral.*, 34, 494–507 (1949).
- American meteorites in the National Collection. *Smithsonian Publ.* 3962, 257–268 (1949).
- With S.H. Perry. A restudy of the Social Circle, Georgia, meteorite. *Am. Mineral.*, 36, 603–608 (1951).
- With S.H. Perry. A discussion of the densities of iron meteorites. *Geochim. Cosmochim. Acta*, 6, 221–240 (1954).
- With A.S. Furcron. Meteorites in Georgia. *Georgia Mineral Newsletter*, 9, 126–135; 10, 113–142 (1956, 1957).
- With S.H. Perry. Studies of seven siderites. *Proc. U.S. National Museum*, 107, 339–403 (1958).
- With R.S. Clarke, Jr. Georgia tektites and related glasses. *Georgia Mineral Newsletter*, 14, 90–114 (1961).
- Hexahedrites. *Smithsonian Misc. Collections*. 148, No. 5, 41 p. (1965).
- With J.S. White, Jr. and B. Mason. Secondary minerals produced by weathering of the Wolf Creek meteorite. *Am. Mineral.*, 52, 1190–1197 (1967).
- With R. Brett. The occurrence and origin of lamellar troilite in iron meteorites. *Geochim. Cosmochim. Acta*, 31, 721–730 (1967).
- With J.I. Goldstein and H. Yakowitz. Investigation of lunar metal particles. *Proc. Apollo 11 Lunar Sci. Confr.*, 499–512 (1970).
- With B. Mason. Australian Meteorite Expedition, 1967. *Nat. Geog. Soc. Research Reports*, 1967, 159–167 (1974).
- With R.O. Chalmers and B. Mason. Occurrence, distribution, and age of Australian tektites. *Smithsonian Contrib. to the Earth Sciences*, no. 17, 46 p. (1976).
- With E.A. King. The Del Rio ataxite, Texas. *Meteoritics*, 12, 1–12 (1977).

<sup>1</sup> A complete bibliography of Edward P. Henderson is available as Document AM-94-559 from the Business Office, Mineralogical Society of America, 1130 Seventeenth Street NW, Suite 330, Washington, DC 20036, U.S.A. Please remit \$5.00 in advance for the microfiche.