Memorial to Winifred Goldring 1888—1971

DONALD W. FISHER

New York Geological Survey, Albany, New York



That "grandame" of New York State paleontology, Winifred Goldring, died on January 30, 1971, at Child's Hospital in Albany, New York—two days shy of her eighty-third birthday. Born February 1, 1888, in Kenwood (at the edge of Albany) almost within the "shadow" of her beloved Helderbergs, Winifred Goldring devoted her life to New York State paleontology, generally, and to the New York State Museum, specifically.

Her father, Frederick Goldring, came from England in 1879. Trained in the famous Kew Gardens in London as an orchid grower, Frederick was ably suited to assume charge of the orchid collections at the large Erastus Corning estate near Albany. Her

mother, the former Mary Grey, whose father was head gardener at that estate, served as a local schoolteacher until her marriage to Frederick in 1881. The couple had seven girls (Esther, Marjorie, Winifred, Grace, Katharine, Joyce, Janet) and one boy (Frederick, Jr.). Katharine, Joyce, Janet, Frederick, Jr. ("Ted"), and several nephews, nieces, grandnephews, and grandnieces survive. Winifred never married.

In the spring of 1890, the Goldring family moved to Font Grove Road, Slingerlands, New York, and established their own floral business which is still in operation. It was in this home that Winifred lived for almost 81 years, a fact that she often mentioned with firm pride. As a small girl, Winifred was introduced to the wonders of nature during long hikes and picnics into the Helderbergs, when they were still unspoiled. Her attachment for these classic Lower Devonian rocks remained with her throughout her life. Also, while still young she developed a liking for music through playing the piano; after her college days she took violin lessons solely for her own enjoyment.

Winifred's first nine grades of schooling were spent in the Slingerlands District School. She then attended one of the best high schools in the area, now known as the Milne School, associated with the then State Normal School for training teachers (later to evolve into the State University of New York at Albany); she graduated valedictorian in the class of 1905. Seemingly, Miss Goldring's interest in paleontology blossomed during her undergraduate days at Wellesley College; here she earned her B.A. in 1909, with honors, and her M.A. in 1912. At Wellesley, she was assistant in geology and geography (1909-1912) and took graduate work in geography at neighboring Harvard under the famed William Morris Davis. She remained at Wellesley,

as Instructor in Geology and as Assistant Instructor in the Teacher's School of Science in Boston, from 1912 through 1914 except for the summer of 1913 which she spent at Columbia University taking a course by the distinguished Amadeus Grabau. Her formal graduate work was concluded in 1921 at The Johns Hopkins University under the paleobotanical tutelage of Professor Edward W. Berry.

Winifred Goldring's distinguished career at the New York State Museum began in 1914 when Director John M. Clarke hired her as Scientific Expert in Paleontology. It must have been awesome and frightening, indeed, to a girl of 26 to be thrust into an environment of such established paleontologists as Clarke and Rudolf Ruedemann. Successively, she served creditably as Assistant Paleontologist (1915-1920), Associate Paleontologist (1920-25; 1928-1932), Paleobotanist (1925-1928), Assistant State Paleontologist (1932-1938), Provisional State Paleontologist (1938-1939), and State Paleontologist (1939-1954). Continuing the tradition of her State Paleontologist predecessors (Hall, Clarke, and Ruedemann) Winifred Goldring devoted 40 years of public service to paleontology prior to retiring in July 1954. For her accomplishments and contributions to the science of paleontology, Winifred Goldring was awarded honorary D.Sc. degrees from two leading eastern colleges for women, Russell Sage (1937) and Smith (1957), and honorary membership in Sigma Delta Epsilon.

Probably partly by choice and partly by State Museum policy, Miss Goldring was somewhat provincial and seldom travelled beyond the borders of the Empire State, except to attend scientific meetings. Two notable exceptions were an extended trip to Gaspé and Nova Scotia assisting Dr. Clarke in collecting Devonian fossils for his large memoir of that area, and a trip to Alaska in the 1930s. Other than a trip to Cuba she never travelled abroad, although, via correspondence, she amassed a large reprint collection which she donated to the State Museum upon her retirement.

Dr. Goldring was intensely interested in the State Museum, its organization, collections, exhibits, and, not least of all, its personnel. She was a woman of strong likes and dislikes. Possessing a somewhat stern countenance but with a thoughtful and kind heart, she encouraged and gave advice to many budding paleontologists and stratigraphers, as well as to scientists in other fields. It is impossible to know precisely how many ideas for graduate theses originated with her during the period 1930-1950. Museum exhibits were a special passion with her. Considerable planning and preparation time were exerted on these visual forms of education during her Museum tenure. Who has not marvelled at the restoration of the oldest known Devonian forest from Gilboa, New York, as one steps from the elevator on the fifth floor of the State Education Building? Constructed under Miss Goldring's direction by George and Henry Marchand, this nationally famous diorama, reproduced in many historical geology textbooks, has become her exhibit signature. Not prone to withhold her feelings about policy and practice, Winifred Goldring commanded a respect from her colleagues not only for her paleontological passion but for her zealousness in upholding principles.

If Winifred Goldring had any idols they most certainly would have been her paleontologist mentors and colleagues at the State Museum, Doctors Clarke and Ruedemann. As scientists and as persons they unquestionably exercised great influence over her as evidence by the numerous anecdotes about them that she would recount to

me and other younger staff members. And, frequently, her recollections would be spiced with references to the activities of Dr. Rousseau H. Flower, colorful possessor of the Assistant State Paleontologist position from 1944-1951. Like Ruedemann, Miss Goldring was most impatient with bureaucracy and incompetence but extremely patient with her research. One has only to read her publications to gain an insight into her meticulous thinking. True, she was a perfectionist and had she been less so, her bibliography may have been immeasurably longer. But this would have detracted from the splendid publications which she painstakingly produced. Her life-long yearning for things botanical is mirrored in her paleontological research subjects: fossil trees, fossil algae, "sea lilies." Forty-four titles, ranging from Pleistocene salinities through Devonian stratigraphy to Cambrian algae, are found in her bibliography. However, she will be remembered best for her (1) popular-type publications, especially the "Handbook of Paleontology for Beginners and Amateurs: Part I-The Fossils and Part II-The Formations," and "Guide to the Geology of Thacher State Park"; (2) publication on Devonian crinoids, chief among which is the monumental "Devonian Crinoids of New York"; and (3) classic quadrangle studies, "Geology of the Berne Quadrangle," and "Geology of the Coxsackie Quadrangle." It should be noted that all of this work was accomplished in spite of low salaries and little field support.

Doctor Goldring was a Fellow of The Geological Society of America (elected in 1921 and a Vice-President in 1950). The Paleontological Society honored her by electing her its first woman President in 1949. Other professional affiliations were with: The Paleobotanical Society, The Paleontological Research Institution, American Association for the Advancement of Science, Association of American Museums, American Geophysical Union, New York Academy of Sciences, New York Historical Association, Phi Beta Kappa, and Sigma Xi.

In the United States, it is with great difficulty that a woman accedes to a high position in science. Had there been a women's liberation movement in science in her day, I am positive that Winifred Goldring would have been in the forefront of such activity. It irked her immensely that there were so many outstanding male geologists and paleontologists who were vocally prejudicial to women in science. And it was saddening to her that more women did not pursue geology and paleontology as careers. No woman before has attained such a high stature in paleontology in North America. The New York State Museum and Science Service is justly proud of this achievement by Winifred Goldring.

Association with Winifred Goldring has benefitted all those who knew her in perhaps as many ways as the number of people that she encountered. From among these, I have invited three, who perhaps knew her best, to supplement this tribute.

Katherine V. W. Palmer, Paleontological Research Institution, and herself a paleontologist of high repute, excerpts from correspondence and comments, "I did not know Dr. Goldring personally in her early days at the New York State Museum but from the forties on we became close friends through her interest and attendance at meetings in Ithaca of the Paleontological Research Institution. She would relate many anecdotes of her association and apprenticeship with Dr. John M. Clarke, Dr. Rudolf

Ruedemann, and Dr. Charles Adams [a former Museum Director]. The following from her letters shows her progressive philosophy of research and teaching. 'While at Wellesley, I took a graduate course with William Morris Davis at Harvard. He was quite likely in the middle of the class to ask "How do you know there was an Ice Age?" or something equal to it, and you were expected to present the evidence.'...'I once went to the Helderbergs with Cleland and his class on one of the field trips. I explained something to the boys, at the end I added, "That is our interpretation from the evidence we now have. It is not impossible that we may acquire more facts for modification or change."'...'I have always felt that the teacher who turns out enthusiastic students interested in going on in the subject should rate as high as the man who devotes most of his time to research work and may be reaching only a limited audience.'

"She kept a lively interest in politics and, because of the long association and career at the museum, followed its later progress and change. She wrote, 'I don't recall ever being bored in my life'."

John Rodgers, Yale University and Past President of The Geological Society of America, reminisces, "I have thought of Dr. Goldring with affection ever since, with her colleagues at the State Museum, Drs. Hartnagel, Newland, and Ruedemann, she encouraged and helped the high-school boy who used to haunt the Museum and who wanted to take lessons in geology and paleontology, as it were, from the staff. Furthermore, by continued frank discussion and criticism over the many years during which I have repeatedly gone back to visit her and them, she stimulated me not to settle for the routine but to want to do excellent work in whatever I tackled. In particular, her mildly acidulous comments on the pomposity and self-satisfaction of certain geologists (mostly male, but *not* those at Albany) helped me, I hope, to overcome any such tendencies in myself and to learn to value scientists only for the excellence of what they produced, whatever their age, sex, or reputation."

Dr. G. Arthur Cooper, Senior Paleobiologist at the Smithsonian Institution and recipient of The Paleontological Society's Medal for supereminence in paleontology, eulogizes, "Miss Goldring could serve very well as a model for the new female 'lib' movement. She was never militant and was always entirely feminine, but she took great pride in competition with her male companions and her achievements in paleontology. In the field she was tireless and an excellent observer. Her stratigraphic work was excellent. She worked with me in the field on that very difficult part of the Hamilton in Schoharie Valley. I was very pleased to have her help and criticism in trying to tie this semi-marine portion of the Hamilton to the sequence to the west of the valley. Her work in stratigraphy and paleontology is the equal in quality to the best of that produced in New York. I have recommended her handbook on Paleontology to many youngsters and beginners. She was always a delightful companion and a perfect lady in all situations. New York State can be well proud of her."

For the New York State Museum and Science Service, Dr. Goldring's association has augmented the prestigious position which this organization enjoys in international

paleontology. For myself, I am especially indebted to her, for without her intercession I would not have had the privilege to follow in the footsteps of New York's eminent State Paleontologists.

Her career was her life and, accordingly, she had few outside interests. If one must judge her worthiness, it must assuredly be regarded as eminently successful.

BIBLIOGRAPHY OF WINIFRED GOLDRING

- 1921 Decreasing salinity of the Pleistocene Champlain sea going southward, as shown by the character of the fauna, with a brief discussion of the Pleistocene fauna of the Hudson Valley and its significance (abstract): Geol. Soc. Amer. Bull., vol. 32, no. 1, p. 132-133.
- —— Annual rings of growth in Carboniferous wood: Bot. Gazette, vol. 72, no. 5, p. 326-330, 1 pl.
- 1922 The Champlain sea; evidence of its decreasing salinity southward as shown by the character of the fauna: New York State Mus. Bull., nos. 239-240, p. 153-194, 2 figs., 5 pls.
- 1923 The Devonian crinoids of the State of New York: New York State Mus., Memoir 16, 670 p., 63 figs., 60 pls.
- 1924 The Upper Devonian forest of seed ferns in eastern New York: New York State Mus. Bull., no. 251, p. 50-92, 7 figs., 11 pls.
- 1926 New museum exhibits: The fossil forests of Gilboa; What is a fossil? What is a geological formation?: New York State Mus. Bull., no. 267, p. 81-84, 1 pl.
- New Upper Devonian plant material [Gilboa, New York]: New York State Mus. Bull., no. 267, p. 85-87, 5 pls.
- —— New species of Hamilton crinoids [Hamilton, New York]: New York State Mus. Bull., no. 267, p. 89-92, 1 fig., 2 pls.
- 1927 The oldest known petrified forest [Gilboa, Schoharie County, New York]: Sci. Monthly, vol. 24, no. 6, p. 515-529, 14 figs; Smithsonian Inst. Ann. Rept. 1928, p. 315-324, 9 pls., 1929.
- 1929 Handbook of paleontology for beginners and amateurs; Pt. I, The fossils: New York State Mus. Handbook 9, 356 p., 97 figs.
- An outdoor exhibit of the Gilboa fossil trees: New York State Mus. Bull., No. 284, p. 33-35, 3 pls.
- 1930 The oldest known fossil forest: New York State Education, vol. 17, no. 8, p. 704-707, 2 figs.
- The oldest known petrified forest: Am. Forestry and Forest Life, vol. 36, no. 8, p. 491-493, 546-547, 6 figs.
- 1931 Handbook of paleontology for beginners and amateurs; Pt. 2, The formations: New York State Mus. Handbook 10, 488 p., 62 figs.
- 1933 Guide to the geology of John Boyd Thacher Park (Indian Ladder region) and vincinity: New York State Mus. Handbook 14, 112 p., 29 figs., 3 pls.
- A new species of crinoid from the Devonian (Oriskany) of Maine: Portland Soc. Nat. History Proc., vol. 4, p. 153-155, 2 pls.
- 1934 Some Hamilton crinoids of New York and Canada: Buffalo Soc. Nat. Sci. Bull., vol. 15, no. 3, p. 182-200, 2 pls.

- 1935 Der älteste versteinerte Wald aus der Devon-Zeit von New York: Natur und Volk, Band 65, Heft 4, p. 151-155, 3 figs.
- Geology of the Berne quadrangle; with a chapter on glacial geology by John H. Cook: New York State Mus. Bull., no. 303, 238 p., 50 pls. incl. geol. maps, 23 figs.
- —— Some Upper Devonian crinoids from New York: Carnegie Mus. Annals, vol. 24, serial 164, December 1934-August 1935, art. 10, p. 337-348, 3 pls.
- New and previously known Middle Devonian crinoids of New York: Carnegie Mus. Annals, vol. 24, serial 164, December 1934—August 1935, art. 11, p. 349-368, 3 pls.
- 1936 Some Hamilton (Devonian) crinoids from New York: Jour. Paleontology, vol. 10, no. 1, p. 14-22, 2 pls., 1 fig.
- 1937 On the origin of the Saratoga mineral waters; Cryptozoon, plant nature and distribution: Science n. s., vol. 86, no. 2241, p. 530-531.
- 1938 An Upper Devonian species of *Aorocrinus*: Carnegie Mus. Annals, vol. 27, art. 5, p. 109-112, 4 figs.
- —— Devonian crinoids from the Mackenzie River Basin, Northwest Territories, Canada: Bull. Am. Paleontology, vol. 24, no. 81, 23 p., 2 pls.
- Algal barrier reefs in the Lower Ozarkian of New York with a chapter on the importance of coralline algae as reef builders through the ages: New York State Mus. Bull., no. 315, p. 5-75, 20 pls., 2 figs., index and geol. maps.
- —— Additional notes on previously described Devonian crinoids: New York State Mus. Bull., no. 315, p. 77-83, 2 pls.
- 1939 Report on geological areas in New York State: New York State Mus. Bull., no. 317, p. 119-131, 1 fig., index map.
- Linobrachiocrinus, new name for Linocrinus Goldring, 1938, not Kirk, 1938: Jour. Paleontology, vol. 13, no. 3, p. 354.
- 1942 Crown of Ancyrocinus bulbosus Hall [from New York]: Buffalo Soc. Nat. Sci. Bull., vol. 17, no. 3, p. 13-18, 1 pl., 2 figs.
- —— (and Flower, Rousseau Hayner), Restudy of the Schoharie and Esopus formations in New York State: Am. Jour. Sci., vol. 240, no. 10, p 673-694.
- 1943 Geology of the Coxsackie quadrangle, New York: New York State Mus. Bull., no. 332, 374 p., 50 pls., 24 figs., geol. maps incl. index, includes chapter on glacial geology, by John H. Cook.
- 1944 (and Rudolf Ruedemann), Memorial to David H. Newland: Geol. Soc. Amer. Proc. 1943, p. 209-216, port.
- —— (and Flower, Rousseau Hayner), Carlisle Center formation, a new name for the Sharon Springs formation of Goldring and Flower: Am. Jour. Sci., vol. 242, no. 6, p. 340.
- 1945 Notes on *Thamnocrinus springeri* Goldring and other Hamilton crinoids: Am. Jour. Sci., vol. 243, no. 2, p. 57-65, 1 pl.
- 1946 A new lower Chemung crinoid [N. Y.]: Bull. Am. Paleontology, vol. 31, no. 119, p. 1-8, 1 pl.
- 1948 Occurrence of *Gennaeocrinus kentuckiensis* (Shumard) in Pennsylvania: Wagner Free Inst. Sci. Bull., vol. 23, no. 1, p. 1-3, 1 pl.
- —— Status of "Homocrinus" cylindricus Hall: Wagner Free Inst. Sci. Bull., vol. 23, no. 4, p. 25-31, 1 pl.

- 1950 Handbook of paleontology for beginners and amateurs; Pt. 1, The fossils: New York State Mus. Handbook 9, 2nd ed., 394 p., 97 figs.
- —— Devonian crinoids -new and old— [Pt. 1]: Wagner Free Inst. Sci. Bull., vol. 25, no. 4, p. 29-37, 2 pls.
- 1951 A new species of the genus *Craterocrinus* Goldring: New York State Mus. Circ. 27, 6 p., 1 pl.
- 1954 Devonian crinoids—new and old—[Pt. 2]: New York State Mus. Circ. 37, 51 p., 6 pls.
- —— Memorial to George Halcott Chadwick (1876-1953): Geol. Soc. Amer. Proc. 1953, p. 101-106, port.
- 1958 Memorial to Rudolf Ruedemann (1864-1956): Geol. Soc. Amer. Proc. 1957, p. 153-161, port.