

Review of Sea Turtle Population Assessment Methods

Committee

Karen A. Bjorndal

Chair

Karen A. Bjorndal is a Professor of zoology and director of the Archie Carr Center for Sea Turtle Research at the University of Florida in Gainesville. She received a Ph.D. in zoology from the University of Florida. Dr. Bjorndal served as the chair of the Marine Turtle Specialist Group of the International Union for the Conservation of Nature for 12 years. She is a member of the Scientific Advisory Council of the Bahamas National Trust and served as president of the Comparative Nutrition Society. Her research includes sea turtle demographics, feeding ecology, growth rates, and nutrition. Dr. Bjorndal was a member of the NRC Committee on Sea Turtle Conservation, which issued a report entitled "Decline of the Sea Turtles: Causes and Prevention."

Brian W. Bowen

Member

Brian W. Bowen is an Associate Researcher at the Hawaii Institute of Marine Biology, a research institute associated with the University of Hawaii, Manoa. He received a Ph.D. in genetics from the University of Georgia in 1992. Dr. Bowen's research focuses on the phylogeography and conservation genetics of marine vertebrates. His research program is designed to serve conservation goals by illuminating the evolutionary processes that generate biodiversity. Dr. Bowen is a member of the American Association for the Advancement of Science, American Society of Ichthyologists and Herpetologists, American Genetics Association, Society for Conservation Biology, and the Society for the Study of Evolution. He has held many editorial positions, including two currently: "Molecular Ecology" and "Journal of Heredity."

Milani Chaloupka

Member

Milani Chaloupka runs Ecological Modelling Services Pty Ltd, an international research company that provides statistical and mathematical consulting on ecological and economic issues for a wide range of groups including industry, government, academia, and nongovernmental organizations. Dr. Chaloupka has a Ph.D. in marine ecology from the University of Queensland in Australia. His expertise is in statistical and mathematical modeling of complex ecological systems, including the development of interactive stochastic computer simulations of endangered species population dynamics. He is the chair of the Sea Turtle Advisory Committee of the Western Pacific Regional Fishery Management Council and vice-chair of the IUCN/SSC/Marine Turtle Specialist Group. He is also chair of the IUCN/SSC Marine Turtle Red List Authority.

Larry B. Crowder

Member

Larry B. Crowder is Professor of Marine Biology at the Nicholas School for the Environment at Duke University. He completed his doctoral studies in zoology at Michigan State University. Dr. Crowder's research centers on predation and food-web interactions, mechanisms underlying recruitment variation in fishes, and population modeling in conservation biology. Dr. Crowder is currently engaged in more extensive programs in marine conservation, including endangered species and fisheries conflicts, especially bycatch in fishing gear. Dr. Crowder is a former member of the Ocean Studies Board and has served on the NRC's U.S. National Scientific Committee on Oceanic Research, the Committee on the Alaska Groundfish Fishery and Steller Sea Lions, and the Committee on Ecosystem Effects of Fishing: Phase II -- Assessments of the Extent of Ecosystem Change and the Implications for Policy.

Selina S. Heppell

Member

Selina S. Heppell is an Associate Professor in the Department of Fisheries and Wildlife at Oregon State University. She earned a Ph.D. in zoology from Duke University. Dr. Heppell's research focuses on sea turtles, sharks, sturgeon, and U.S. west coast rockfish, primarily using computer models and simulations to understand how populations respond to human impacts and to guide research and management policy towards their recovery. She was an Aldo Leopold Leadership Program Fellow in 2006.

Cynthia M. Jones

Member

Cynthia M. Jones is a Professor, Eminent Scholar, and Director of the Center for Quantitative Fisheries Ecology at Old Dominion University. She received a Ph.D. in oceanography from the University of Rhode Island. Dr. Jones is a recognized expert in fisheries ecology and populations dynamics, and her recent research has explored topics including elemental analysis of adult and juvenile fish to investigate natal homing and connectivity in a marine fish meta-population. She has served on several Ocean Studies Board committees, including Review of Northeast Fishery Stock Assessments, and she chaired the Review of the National Marine Fisheries Service: Use of Science and Data in Management and Litigation. In addition, she was an Ocean Studies Board member from 2005 to 2007.

Molly E. Lutcavage

Member

Molly E. Lutcavage is Research Professor and Director of the Large Pelagics Research Center in the the Department of Natural Resources and the Environment, University of Massachusetts, Amherst. Dr. Lutcavage received her Ph.D. in biological oceanography from the University of Miami in 1987 and her M.S. from Virginia Institute of Marine Science at the College of William and Mary in 1981. Her research emphasizes population biology, physiological ecology, and conservation of large pelagic species, particularly tunas, billfish and sea turtles. Along with colleagues, Dr. Lutcavage helped develop electronic tagging and tracking methodologies for large marine animals. Her current interests include development of fishery independent detection and assessment methods for large pelagic species, and cooperative research approaches for fisheries.

Andrew R. Solow

Member

Andrew R. Solow is a Senior Scientist and Director of the Marine Policy Center at the Woods Hole Oceanographic Institution. He received his Ph.D. from Stanford University. His research is in the area of environmental and ecological statistics. Dr. Solow's most recent participation on NRC committees are the Committee on Evaluation of the Sea Grant Program Review Process, Committee for Review of the U.S. Climate Change Science Program Strategic Plan, the Committee on Future Needs in Deep Submergence Science, and the Committee on Extending Observations and Research Results to Practical Applications: A Review of NASA's Approach.

Blair E. Witherington

Member

Blair E. Witherington is a Research Scientist with the Florida Fish and Wildlife Research Institute where he has worked since 1992 on sea turtle biology and conservation. Dr. Witherington received a Ph.D. from the Department of Zoology at the University of Florida. He has an appointment as adjunct assistant professor in the Department of Zoology at the University of Florida, has served as president of the 20th International Sea Turtle Symposium, and is a member of the Marine Turtle Specialist Group of the IUCN as Vice Chair of the Northwest Atlantic region. He has authored or contributed to more than 40 scientific articles, monographs, and book chapters, and he has written three books on sea turtles and other natural history subjects.