

## AUTOBIOGRAPHICAL SKETCHES OF

## WOMEN IN OCEANOGRAPHY



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As "Deepsea Dawn," I have immersed myself in two disciplines: marine geology and the emerging field of marine geography. After receiving my B.S. in geology from Wheaton College (Illinois) and my M.S. in oceanography from Texas A&M University, I sailed for three years as marine technician with the Ocean Drilling Program (ODP). Working with the diverse group of scientists, technicians, and staff at ODP motivated to obtain my Ph.D. in physical geography and marine geology from the University of California, Santa Barbara. I am currently professor of geography and oceanography at Oregon State University.

When in geologist mode, and with the help of the *Argo* remotely operated vehicle and *Alvin* submersible dives, I have focused my research on mid-ocean ridge fissures and the impor-



Dawn with her dog Lydia at Agate Beach on the central Oregon coast.

tant clues they provide to the birth and death of hydrothermal vents and the nature of volcanic eruptions along fast-spreading ridges. I am also studying benthic complexity for habitat mapping of coral reefs in the Southwest Pacific, in collaboration with Marine Protected Area managers.

When in geographer mode, I devote my expertise to developing better ways of displaying, analyzing, and interpreting information I, and other oceanographers, collect from the seafloor. Through this work I've become one of the leading authorities on marine geographic information systems (GIS). Although GIS has been used in a wide variety of fields from landscape ecology to archaeology to climatology, it has only recently been adapted for oceanography. This is an exciting research frontier for GIS, in terms of the necessity for data structures and analytical procedures that will better visualize and analyze data in two, three, and four dimensions.

I was a member of the National Academy of Sciences' National Needs for Coastal Mapping and Charting Committee and now serve on the editorial boards of three geographic information science journals. My most recent books include *Marine and Coastal Geographical Information Systems* (Taylor & Francis, 2000), *Undersea with GIS* (ESRI Press, 2002), and *Place Matters: Geospatial Tools for Marine Science, Conservation, and Management in the Pacific Northwest* (OSU Press, in press).

What continues to inspire me are my colleagues, particularly my woman colleagues. I enjoy hearing or reading about their discoveries, which spur me on to keep striving in my own research and teaching. While I have seen many more women come in to my fields than when I first started, it is still somewhat of a novelty to see women achieving in certain areas. For instance, at my institution there is still a very small percentage of women who have made the rank of full professor, and I remain the only female African-American of this rank on the entire campus. But, an additional inspiration are my students and the courses that they are charting for themselves in ocean science. Fingers crossed!

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