

Richard D. Methot, Jr., (PhD), is the first NOAA Science Advisor for Stock Assessments. He is the agency's senior-most authority in the field of stock assessment science. His priorities are to facilitate a national approach to stock assessments across the agency and to conduct research to improve fish stock assessments nationally and internationally. A key aspect of his work is to develop methods for incorporating ecosystem considerations into stock assessments, such as predator and prey relationships, habitat and oceanographic impacts, and multi-species and multi-fisheries interactions.

Rick has been with NOAA Fisheries for over 30 years. Most recently, he was the National Stock Assessment Coordinator for the agency in the Office of Science and Technology. There, he led several national committees related to scientific guidance on marine fish stock assessment and provided scientific advice to fishery managers across the nation. Those include the Marine Fisheries Stock Assessment Improvement Plan and the Working Group for Revision of National Standards regarding optimum fishery yield, prevention of overfishing and rebuilding overfished stocks.

During his 30-year career with NOAA—including period working at the Southwest, Alaska, and Northwest Fisheries Science Centers, as well as the Headquarters Office of Science and Technology—his primary research area has been assessment of the abundance and productivity of groundfish and pelagic fish populations off the West Coast of the United States. His most recent research interests have included improvements in analytical methods to provide more comprehensive evaluation of the status of harvested fish stocks, including environmental and ecosystem factors, and better communication of these results to fishery managers. In 2008, he was awarded the Department of Commerce Gold Medal for his development of the Stock Synthesis Assessment Approach (2008) and Bronze for development of guidelines for implementation of annual catch limits (2009).

Dr. Methot's educational background includes a Bachelors of Science in Fisheries from the University of Washington (1975); a Doctorate in Biological Oceanography from Scripps Institution of Oceanography, University of California at San Diego (1981); and a post-doctoral position at the Bodega Marine Laboratory, University of California.

#### **Selected Publications:**

- Methot R.D. Jr., and Wetzel, C. 2012 (in press). Stock Synthesis: a biological and statistical framework for fish stock assessment and fishery management. Fisheries Research.
- Methot, R.D. Jr. and I.G. Taylor. 2011. Adjusting for Bias due to Variability of Estimated Recruitments in Fishery Assessment Models. Can. J. Fish. Aquat. Sci. 68: 1744-1760.
- Piner, K., H-H. Lee, M. Maunder and R.D. Methot. 2011. A simulation-based method to determine model misspecification: examples using natural mortality and population dynamics models. Marine and Coastal Fisheries.
- Methot, R.D. 2009. Stock Assessment: Operational Models in Support of Fisheries Management. In Beamish and Rothschild (ed) Future of Fishery Science – Proceedings of the 50th Anniversary Symposium of the American Institute of Fishery Research Biologists, Seattle, WA. Springer. Fish & Fisheries Series, Vol. 31: Pg. 137-165.
- Field, John C., A.E. Punt, R.D. Methot and C.J. Thomson. 2006. Does MPA mean 'Major Problem for Assessments'? Considering the consequences of place-based management systems. Fish and Fisheries, 7: 284-302.