

### Stephen A. Bloom, Ph.D.

Dr. Bloom has done research in marine shallow-water systems since 1965 when he began working with Dr. Joseph Simon at the University of South Florida on a benthic community characterization of Old Tampa Bay. He moved onto work at Woods Hole's Marine Biological Laboratory on oil spill dispersants and then onto the University of Washington in Seattle under Dr. Alan Kohn. Dr. Bloom completed his doctoral work (on competitive relations among dorid nudibranchs) in 1974 and returned to USF for a post-doctorate position with Dr. Simon. He accepted a faculty position with the Zoology Department of the University of Florida in 1976 and began research programs focusing on benthic fauna of the Gulf Coast and on seagrass competition.

Dr. Bloom has taught at Institutions including the University of South Florida, the University of Florida, the University of Washington, and the Duke Marine Laboratory at Beaufort with courses in Marine Ecology, Invertebrate Zoology, Integrated Marine Biology, Biological Photography, General Ecology, Principles of Animal Biology, Coral Reef Ecology, Reproduction and Habitat Selection Strategies, and Analytical Techniques in Community Ecology.

In 1983, Dr. Bloom pursued his growing interest in computer software development by earning an M.S. in computer science from the University of Florida and moving to a position in the Soil and Water Science Department as a Senior Programmer/Analyst where he is was employed until 2006. He has retired from the University but is still active in consulting.

Over the years, Dr. Bloom has authored several major software systems including:

- CAS The Community Analyses System : a comprehensive software system for community analysis and multivariate statistics
- Distance testing System for Child and Youth Care Workers (State of Illinois); and
- WETLANDS: A two-dimensional finite-difference model including dynamic pond and soil interactions and Priestley-Taylor evapotranspiration.

Dr. Bloom's clients have included the Army Corps of Engineers, Barry Vittor, Inc., Breedlove and Associates, Environmental Science & Engineering Corp., Florida Department of Natural Resources, Florida Department of Transport, Mote Marine Laboratories, Smithsonian Institution, Taylor Biological Company, University of Illinois at Springfield, Center for Legal Studies, and U.S. Fish & Wildlife Service. He provided them with services including software engineering, remote testing systems, database management, and statistical analyses.

Dr. Bloom is a member of Ecological Society of America, Southeastern Estuarine Research Society, and Society of Sigma Xi and has authored or co-authored over 40 publications in refereed scientific journals (see vitae for particulars) and untold numbers of articles in blacksmith newsletters, most of which are reproduced on this web site.

A subset of peer reviewed publications (as PDF's) is available here:

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Bloom, S.A. & C.F.Bloom [1978](#). Radular variation in two species of dorid nudibranchs. *J.Mollusc.Studies* 43:276-300.

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- Bloom, S.A. [1987](#). Seagrass Zonation: Experimental Verification of the roles of competition and predation. IN: Webb,F.J.,Editor. Proc.14th Annual Conf. on Wetlands Restoration & Creation. Hillsborough Community College,Tampa, FL. pp.48-62.
- Downs, W.C., R.S. Mansell, J.J. Street, S.A. Bloom, and D.C.M. Augustijn. 1987. Hydrazine transport in columns of sandy soil. p. 285-289. In Proceedings of International Conference on the Impact of Physico-Chemistry on the Study, Design, and Optimization of Processes in Natural Porous Media, M. Sardin and D. Schweich (eds.) Convened in Nancy, France during June 10-12, 1987.
- Gaston, L.A., R.S. Mansell, R.D. Rhue, S.A. Bloom and G.B. Volk. 1987. Cation leaching during application of sulfuric and nitric acids to an ultisol. p. 421-428. In Proceedings of an International Conference on Acid Rain, R. Perry, J.N.B. Bell, R.M. Harrison, and J. Lester (eds.). Convened in Lisbon, Portugal during September 1-3, 1987.
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