

Robert F. Van Dolah

Current Appointments:

Director and Senior Marine Scientist
Marine Resources Research Institute
South Carolina Department of Natural Resources
2001-present

Graduate Faculty
College of Charleston
Marine Biology Program
1987 – present

Education:

Marietta College - B.S. (Biology), 1971
University of Maryland - M.S. (Zoology), 1975
University of Maryland - Ph.D. (Zoology), 1977

Research Activities:

Estuarine Areas – assessing (a) estuarine habitat quality at state-wide and regional scales using a multi-metric approaches; (b) impacts of dredging and open-water disposal on benthic infaunal communities; (c) pollutant concentrations in sediments and tissues, and their ecological effects; (d) effects of habitat characteristics and upland development on estuarine biota; (e) toxicity effects of organic and metal pollutants on invertebrates and fish, including development of bioassay indicator methodologies; (f) effects of trawling and other bottom disturbance on soft-bottom infaunal communities; (g) changes in hydrographic conditions in several major estuaries of South Carolina; and (h) mapping intertidal shellfish habitats using high resolution aerial imagery.

Ocean Beach and Nearshore Areas - assessing (a) effects of beach nourishment on intertidal and nearshore macroinfaunal communities; (b) effects of dredging on nearshore subtidal communities; (c) colonization and community development patterns of epifauna on intertidal and shallow subtidal rocky substratum; (d) distribution of hard-bottom resources using remote sensing techniques; (e) impacts from jetty construction on beach and nearshore infauna; (f) seasonal and spatial distribution of loggerhead turtle populations in the Charleston entrance channel; (g) seasonal community dynamics of benthic infauna and epifauna.

Offshore Areas - assessing (a) effects of ocean disposal activities on sand-bottom infaunal communities in shallow shelf environments; (b) the ecology, distribution, and seasonal community dynamics of hard-bottom reef assemblages on the continental shelf (20-100 m); (c) effects of trawl damage on hard-bottom reef fauna; (d) growth and recruitment of hard-bottom fouling assemblages, (e) spatial analyses of coastal resources and uses using

Geographic Information System.

The above studies have provided considerable experience in a wide variety of quantitative and qualitative sampling designs and considerable supervisory experience in managing interdisciplinary research projects involving a large number of personnel and multiple agencies. As Director of the Institute, considerable management experience on offshore fisheries issues and data needs.

Research Grants:

PI or Co-PI on more than 60 studies in both estuarine and coastal marine habitats. Collective funding exceeds \$16,000,000. Funding sources have included NOAA-NOS and NMFS, EPA, Corps of Engineers, Fish and Wildlife Service, Minerals Management Service, Department of the Navy, South Carolina Sea Grant.

Publications:

Lead author or co-author on 63 peer-reviewed journal or technical report publications. Additional author or co-author on 41 technical reports describing findings on a variety of environmental and ecological issues.

Other Research and Management Activities

- Member, South East Coastal Ocean Observing Regional Association, 2007-present
- Member, South Carolina Shoreline Change Advisory Committee, 2007-2010
- Member, Regulatory Task Force for Coastal Clean Energy, 2009-present
- Member, Habitat Committee, Atlantic States Marine Fisheries Commission, 2002-present
- Member, South Atlantic Fishery Management Council, Coral Advisory Panel, 1993-present
- Board Member, Southern Association of Marine Laboratories, 2007-2009
- Member, Scientific Steering Committee, Development of Sediment Quality Objectives for California Bays and Estuaries, 2004-2011
- President – Southern Association of Marine Laboratories, 2002-2003
- Chair, Bottom Mapping Workgroup, Southeast Area Monitoring and Assessment Program, 1985-2003
- Chair, South Carolina Task Force on Offshore Resources, 1992-2002
- Chair, Marine Resources Division, Environmental Committee, 1985-2000
- Member, Committee on Beach Nourishment and Protection of the Commission on Engineering and Technical Systems, National Research Council, Marine Board, 1992-1995
- Secretary-Treasurer, Southeastern Estuarine Research Society, 1991-1993