

J. Frederick Grassle

Position: Professor II, Institute of Marine and Coastal Sciences, Rutgers University

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Professional Preparation:

B.S. 1961 Yale University
Ph.D. 1967 Duke University
Postdoctoral Fulbright Scholar, University of Queensland 1967-69

Appointments:

- Professor II, Rutgers University; Director, Institute of Marine and Coastal Sciences, 1989-present
- Assistant Scientist-Senior Scientist, Woods Hole Oceanographic Institution, 1969-1989

Research Summary

Research on marine benthos in many different habitats (including research on: coastal, continental shelf, and deep-sea environments along the Atlantic Coast, coral reef communities on the Australian Great Barrier Reef, and deep-sea communities in the Northwest Atlantic, Panama Basin, Galapagos Rift, East Pacific Rise, and Guaymas Basin. About 80 publications include papers on marine benthic communities (deep-sea), hydrothermal vents, estuaries, wetlands, continental shelves, oil pollution, ocean observing systems, and web-based ocean information systems). Presently his research focuses on development of the Ocean Biogeographic Information System, synthesis activities associated with completion of the first Census of Marine Life in 2010, and benthic research on the New Jersey continental shelf, and deep-sea benthos in the Hudson Canyon.

Selected Publications (since 1992)

- 1992 Grassle, J.F. and N.J. Maciolek. Deep-sea species richness: regional and local diversity estimates from quantitative bottom samples. *American Naturalist* 139(2):313-341.
- 1992 Etter, R.J. and J.F. Grassle. Patterns of species diversity in the deep sea as a function of sediment particle size diversity. *Nature* 360:576-578.
- 1992 Snelgrove, P.V.R., J.F. Grassle and R.F. Petrecca. The role of food patches in maintaining high deep-sea diversity: field experiments using hydrodynamically unbiased colonization trays. *Limnology and Oceanography*

37:1543-1550.

1994 Snelgrove, P.V.R., J.F. Grassle, and R.F. Petrecca. Macrofaunal response to artificial enrichments and depressions in a deep-sea habitat. *J. Marine Research* 51:345-369.

1994 Blake, J.A. and J.F. Grassle. Benthic community structure on the U.S. South Atlantic Slope off the Carolinas: Spatial heterogeneity in a current-dominated system. *Deep-Sea Research II* 41:835-874.

1995 Snelgrove, P.V.R., C.A. Butman and J.F. Grassle. Potential flow artifacts associated with benthic experimental gear: Deep-sea mudbox examples. *J. Marine Research* 53:821-845.

1996 Snelgrove, P.V.R., J.F. Grassle and R.F. Petrecca. Experimental evidence for aging food patches as a factor contributing to high deep-sea macrofaunal diversity. *Limnology and Oceanography* 41:605-614.

1999 Snelgrove, P.V.R., J.P. Grassle, J.F. Grassle, R.F. Petrecca, H. Ma (1999). In situ habitat selection by settling larvae of marine soft-sediment invertebrates. *Limnology and Oceanography*. 44(5): 1341-1347.

2001 Stocks, K.I., and J.F. Grassle. Effects of microalgae and food limitation on the recolonization of benthic macrofauna in *in situ* saltmarsh-pond mesocosms. *Mar. Ecol. Prog. Ser.* 221:93-104.

2001 Snelgrove, P. V. R., J. F. Grassle, J.P. Grassle, R.F. Petrecca, and K.I. Stocks. The role of colonization in establishing patterns of community composition and diversity in shallow-water sedimentary communities. *J. Mar. Res.* 59:813-830.

2003 Zhang, Y. and J.F. Grassle. A portal for the Ocean Biogeographic Information System. *Oceanologica Acta* 25(2003):193-197.

2003 Stocks, K. and J.F. Grassle. Benthic Macrofaunal Communities in Partially Impounded Salt Marshes in Delaware: Comparisons with Natural Marshes and Responses to Sediment Exposure. *Estuaries*, 26(3),2003, 777-789.

2003 Hankin, S., L. Bernard, P. Cornillon, F. Grassle, D. Legler, J. Lever, and S. Worley. Designing the data management and communications infrastructure for the U.S. Integrated Ocean Observing System. *Marine Technology Society Journal* 37(3): 51-54.

U.S. Global Ocean Observing System Steering Committee, 2001-2006

Census of Marine Life, Scientific Steering Committee, 2001-present

Ocean Biogeographic Information System, Board of Governors, 2007-present

Editorial Board: *Journal of Marine Environmental Engineering*

Fellow: American Association for the Advancement of Science

Explorer's Club

Linnean Society of London

Member: American Geophysical Union, American Society of Limnology and Oceanography, American Society of Naturalists, Ecological Society of America, Estuarine Research Federation, National Association of Marine Laboratories, New

Jersey Academy of Sciences, The Oceanography Society, Sigma Xi, Society for the Study of Evolution, International Association of Biological Oceanographers (Past President)

PhD Advisor:

Cheryl Ann Butman, UCLA
Jeremy Collie, University of Rhode Island
Tracy McLellan, University of Johannesburg
Fredrika C. Moser, University of Maryland
Patricia Ramey, Rutgers University
Paul Snelgrove, Memorial University of Newfoundland
Karen I. Stocks, San Diego Supercomputing Center
Cindy Van Dover, College of William and Mary

Postdoctoral Scholar/Fellow Sponsor:

Richard Aronson, University of Southern Alabama
Gayle Brenchley, law practice in Seattle
Ron Etter, University of Massachusetts, Boston
Richard Hoffman, University of Albany, State University of New York
Peter Petraitis, University of Pennsylvania
Patricia Ramey, Rutgers University
Clay Sassaman, University of California at Davis
Paul Snelgrove, Memorial University of Newfoundland
Gary Taghon, Rutgers University
Dwight Trueblood, University of New Hampshire