

Memorial to Helen M. Duncan

1910-1971

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Helen Duncan died at home on August 14, 1971, after a long illness which began when she collapsed in the London airport in 1968, while returning from an international conference on the Bryozoa. There are those whose passing is lamented but whose work has been done; there are others like Helen, whose loss deprives us of much important knowledge. The paleontological clock must stand still until others can complete her studies on the Ordovician corals and the possible origin of the Alcyonaria, to mention only two of the important investigations that were left incomplete by her death.

Helen Duncan was born on May 3, 1910, in Medford, Oregon, but she grew up near Virginia City, Montana, and considered Montana her home. She became interested in geology through Professor Charles F.

Deiss and received her B.A. degree from the University of Montana in 1934 and her M.A. from the same university in 1937. While at Montana, she also served as instructor and as library secretary involved with the purchase of books for the library. Her master's thesis on trepostomatous Bryozoa of the Traverse Group of Michigan was published by the University of Michigan and has become a classic in its field. From 1939 to 1942 she was at the University of Cincinnati—as a graduate student and assistant in the geology department until 1941 and then in the applied science research division until 1942.

Helen joined the U.S. Geological Survey in 1942, first as an editor, and then on the wartime fluorspar project under James Steele Williams. As she had been promised when she started work on fluorspar, she was transferred to the Paleontology and Stratigraphy Branch when the war was over in 1945. Her main duties as a paleontologist involved the identification and description of late Paleozoic Bryozoa and corals, but her work and her knowledge embraced a much wider field. For a time she was responsible for all the Paleozoic corals, which led to her interest in and research on Ordovician corals in particular, and also on algae, Hydrozoa, archaeocyathids, and various odds and ends, as well as Bryozoa. She produced about 400 reports on fossils for fieldmen both in and outside the Survey; many of these reports have been quoted in the works of others, and more may yet be quoted in future works. Her voluminous knowledge of foreign literature and her prodigious memory were always available to her colleagues, and she freely gave her time to help and train newcomers to her fields of competence, although her own work suffered as a result of this generosity. Her studies of Paleozoic corals resulted in making them stratigraphically useful for the first time to Survey field geologists. As a consequence, so many more collections were sent in for identification that three additional coral specialists had to be added to the staff of the Paleontology and Stratigraphy Branch. For her varied and largely anonymous contributions, as well as significant publi-

cations, she was granted the Meritorious Service Award by the Department of the Interior in 1971.

Helen Duncan was a member of the Subcommittee on Carboniferous Stratigraphy of the International Union of Geological Sciences from 1960 until her death. She represented the U.S. Geological Survey at the International Geological Congress in Copenhagen in 1960 and at the Sixth Carboniferous Congress in Sheffield, England, in 1967. Her advice was highly valued by the Geologic Names Committee of the U.S. Geological Survey, and she served as a member of the Committee from 1957 to 1960. She was a Fellow of the Geological Society of America and a member of the Paleontological Society, the Palaeontological Association, the American Association for the Advancement of Science, the Society of Systematic Zoology, the Washington Academy of Sciences, and Sigma Xi. She also was a member of the Paleontological Society of Washington, which she served as Vice-President and Treasurer, and the Geological Society of Washington, which she served as Councilor.

Although afflicted by a rheumatic heart throughout her professional life, Helen undertook fieldwork in the Rockies and Great Basin, and by finding diagnostic fossils (when she sat down for a much-needed rest) in a formation hitherto considered unfossiliferous, she demonstrated conclusively the folly of hurrying a paleontologist. Her virtuosity with corals was illustrated by an incident when she was in the hospital but was requested to identify a small piece of diamond drill core of dolomite containing holes. Helen identified the holes as the remains of a syringoporoid coral and the dolomite as probable Mississippian; this led to continued drilling and the discovery of a rich ore body.

Next to her preoccupation with paleontology, her main interest was in gourmet cooking, and an invitation to dinner at Miss Duncan's became an occasion that no visiting geologist would dream of refusing or ever forget.

But there was much more. There is no place in a memorial for more than a passing mention of her work on odds and ends, of how she became the strongest woman in the Cincinnati geology department, of her contributions to the Lipalian Research Foundation, and of her oblique contributions to the Pick and Hammer shows. These should be enshrined, but not here. We need say nothing of her as a delightful person, a spirit blithe in spite of adversity and "a surfeit of leeches." Those who knew her will remember; those who did not, will not care. But we can say of her work what was said of Schubert: Here lie great treasures but much fairer hopes.

SELECTED BIBLIOGRAPHY OF HELEN M. DUNCAN

- 1938 Taxonomy of Devonian Trepostomata [abs.]: Geol. Soc. America Proc. 1937, p. 276-277.
- 1939 Trepostomatous Bryozoa from the Traverse Group of Michigan: Michigan Univ. Mus. Paleontology Contr., v. 5, no. 10, p. 171-270.
- 1949 Genotypes of some Paleozoic Bryozoa: Washington Acad. Sci. Jour., v. 39, no. 4, p. 122-136.
- 1953 (and Barnes, V. E., and Cloud, P. E., Jr.) Upper Ordovician of central Texas: Am. Assoc. Petroleum Geologists Bull., v. 37, no. 5, p. 1030-1043.
- (and Easton, W. H.) *Archimedes* and its genotype: Jour. Paleontology, v. 27, no. 5, p. 737-741.
- Corals, in Cooper, G. A., and others, eds., Permian fauna at El Antimonio, western Sonora, Mexico: Smithsonian Misc. Colln., v. 119, no. 2, p. 21.
- 1955 (and Williams, James Steele) Introduction, in Pt. 1, Fluorspar deposits in western Kentucky: U.S. Geol. Survey Bull. 1012-A, p. 1-6.
- (and Loeblich, A. R., Jr., and Moore, R. C.) Proposed validation under the Plenary Powers of "*Fistulipora*" McCoy, 1849 (Class Bryozoa, order Cyclostomata, family Fistuliporidae): Bull. Zool. Nomenclature, v. 11, pt. 5, p. 155-157.
- (and Bassler, R. S.) Proposed use of the Plenary Powers to standardize the current use of "*Monticulipora*" d'Orbigny, 1849 (Class Bryozoa, order Cyclostomata or Trepostomata, family Monticuliporidae Nicholson): Bull. Zool. Nomenclature, v. 11, pt. 3, p. 90-92.
- (and Berdan, J. M.) Ordovician age of the rocks mapped as Silurian in western Wyoming, in Wyoming Geol. Assoc. Guidebook, 10th Ann. Field Conf., 1955: p. 48.
- 1956 Ordovician and Silurian coral faunas of western United States: U.S. Geol. Survey Bull. 1021-F, p. 209-236.
- Evolution of horn corals through the Ordovician [abs.]: Geol. Soc. America Bull., v. 76, no. 12, p. 1688-1689.
- 1957 Bryozoans—Annotated bibliography, in Ladd, H. S., ed., Paleocology: Geol. Soc. America Mem. 67, v. 2, p. 783-799.
- *Bighornia*, a new Ordovician coral genus: Jour. Paleontology, v. 31, no. 3, p. 607-615.
- 1960 Bryozoa fossils, in Encyclopedia of science and technology: New York, McGraw-Hill Book Co., v. 2, p. 356-358.
- 1961 Corals from Permian rocks of the northern Rocky Mountain region: U.S. Geol. Survey Prof. Paper 424-B, p. B235-B236.
- (and Gordon, Mackenzie, Jr.) Early Mississippian faunas in southwestern Elko County, Nevada: U.S. Geol. Survey Prof. Paper 424-C, p. C233-C234.
- Discussion of the Fitchville fauna, its age significance and regional distribution, in Morris, H. T., and Lovering, T. S., Stratigraphy of the East Tintic Mountains, Utah: U.S. Geol. Survey Prof. Paper 361, p. 86-87.
- 1962 Class Anthozoa, in Mudge, M. R., and Yochelson, E. L., Stratigraphy and paleontology of the uppermost Pennsylvanian and lowermost Permian rocks in Kansas: U.S. Geol. Survey Prof. Paper 323, p. 64-67, 122.
- 1965 Heterocorals in the Carboniferous of North America [abs.]: Geol. Soc. America Spec. Paper 87, p. 48-49.
- (and others) Age of the Eleana Formation (Devonian and Mississippian) in the Nevada Test Site: U.S. Geol. Survey Bull. 1224-A, p. A51-A53.
- Corales, in Cooper, G. A., and others, Fauna Pérmica de El Antimonio, oeste de Sonora, México: México Univ. Nac. Autónoma, Inst. Geología, Bol. 58, pt. 3, p. 23-24.
- 1969 Bryozoans, in McKee, E. D., and Gutschick, R. C., eds., History of the Redwall Limestone of northern Arizona: Geol. Soc. America Mem. 114, Chap. 7, p. 345-434.
- 1970 (and Gordon, Mackenzie, Jr.) Biostratigraphy and correlation of the Oquirrh Group and related rocks in the Oquirrh Mountains, Utah, in Tooker, E. W., and Roberts, R. J., Upper Paleozoic rocks in the Oquirrh Mountains and Bingham mining district, Utah: U.S. Geol. Survey Prof. Paper 629-A, p. A38-A57.