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James L. Carew**



**Bahamian Field Station
San Salvador, Bahamas
1997**

**A MEMORIAL AND DEDICATION:
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(1946-1995)**

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A MEMORIAL AND DEDICATION:
SUSAN JENKS GAFFEY
(1946-1995)¹

Susan Jenks Gaffey, a frequent research visitor to the Bahamian Field Station and contributor to the Geology of the Bahamas symposia, died on October 2, 1995 at age 49 in North Liberty, Iowa, only two months after the first appearance of a rare form of intestinal cancer. At the time of her death, Sue was on sabbatical leave to Iowa State University from her position on the faculty of the Department of Earth and Environmental Sciences at Rensselaer Polytechnic Institute in Troy, New York. Sue was an accomplished scholar whose research emphasis was in the geochemical aspects of carbonates. She is survived by her husband, Michael J. Gaffey, also a geologist and on the faculty of RPI.

A native of Iowa, Sue entered the University of Iowa as a National Merit Scholar and received her undergraduate degree in 1968 with High Distinction Honors in geology and election to Phi Beta Kappa. During her undergraduate years, Sue contracted a polio-like infection that resulted in muscle weakness and associated health problems that persisted throughout her life. Nonetheless, she was resolute in following her career dream to be a geologist, even with limited financial resources and at a time when there were relatively few women in the field to serve as role models and mentors. In 1968, with a National Science Foundation Fellowship, Sue entered the graduate geology program at Rice University. In 1973, she completed a thesis on deposition and diagenesis of the Mississippian Lodgepole Formation of Montana and received an MS degree. Dissatisfaction with the program at Rice led Sue to leave in 1971 to enter the Ph. D. program at Johns Hopkins University, again with an NSF Fellowship. Unfortunately, she was forced to withdraw after a year owing to a serious kidney illness.

In August of 1973, Sue and Michael were married in the Danforth Chapel on the University of Iowa campus; they had been geology classmates in the Iowa class of 1968. From 1973 to 1978 the Gaffeys lived in Cambridge, Massachusetts where Sue continued to take classes and conduct independent research on ooids and other aspects of carbonates, as her health permitted. In 1977, Sue and Mike moved to the University of Hawaii in Honolulu. With recovering health, Sue was able to work part-time and continue her research, and she soon entered the Ph. D. program at the university. Her thesis research was on the spectral reflectance of carbonate minerals and applications to carbonate petrology; she received her doctorate degree from the University of Hawaii in 1984.

With encouragement from Dr. Gerry Friedman, Sue and Mike moved to Troy, New York in 1984 where they assumed faculty positions at RPI. Sue began to focus her research on the stability and early diagenesis of skeletal carbonates, and she developed an active field research program at the Bahamian Field Station. Employing spectral techniques developed during her doctoral research, Sue discovered and characterized several previously unknown or under-appreciated hydrated mineral forms that affect the stability and diagenetic behavior of skeletal carbonate sediments. Her most recent research concerned the increasingly-evident major role played by micro-organisms in the cementation of carbonate sediments.

During her all-too-short career, Sue published 19 papers, many single-authored, and 22 abstracts (an abridged bibliography follows). Sue was a Geological Society of America Fellow and, at the time of her death, was serving as book-review editor for *Northeastern Geology and Environmental Sciences*. Beyond her career in geology, Sue was an accomplished musician, skilled with the flute, recorder, fife, and bagpipes. She also was an avid "frogger", taking pleasure in observing her favorite amphibians in their natural habitats and in collecting frog miniatures in a variety of media. Sue was a loving spouse and family member and a caring friend and mentor. A memorial service was held for Sue on October 28, 1995 in the same chapel on the University of Iowa campus where she and Michael were married 22 years earlier.

Sue Gaffey will be greatly missed by her fellow researchers in carbonate geology, and many friends at the Bahamian Field Station. The contributors and editors dedicate this volume to her memory.

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Susan Jenks Gaffey

¹ Prepared by H. Allen Curran from materials supplied by Michael Gaffey and from a memorial written by Gerald M. Friedman that appeared in *Northeastern Geology and Environmental Sciences*, 1995, v. 17, p. 446.

² This list includes only those papers most closely related to tropical carbonate geology. The complete bibliography for Susan Jenks Gaffey may be obtained by writing Michael J. Gaffey, Department of Earth and Environmental Sciences, RPI, Troy, NY 12180-3590.