

Personal Information:

Name: DOUGLAS W. LIPTON
Department: Agricultural and Resource Economics
Rank: Associate Professor
Year of Appointment: 1988

Education:

University of Maryland
Ph.D. in Agricultural and Resource Economics.....May, 1989

College of William & Mary School of Marine Science,
M.A. in Marine Science.....December, 1979

State University of New York @ Stony Brook
B.S. in Biology.....May, 1976

Employment

Assistant Professor and Marine Economic Specialist, Department of Agricultural & Resource Economics, University of Maryland--April, 1988 - July, 1994
Associate Professor April, 1988 to present

Coordinator, Maryland Sea Grant Extension Program--January, 1993 to present

Acting Program Director, Marine Economics and Recreation, National Sea Grant College Program (*IPA*)--October, 1990-July, 1991

Executive Director, Mid-Atlantic Regional Marine Research Program--February, 1993 to 1996

Economist, National Marine Fisheries Service, National Economics Program--June, 1985 to April, 1988

Fishery Biologist, National Marine Fisheries Service, Office of Resource Investigations--January, 1979 to June, 1985

Articles in Refereed Journals

Lipton, D.W. The resurgence of the U.S. swordfish market. Marine Fisheries Review 48(3):24-27. 1986.

Lipton, D.W. Interdependencies among fisheries management, fisheries trade and fisheries

- development: Experiences with extended jurisdiction - Discussion. Marine Fisheries Review 49(3):55-56. 1987.
- Lipton, D.W. and R.A. Siegel. Toward a rational seafood trade policy. Marine Fisheries Review 51(1):11-14. 1989.
- Lipton, D.W. and I.E. Strand. The effect of common property on the optimal structure of the fishing industry. J. Environ. Econ. and Manage. (16):45-51. 1989.
- Lipton, D.W. and I.E. Strand. The effect of regulations and stock size on the structure of the fishing industry: The Case of the Surf Clam Industry. Amer. J. Agric. Econ. 74(1):197-208, 1992.
- Lipton, D.W., E. Lavan, and I.E. Strand. Economics of mollusk introductions and transfers: The Chesapeake Bay dilemma. J. of Shellfish Research 11(2), 1992. (also reprinted in: Molluscan Introductions and Transfers, Carlton, J.T. and A. Rosenfield, ed., Maryland Sea Grant Publication UM-SG-TS-94-02.
- Bockstael, N.E., I.E. Strand and D.W. Lipton. Pulsed generic advertising: The case of common property. Marine Resource Economics Vol. 7:189-208, 1992.
- Herrick, S., I. Strand, D. Squires, M. Miller, D. Lipton, J. Walden, S. Freese. Application of benefit-cost analysis to fisheries allocation decisions: The case of Alaska pollock and cod. N. Amer J. Fish. Manage. 14:726-741, 1994.
- Lipton, D.W. and I.E. Strand. Economic effects of pollution in fish habitats. Transactions of the American Fisheries Society 126:514-518, 1997.
- Lipton, D.W. and R. Hicks. Boat Location Choice: The Role of Boating Quality and Excise Taxes. Coastal Management 27(1):81-90. 1999.
- Mistiaen, J.A., I.E. Strand and D. Lipton. Effect of environmental stress on blue crab (*Callinectes sapidus*) harvests in Chesapeake Bay tributaries. Estuaries 26(2a): 316-323 2003.
- Lipton, D.W. and R.Hicks. The cost of stress: Low dissolved oxygen and recreational striped bass (*Morone saxatilis*) fishing in the Patuxent River. Estuaries 26(2a):310-315. 2003.
- Lipton, D.W. Book Review: The Economics of Marine Resources and Conservation Policy: The Pacific Halibut Case Study with Commentary (James A. Crutchfield and Arnold Zellner). Environmental Conservation 31(1):87. 2004.
- Lipton, D.W. The value of improved water quality to Chesapeake Bay boaters. Marine Resource Economics. 19(2):265-270. 2004.

- Lipton, D.W. and D.H. Kim. Assessing the economic viability of offshore aquaculture in Korea: An evaluation based on rock bream, *Oplegnathus fasciatus*, production. *Journal of the World Aquaculture Society* 38(4):506-515.2007.
- Lipton, D.W. Economic Benefits of a Restored Oyster Fishery in Chesapeake Bay. *Journal of Shellfish Research* 27(3)619-623. 2008.
- Sanchirico, J.N., M.D. Smith and D.W. Lipton. An empirical approach to ecosystem based fishery management. *Ecological Economics* 64(3):586-596. 2008.
- Bunnell, D.B., Lipton, D.W. and T.J. Miller. 2010. The bioeconomic impact of different management regulations on the Chesapeake Bay Blue Crab Fishery. *North American Journal of Fisheries Management*. 30:1505-1521.
- Kim, D.H. and D.W. Lipton. 2011. A comparison of the economic performance of offshore and inshore aquaculture production systems in Korea. *Aquaculture Economics & Management* 15(2):103-117.
- Holzer, J., D. Lipton, D. and O. Francois. 2013. Rent-seeking and incentives for compliance in the commons. *American Journal of Agricultural Economics*. 95(1): 131-152.
- DePiper, G., N. Higgins, D. Lipton and A. Stocking. *Forthcoming*. Auction design, incentives, and buying back Maryland and Virginia crab licenses. *Canadian Journal of Agricultural Economics*.

Refereed Conference Proceeding

- Kirkley, J.E. and D.W. Lipton. Economic aspects of the Chesapeake Bay oyster fishery: Problems and the future or should the industry be revitalized? *Proceedings of the 1994 Chesapeake Research Conference*. 1995. pp.600-607.
- Gempesaw, C.M., D.W. Lipton and J.R. Bacon. Aquasim PC: A financial risk management tool for aquaculture farm managers. *Proceedings, 6th International Conference on Computers in Agriculture*. 1996.
- Lipton, D. and N. Bockstael. 2001. In-season spatial modeling of the Chesapeake Bay Blue Crab Fishery. In: *Spatial Processes and Management of Marine Populations* (edited by: G.H. Kruse, A. Booth, M.W. Dorn, S. Hills, R.N. Lipscius, D. Pelletier, C. Roy, S.J. Smith, and D. Witherell) University of Alaska Sea Grant, AK-SG-01-02.

Books

- Wang, D.H., M. Miller, P. Logan and D. Lipton. *U.S. fishing effected by the 1984*

- U.S./Canadian east coast maritime boundary decision. In: East Coast Fisheries Law and Policy (Bubier, J.L. and A. Rieser, eds.). The Marine Law Institute, Univ. of Maine. pp.33-48. 1987.
- Lipton, D.W. and K. Wellman. Economic Valuation of Natural Resources: A Handbook for Coastal Resource Policymakers. NOAA Coastal Ocean Program Decision Analysis Series No. 5. 1995. 131pp.
- Zilinskas, R.A., R.R. Colwell, D.W. Lipton and R.T. Hill. The Global Challenge of Marine Biotechnology: A Status Report on the United States, Japan, Australia and Norway. University of Maryland Sea Grant. UM-SG-TS-95-01. 1995. 372pp.
- Lipton, D.W. and C.M. Gempesaw. Chapter 12. Economics and Marketing. In : Striped Bass and Other Morone Culture. (R.M. Harrell, ed.) Developments in Aquaculture and Fisheries Science, 30. Elsevier New York. 1997. pp. 315-328.
- Lipton, D. and S. Kasperski. Chapter 4. Estuarine Restoration and Commercial Fisheries. In: The Economic and Market Value of Coasts and Estuaries: What's At Stake? (L. Pendleton, ed.) Published by Restore America's Estuaries. Washington, DC. 2008. pp. 65-81.

Monographs, Reports and Extension Publications

- Lipton, D.W. Comparison of scales and otoliths for determining age and growth of the alewife (Alosa pseudoharengus). Master's Thesis, Virginia Institute of Marine Science, College of William and Mary in Virginia. 37pp. 1979.
- McHugh, J.L., M.W. Sumner, P.J. Flagg, D.W. Lipton and W.J. Behrens. Annotated bibliography of the hard clam (*Mercenaria mercenaria*). NOAA Tech. Rep. NMFS SSRF 756 845pp. 1982.
- Lipton, D.W. and I.E. Strand. Maryland's ocean fisheries: A bioeconomic assessment. Tech. Rep. Md. Sea Grant College UM-SG-TS-83-03. 75pp. 1983.
- Smith, T.P., D.W. Lipton, and V. Norton. Estimates of recreational fishing in five east coast estuaries. Final Report: Hudson Raritan Estuary Program, NOAA, NOS. 32pp. 1984.
- Cathcart, T.P., D.W. Lipton, F.W. Wheaton, R.B. Brinsfield, D.G. Swartz, I.E. Strand. Composting Blue Crab Processing Plant Solid Waste. MD Sea Grant Report (1984).
- Lipton, D.W. and M.M. Miller. New issues for fisheries economists. (Keynote Article) Fisheries Economics Newsletter. 20 November, 1985:xxi-xxvi. 1985 (I)
- Lipton, D.W. The status and health of the Maryland seafood industry. Submitted to Maryland

- Department of Natural Resources. 1986.
- Lipton, D.W. and M.M. Miller. Problems of fisheries trade and management. NMFS staff paper. 1986.
- Lipton, D.W. Processed fishery products. in: 1986 U.S. Industrial Outlook. USDOC/ITA. pp.40/39-40/41. 1986.
- Wang, S., M.M. Miller and D.W. Lipton. Impact of U.S./Canada boundary decision on U.S. fisheries. NMFS staff paper. 1986.
- Anderson, L.G., M.M. Miller and D.W. Lipton. An economic research design for NMFS. NMFS staff paper. 1986.
- Loayza, E. and D.W. Lipton. Fisheries Development Strategy. Unpublished manuscript for The World Bank. 1988.
- Lipton, D.W. The status and health of Maryland seafood harvesting, 1988. University of Maryland Sea Grant Extension Pub.
- Lipton, D.W. and R.A. Siegel. Aquaculture and Capture Fisheries: Impacts in U.S. Seafood Markets (Chapters I-III). U.S. Dept. of Comm., NOAA, NMFS, 1988.
- Lipton, D.W., K. Sundberg and I. Strand. A business plan for the reactivation of McNasby's as a watermen's cooperative. Prepared for City of Annapolis, Department of Planning and Zoning. 51pp. 1989.
- Lipton, D.W. The status and health of Maryland seafood harvesting, 1987. UM-SG-MAP 89-02. 27pp. 1989.
- Strand, I.E., A. Buss, and D.W. Lipton. A transition period in the management, production and processing of Maryland oysters: 1950-1988. in: The Role of the State of Maryland in Oyster Fisheries Management. Report to the Governor, 1990.
- Lipton, D.W. An Evaluation of the Demand for a State Marina at Ocean City, Maryland. Report to the Waterway Grants & Project Planning Division, Maryland Department of Natural Resources. 1991. 14pp.
- Coastal Business Initiatives: A National Sea Grant Agenda for the '90's. coeditors: Cochrane, Davidson, DeYoung, Leffler, Lipton, Malouf, Schuler, Shephard, Smith. Oregon State University Sea Grant Special Report 870, March 1991.
- Lipton, D.W. and M.M. Miller. Regulatory Impact Review and Supplemental Environmental Impact Statement for the Atlantic Swordfish Fishery Management Plan. National Marine Fisheries Service, 1991.

- Lipton, D.W. and R.M. Harrell. Figuring costs of production in finfish aquaculture. Finfish Aquaculture Workbook Worksheet #4. Univ. of MD. Sea Grant Extension Pub. 1991.
- Lipton, D.W. Understanding fish prices: From production to table. Aquaculture Workbook Worksheet #5. Univ. of MD. Sea Grant Extension Pub. 1991.
- Lipton, D.W. and S. Keilholtz. 1993. Market needs of crabmeat dealers: Implications for Maryland's crab processing industry. Maryland Sea Grant UM-SG-TS-93-01
- Miller, M., D. Lipton and P. Hooker. Profile of change: A review of offshore factory trawler operations in the Bering Sea/Aleutian Islands pollock fishery. Report to the National Marine Fisheries Service. 1994. 37pp.
- Lipton, D. V. Ahuja and D. Squires. Review and recommendations for the economics analysis of AID environmental and policy reform project. Report to the U.S. Agency for International Development, REDSO/WCA, Abidjan, Cote d'Ivoire. 105pp. 1994.
- Cooper, S. and D. Lipton. Mid-Atlantic Regional Marine Research Program Research Plan. 1994.
- Lipton, D.W. and J. Kirkley (editors). 1994. A profile of the oyster industry of the Northeastern United States. Maryland Sea Grant UM-SG-MAP-94-02.
- Petrocci, C. and D. Lipton. 1994. The warmwater crab fishery in Asia: Implications for the Chesapeake Bay blue crab industry. Maryland Sea Grant UM-SG-MAP-94-01.
- Lipton, D.W. and S. Miller. Recreational Boating in Maryland: An Economic Impact Study. University of Maryland Sea Grant UM-SG-MAP-95-02. 1995. 35pp.
- Leffler, M., S. Cooper and D. Lipton. Land-use effects on water quality in mid-Atlantic waters and estuaries: Management and research needs. University of Maryland Sea Grant UM-SG-TS-95-02. 1995. 32pp.
- Geoghegan, J., N. Bockstael and D. Lipton. The Economics of Land Use Change in the Patuxent Watershed. In: Land Use and Management in Maryland (E. Brown and C. Buniski, eds.). University of Maryland College Park and The Aspen Institute. 1996. 107-147.
- Lipton, D.W. The Chesapeake Bay and Environmental Policies, Economic Viewpoints 1(1), Spring 96.
- Lipton, D.W. U.S. Fisheries Flat in 1995, Maryland Aquafarmer, 96-04, 1996. (Reprinted in Farm Pond Harvest, Vol. 31, No. 1, Winter 1997, pp.8 & 9)
- Lipton, D.W. Economic Impacts of Aquaculture in the US, Maryland Aquafarmer, 96-03, 1996.

- Lipton, D.W. Paying for Risk in Aquaculture, Maryland Aquafarmer, 96-01, 1996.
- Lipton, D.W. and R. Hicks. The Effect of a Change in the Excise Tax on Boats Documented in Maryland. Report to the Maryland Department of Natural Resource, Maryland Department of Business and Economic Development, and the Marine Trades Association of Maryland. 1997. 19pp.
- Lipton, D.W. and N.E. Bockstael. Maryland Land Use: Assessing Policy Outcomes with Economics. Economic Viewpoints Vol. 2. No. 2. Fall, 1997. pp 4-7.
- Lipton, D.W. Boating in Maryland — Economic Impacts from a Healthy Coastal Environment. Economic Viewpoints, Vol. 2. No. 1. Spring, 1997. pp 1-3.
- Lipton, D.W. Fisheries Facts for 1996. Maryland Aquafarmer 97-03, 1997. pp 3.
- Lipton, D.W. Trout and Aquaculture. Maryland Aquafarmer 97-02, 1997. (Reprinted in Aquaculture Magazine, Vol. 23, No. 3. May/June 1997, pp7-8.)
- Lipton, D.W. Tilapia Takes Hold. Maryland Aquafarmer 97-01, 1997. (Reprinted in Aquaculture Magazine, Vol. 23, No. 2, March/April 1997, pp 9-10.)
- Wallace, N. and D.W. Lipton. The global crabmeat market. Maryland Aquafarmer 98-03, 1998. p.3.
- Kirkley, J.E. and D.W. Lipton. Managing technical and economic interactions in multispecies and multiproduct fisheries. in: Prospects for Multispecies Management in Chesapeake Bay. STAC Publication 98-002.
- Lipton, D.W. Response of Maryland Recreational Fishing to 1997 Pfiesteria Occurrences. Maryland Aquafarmer 98-03, 1998. p.4.
- Lipton, D.W. The Economics of Aquaculture. Maryland Aquafarmer 98-01, 1998. p.9. (Reprinted in Aquaculture Magazine, Vol. 24, No. 2. March/April 1998, pp13-14.)
- Lipton, D.W. The values of oysters. Maryland Aquafarmer 99-04, 1999. p. 4.
- Lipton, D.W. Managing Chesapeake Bay blue crabs: Is there a better way? Maryland Aquafarmer. 99-03, 1999. pp. 1-2. (Reprinted in Aquaculture Magazine, Vol 25, No. 6. November/December, 1999. pp. 7-10.)
- Lipton, D.W. Crabmeat processors file ITC petition. Maryland Aquafarmer 2000-03, p.4.
- Rhodes, A., D. Lipton and L. Shabman. The Chesapeake Bay Commercial Blue Crab Fishery: A Socio-Economic Profile. Chesapeake Bay Commission. Report No. 1, 23pp. December 2001.

- Byrd, H., E. English, D. Lipton, N. Meade and T. Tomasi. Chalk Point Oil Spill: Lost recreational use valuation report. Report to the Chalk Point Trustee Council. March 2001.
- Lipton, D.W. Boating 2000: A Survey of Boater Spending in Maryland. Maryland Sea Grant UM-SG-SGEP-2001-03. 7pp. 2001.
- Lipton, D.W. State of the soft crab market. Maryland Aquafarmer 2001-01, pp. 5-6. 2001.
- Lipton, D.W., E.D. Houde and J. Freeman. 2002. Exploring Alternatives for Fisheries Management in Chesapeake Bay: A Workshop. Scientific and Technical Advisory Committee, Chesapeake Bay Program STAC Publication 01-002. 25pp.
- Lipton, D.W. Did the ITC get it wrong? Crabmeat imports three years later. Maryland Aquafarmer 2003-03. pp.8-9. 2003.
- Lipton, D.W. Country of origin labeling coming to your seafood counter. Maryland Aquafarmer. 2003-02. p. 8. 2003.
- Lipton, D.W. Profitability and oyster restoration: Marketing will be critical. Maryland Aquafarmer. 2003-01. pp. 5-6. 2003.
- Whitehead, J., D. Lipton, F. Lupi and R. Southwick. 2004. Economic growth and environmental protection: A clarification about neoclassical economics. Fisheries 30(4):32-34.
- Economic Impact of Maryland Boating Update: 2004.
<http://www.mdsg.umd.edu/Extension/recboat04.html>
- Lipton, D.W. Fisheries and Worldwide Markets. Maryland Aquafarmer. 2004-01/02:20-21. 2004.
- Lipton, D.W. The Changing Values of an Ecosystem. (Chapter 3 in: Chesapeake Bay Commission Annual Report 2006). Chesapeake Bay Commission. pp. 29-33. 2007
- Bricker, S., D. Lipton, A. Mason, M. Dionne, D. Keeley, C. Krahforst, J. Latimore and J. Pennock. Improving methods and indicators for evaluating coastal eutrophication: A pilot study in the Gulf of Maine. NOAA Technical Memorandum NOS NCCOS 20. National Ocean Service. National Center for Coastal Ocean Science, Center for Coastal Monitoring and Assessment, Silver Spring, MD. 81pp. 2006
- Sanchirico, J.N., M. Smith and D. Lipton. Managing fish portfolios. Resources. Resources for the Future. Winter 2007 pp3-4.

Loomis, David K., Christopher Hawkins, Douglas Lipton and Robert B. Ditton. 2008. The Social and Economic Impacts of the Tortugas Ecological Reserve to Recreation Businesses that Utilize the Dry Tortugas Area. National Centers for Coastal Ocean Science

.Lipton, D.W., L. Shabman and T. Miller. Saving the Crab – and the Watermen. Editorial, Washington Post, Sunday, May 11, 2008.

Luckenbach, M., D. Lipton, D. Webster, S. Abel, T. Zinn, T. Leggett, E. Rhodes, and K.G. Sellner. 2008. A Framework for Native Oyster Aquaculture Development in Maryland. CRC Publ. No. 08-166, Edgewater, MD. 38 pp.

Murray, T, Kirkley, J and D. Lipton. 2009. Assessment of the Economic Impacts of Recreational Boating in the City of Hampton. VIMS Marine Research Report #2009-02. 38pp

Díaz, R.J. Able, K.W., Atkinson, L. Austin, D, Brill, R, Kraus S.D., **Lipton, D.** and L. Schaffner. Workshop on Environmental Research Needs in Support of Potential Virginia Offshore Oil and Gas Activities. Prepared under MMS Contract #MMS08HQPA0009. Virginia Institute of Marine Science, College of William and Mary Gloucester Pt., Virginia. February, 2009. <http://www.mms.gov/eppd/sciences/conf.htm>

Lipton. D. 2010. *Ecosystem Based Fisheries Management for Chesapeake Bay: Striped Bass Species Team Background and Issues Briefs*. Socioeconomics: Section 18-1: Valuation of Water Quality, Section 19-1: Consumption and Demand. Maryland Sea Grant.

Paolisso, M., E. Van Dolah, T. W.Hartley, L. A. Wainger, J. Pease, **D. Lipton** and S. Julius. (2011). *Integrating Social Science Research into Chesapeake Bay Restoration*. Chesapeake Bay Scientific and Technical Advisory Committee Workshop Report 11-05. 23pp. http://www.chesapeake.org/pubs/258_Paolisso2011.pdf

Talks, Abstracts, and other Professional Papers Presented:

Invited Talks

Price determination in the U.S. shrimp market. Presented at the Shrimp Market Workshop of the Int. Inst. Fish. Econ. Trade, Charleston, SC, July, 1984.

Response to "Interdependencies Among Fisheries Management, Fisheries Trade, and Fisheries Development: Experiences with Extended Jurisdiction" by R.S. Johnston and J.R. Wilson, at American Fisheries Society Annual Meeting, Providence, RI, September, 1986.

The Economics of the Fisheries Trade Balance. at American Fisheries Society Annual Meeting, Winston-Salem, NC, September, 1987.

A Review of the NMFS Cold Storage Holding Program. Presented to the Shrimp

Committee, National Fisheries Institute, Orlando, FL, September, 1987.

Chesapeake Bay Fisheries Management. Presented at the 4th Annual Conference on the Economics of Chesapeake Bay, Baltimore, MD May, 1988.

Agricultural Alternatives for Maryland Farmers: A Case Study in Aquaculture. Presented at the Governor's Conference of the Future of Maryland Agriculture, Baltimore, MD, November, 1988.

The Economics and Business of Aquaculture. Penn State Fish Farming Conference, Reading, PA, November, 1989.

Pulsed Generic Advertising: The Case of the Maryland Oyster. Symposium on Seafood Advertising and Promotion, Orlando, FL, October, 1989.

Figuring Cost of Production in Finfish Aquaculture, at Maryland/Virginia Aquaculture Conference, Fredericksburg, VA, June, 1989.

Panelist: Managing Bay Resources. at 5th Economics of Chesapeake Bay Conference, Annapolis, MD, June, 1989.

Discussion: Private Oyster Culture in Virginia (Bosch and Shabman). at Economics of Chesapeake Bay Conference, Annapolis, MD, June, 1989.

The Economics of Mollusk Introductions and Transfers National Shellfisheries Association, Williamsburg, VA, April, 1990.

Aquaculture and the Product Life Cycle Marine Aquaculture Training Workshop, Portsmouth, NH, October, 1990.

Product Life Cycles: The Potential for Striped Bass Aquaculture, Presented paper at AAAS meeting, Washington, DC, February, 1991.

An analysis of the maritime retention strategy in Annapolis, Maryland. Southeast Regional Agricultural Economics Working Group, Clearwater Beach, FL, October, 1992.

A comparative analysis of hybrid striped bass production in ponds and tanks. at the National Aquaculture Extension Workshop, Ferndale, AR, March, 1992.

The product life cycle and its application to aquaculture. at the National Aquaculture Extension Workshop, Ferndale, AR, March 1992.

Economic aspects of the Chesapeake Bay Oyster Fishery: Problems and the Future or Should the Industry be Revitalized? (J. Kirkley, co-author and presenter), Chesapeake Research

Conference, Norfolk, VA, June, 1994.

Managing a Blue Crab Fishery: Lessons from the Chesapeake (L. Shabman & A. Rhodes, co-authors), Presentation at the Blue Crab Fisheries of North America conference, Baltimore, MD, April, 1996.

Blue Crab Economics: The Effects of Harvest Regulations in Maryland, (Abstract) Proceedings of the 49th Annual Interstate Seafood Seminar, Ocean City, MD, November, 1997.

Managing the Chesapeake Bay for Humans. Federally Supported Science and the Chesapeake Bay Program. December, 1998. Laurel, MD.

Pfiesteria's Economic Impact on Seafood Industry Sales & Recreational Fishing. Center for Agriculture and Natural Resource Policy Conference - Pfiesteria: Where Do We Go From Here? Economics of Policy Options for Nutrient Management and Dinoflagellates, Patuxent Wildlife Visitor Center. November, 1998. Laurel, MD.

Pfiesteria's Economic Impact on Seafood Industry Sales & Recreational Fishing. National Sea Grant Program Media Briefing. October, 1998, Washington, DC.

Effects of Nutrient Pollution on Recreational Fishing in the Chesapeake Bay. Center for Marine Conservation Workshop on Nutrient Pollution in Coastal Waters. September, 1998. Washington, DC.

Use of GIS to Determine the Effect of Water Quality on Human Activities. National Sea Grant GIS Meeting, May, 1998, Newark, DE.

Asian Crabmeat Imports: Can the Domestic Industry Compete? Atlantic Fisheries Technology Conference. November, 1999. Atlantic Beach, NC. (Abstract published).

Economic Impact of Pfiesteria on Maryland's Seafood and Recreational Fishing Industry. Workshop on Measuring the Economic Impacts of Harmful Algal Blooms on Florida's West Coast. June, 1999. Mote Marine Lab, Sarasota, FL.

Linking Water Quality to Recreational Fishing Benefits: The Case of Chesapeake Bay Striped Bass. March 1999. Resources for the Future Seminar, Washington, DC.

Alternative Blue Crab Management. Atlantic Fisheries Technology Conference and Interstate Seafood Seminar. November, 2000. Ocean City, MD (Abstract published).

Measuring the Economic Impacts of Eutrophication. National Eutrophication Workshop. September, 2002. Laurel, MD.

Chesapeake Bay Oyster Economics. National Academy of Sciences Panel on the Introduction of Non-Native Oysters to Chesapeake Bay. October, 2002. Fredericksburg, VA.

Estimating the Economic Benefits of Oyster Reef Restoration and Marine Preserve Establishment in the Lower Chesapeake Bay (w/R. Hicks & T. Haab). Spatial Management in Fisheries Workshop. National Marine Fisheries Service. October 2002. Silver Spring, MD.

Economic Impact Of Regulations On Maryland's Crabmeat Processing Industry. Mid-Atlantic Interstate Seafood Seminar. October, 2002. Rehoboth, DE.

Valuing Water Quality Benefits: Case Studies From Chesapeake Bay. University of Washington, Natural Resource Economics Seminar. Seattle, WA. April 2003.

Environmental Valuation. Workshop on Economic Analysis for Environmental Policy and Planning. Orlando, FL. February, 2003.

Economic Value and Eutrophication. NOAA Science Seminar. February, 2003. Silver Spring, MD.

Socioeconomics in Chesapeake Bay Restoration. Invited Keynote Presentation. Challenges of Socioeconomic Research in Coastal Systems: Valuation Analysis and Policy Development, Baton Rouge, LA, May, 2004.

A New Oyster for Chesapeake Bay. Maryland DNR Seminar Series. Annapolis, MD, October 2005.

Economics and Ecosystem Based Fisheries Management. NMFS Ecosystem Based Fisheries Management Workshop. Key Largo, FL. Feb. 2005.

Evaluating Oyster Restoration Alternatives in Chesapeake Bay National Marine Fisheries Service "Good Policy" Seminar Series. Silver Spring, MD December, 2006.

Accounting For Economic Risk and Uncertainty in Offshore Aquaculture: A Case Study of Korean Rock Bream Production U.S. Japan Natural Resources Seminar (UJNR). Ishima, Japan., November, 2006.

The Shifting Economic Picture of Chesapeake Bay's Living Resources. Chesapeake Bay Commission. Virginia Beach, VA. November, 2006.

An Economic Indicator of Eutrophication: Barneget Bay Recreational Fishing. National Estuarine Eutrophication Assessment Workshop. Linthicum, MD May, 2006.

A New Oyster for Chesapeake Bay. University of Delaware Marine Policy Seminar. Newark, DE, March 2006.

Economics of Environmental Impacts of Offshore Oil & Gas Development. Workshop on OCS Development off the Coast of Virginia. Williamsburg, VA December 2008.

Economics of Resources in Mid-Atlantic. Mid-Atlantic Regional Ocean Forum. Baltimore, MD December 2008.

Economics of Oyster Aquaculture. Maryland Oyster Business Plan Workshop. Kent Island, MD, November 2008.

Market and Non-Market Values. Massachusetts Ocean Partnership Workshop. Boston, MA, February, 2010.

The Impact of Nutrient Trading on the Profitability of Oyster Aquaculture Maryland Oyster Meeting, Annapolis, MD, November 2010.

An Application for Valuing Ecosystem Services for Decision-Making: The Programmatic Environmental Impact Statement for Oyster Restoration in Chesapeake Bay Using a Native and/or Nonnative Oyster. AAAS Policy Luncheon, Options for the Oceans, Washington, DC, February 2011.

The Economics of Individual Decision-Making for Chesapeake Bay Management. Scientific and Technical Advisory Committee Workshop: Social Science Research and Chesapeake Bay Restoration, Annapolis, MD March 2011.

Will the Chesapeake Bay TMDL Result in Increased Benefits from Recreational Fishing? EPA Workshop: The Economics of Water Quality Improvement in Chesapeake Bay October 31 - November 1, 2011. Washington, DC 20036.

Contributed Talks

Comparison of scales and otolith for age and growth determination of the alewife (*Alosa pseudoharengus*). Presented to the Atlantic Estuarine Research Society, Annapolis, MD, October, 1980.

The optimum distribution of the middle Atlantic surf clam fleet. Presented to the Atlantic Estuarine Research Society, Richmond, VA, October, 1982.

The problem of evaluating marine fisheries habitat. Presented at Coastal Zone '85, Baltimore, MD, 1985.

Beyond the Commons: Maryland's Oyster Industry American Agricultural Economics Association, Vancouver, BC, Canada, August, 1990

In-Season Spatial Management of Chesapeake Bay Blue Crab. Spatial Processes in Fisheries Management, Wakefield Symposium. Anchorage, AK. October, 1999.

Linking Water Quality to Recreational Fishing Benefits: The Case of Chesapeake Bay Striped Bass. Measuring the Benefits of Recreational Fishing. Fisheries Centre, University of British Columbia, Vancouver, BC. June, 1999.

The Effect of Water Quality on Fishing Productivity. North American Fisheries Economics Forum, New Orleans, LA. With: J. Mistiaen, **D. Lipton** (presenter) and I. Strand, April, 2001.

The Economic Effects of Pfiesteria in the Mid-Atlantic Region. American Fisheries Society Southern Division Annual Meeting. With: T. Haab, J. Whitehead (presenter), **D. Lipton**, J. Kirkley and G. Parsons. February, 2001.

Economic Indicators of Water Quality Degradation. S. Bricker, **D. Lipton** and A. Mason (presenter). American Society of Limnology and Oceanography, Honolulu, HI. February. 2004.

The Economic Benefits of Reducing Eutrophication. D. Lipton. Estuarine Research Federation. Norfolk, VA. October, 2005.

The importance of scale and location to the ecological and economic benefits of restoration. Breitburg, D. (Presenter) Adamack, A, Fulford, . Jordan, T., **Lipton, D.**, Weller, D., Nice, A., Lung, W., Rose, K. Ecological Society of America, Montreal, Canada. August 2005.

Ecosystem Portfolios: A finance based approach to ecosystem management. Sanchirico, J., M. Smith and **D. Lipton**. Assoc. of Env. & Res. Econ. Workshop. Jackson, WY. June 2005.

Development of a Quantitative Methodology for Defining and Assessing Response to Coastal Eutrophication. Ferreira, J. G (Presenter).; Bricker, S. B.; De Wit, M. P.; **Lipton, D** . American Society of Limnology & Oceanography.Santiago de Compestela, Spain. June,2005.

Living Resources: Estuarine Conditions and Commercial Fisheries.: National Estuarine Restoration Conference. New Orleans, LA. December, 2006.

Economic Benefits of Coastal Restoration: Indicators of Success. National Estuarine Restoration Conference. New Orleans, LA. December, 2006.

Sanchirico, J.N., M.D. Smith, and D.W. Lipton, "Ecosystem Portfolios: A Finance-based Approach to Ecosystem Management," *IIFET 2006: Rebuilding Fisheries in an Uncertain Environment*, Book of Abstracts, The Thirteenth Biennial Conference of the International Institute of Fisheries Economics and Trade, Portsmouth, UK, 2006.

Economic Considerations of Chesapeake Bay Oyster Restoration. **D. Lipton**, J. Kirkley, T. Murray. National Shellfisheries Association, Monterey, CA. March, 2006.

Economic Aspects of Native and Non-native Oyster Restoration in Chesapeake Bay: Estuarine Research Federation. Providence, RI, November, 2007

Developing an Economic Indicator of Estuarine Eutrophication: The Asset Value of Estuaries: Estuarine Research Federation. Providence, RI, November, 2007

Virtual Oysters in Chesapeake Bay – A modeling study of productivity and top-down control of eutrophication: Co-Authors: Ferreira, J.; Hawkins, A.; Bricker, S.; **Lipton, D.**; Rothschild, B.; Xiao, Y. Estuarine Research Federation. Providence, RI, November, 2007

A Cost-Effectiveness Analysis of Nutrient Reductions through Oyster Restoration within Chesapeake Bay. Co-Authors: Wenczel, A.; Parsons, G.; Anderson, L.; **Lipton, D.**, Estuarine Research Federation. Providence, RI, November, 2007

Assessing The Economic Viability Of Offshore Aquaculture In Korea: An Evaluation Based On Rock Bream (*Oplegnathus Fasciatus*) Production. D. Kim and **D. Lipton**. World Aquaculture Society Annual Meeting, Busan Korea. May 2008.

The Effect of Nutrient Removal Credits on the Commercial Viability of Oyster Aquaculture in Chesapeake Bay. **D. Lipton** and G. DePiper. Coastal and Estuarine Research Federation Annual Meeting. Portland, OR, Nov, 2009.

The ESE-CBA plan: a comprehensive, integrated approach to assessing the benefits of oyster reef restoration (Poster) M. Lisa Kellogg, H. Ward Slacum, Kennedy T. Paynter, Stephan Able, Steven M. Allen, Linda S. Barker, William Boicourt, David Bruce, Bob Conkwright, Jeff Cornwell, Brad Gentner, Lee Karrh, Jay Lazar, **Doug Lipton**, Don Meritt, Tom O'Connell, Howard Townsend, and Mark Trice. National Shellfisheries Association Annual Meeting, Savannah, Georgia, March, 2009.

Temporary Transfers and Harvesting Efficiency in Maryland Fisheries. J. Holzer and **D. Lipton**. North American Association of Fisheries Economists Biennial Meeting, Honolulu, HA, May 2011

Auction Design, Incentives and Buying Back in Maryland and Virginia Crab Licenses. G. Depiper, **D. Lipton**, N. Higgins and A. Stocking. North American Association of Fisheries Economists Biennial Meeting, Honolulu, HA, May 2011

Payment for Ecosystem Services: Examples from Chesapeake Bay. G. DePiper and **D. Lipton**. International Conference on Shellfish Restorations, Stirling, Scotland, UK, August 2011.

Unrefereed Conference Proceedings

Lipton, D.W. and J.G. Travelstead. 1978. Beach zone fish community structure in the James River, Virginia. Proc. Ann. Conf. S.E. Assoc. Fish & Wildl. Agencies. 32:639-647.

Strand, I.E. and D.W. Lipton. 1985. Disease organisms, economics and fisheries management. Trans. 50th N. Amer. Wildl. Nat. Res. Conf. 655-674.

- Lipton, D.W. 1985. The problem of evaluating marine fisheries habitat. in: Coastal Zone '85 (ed.: O.T. Magoon, H. Converse, D. Miner, D. Clark, and L.T. Tobin):682-691.
- Lipton, D.W. 1985. Price determination and the effects of aquaculture on the U.S. shrimp industry. in: Proceedings of the Workshop on Shrimp and Prawn Markets. Int. Inst. Fish. Econ. and Trade. pp.99-104.
- Lipton, D.W. Economics and Chesapeake Bay fisheries management: Improving on the Federal model. Proceed. Fourth Ann. Conf. on Econ. of Chesapeake Bay Management, Balt., MD, May, 1988.
- Gempesaw, C.M., D.W. Lipton, J. Bacon and V. Varma. A comparative analysis of hybrid striped bass production in ponds and tanks. Proceedings of the National Aquaculture Extension Workshop, Ferndale, AR, 1992.
- Lipton, D.W. The product life cycle and its application to aquaculture. Proceedings of the National Aquaculture Extension Workshop, Ferndale, AR, 1992.
- Lipton, D.W. and J. Greer. An evaluation of the maritime retention strategy in Annapolis, Maryland. In: Urbanization and Development Effects On the Use of Natural Resources (ed: E.M. Thunberg and J.E. Reynolds). SRIEG-10 Pub. No. 31, SRDC Pub. No. 169. pp.23-50, July, 1993.
- Lipton, D.W. Environmental Valuation in the Chesapeake Bay. In: Coastal Zone '95 (B.L. Edge, ed.). 344-345, 1995.
- Geoghegan, J., N. Bockstael and D. Lipton. The economics of land-use change in the Patuxent watershed. Proceedings of a Workshop, Land Use and Management in Maryland, Aspen Institute, March 21-22, 1996.
- Lipton, D.W. and R. Hicks. Linking water quality improvements to recreational fishing values: The case of Chesapeake Bay striped bass. In: Evaluating the Benefits of Recreational Fisheries. Fisheries Centre Research Reports 7(2). University of British Columbia. 1999.
- Lipton, D.W. Pfiesteria's economic impact on seafood industry sales and recreational fishing. Proceedings of the Conference, Economics of Policy Options for Nutrient Management and Pfiesteria (B.L. Gardner and L. Koch, ed.). Center for Agricultural and Natural Resource Policy, University of Maryland, College Park. 35-38, 1999.
- Bricker, S., G. Matlock, J. Snider, A. Mason, M. Alber, W. Boynton, D. Brock, G. Brush, D. Chestnut, U. Claussen, W. Dennison, E. Dettmann, D. Dunn, J. Ferreira, D. Flemer, P. Fong, J. Fourqurean, J. Hameedi, D. Hernandez, D. Hoover, D. Johnston, S. Jones, K. Kamer, R. Kelty, D. Keeley, R. Langan, J. Latimer, D. Lipton, R. Magnien, T. Malone, G. Morrison, J. Newton, J. Pennock, N. Rabalais, D. Scheurer, J. Sharp, D. Smith, S. Smith, P. Tester, R. Thom, D. Trueblood, R. Van Dolah. 2004. National Estuarine

Eutrophication Assessment Update: Workshop summary and recommendations for development of a long-term monitoring and assessment program. Proceedings of a workshop September 4-5 2002, Patuxent Wildlife Research Refuge, Laurel, Maryland. NOAA, National Ocean Service, National Centers for Coastal Ocean Science. Silver Spring.

Mason, A., D.W. Lipton, and S.B. Bricker. 2004. Improving indicators of water quality degradation impacts for management of estuarine and coastal waters, p. 102. *In* American Society of Limnology and Oceanography and The Oceanography Society 2004 Ocean Research Conference Abstract Book. February 15-20, 2004. Honolulu. Hawaii. <http://www.aslo.org/honolulu2004>.

Contracts and Grants

Analysis of Economics and Marketing of Farmed Finfish in the Northeast, Northeast Regional Aquaculture Center, 1989-1991 \$45,600 (*with I. Strand*)

A Business Plan For the Reactivation of McNasbys as a Watermen's Cooperative, City of Annapolis, 1989, \$20,000. (*with I. Strand*)

Development of Coastal Business Initiatives Report and Other Activities, National Sea Grant Office, 1990-1991, \$24,916.

The Demand for Aquacultured Products (*With N. Bockstael and I. Strand*), Maryland Agricultural Experiment Station, 1991-1992, \$18,000.

A Profile of the Northeast United States Oyster Industry, National Marine Fisheries Service, 1990-1992, \$37,218.

Analysis of the Demand for a State Marina in Ocean City, Maryland. Maryland Department of Natural Resources, 1991, \$2,000

Development of a User-Friendly Financial Simulation Model for Aquaculture, Federal Extension Service, USDA, 1991, \$21,800

An Analysis of Marine Biotechnology Research in the U.S. and other Countries, Maryland and National Sea Grant Programs, 1991-1992, \$40,000.

Evaluation of Annapolis Maritime Zoning Strategy, City of Annapolis, 1992, \$5,000.

Competitiveness of Maryland's Seafood Industry, Maryland Office of Seafood Marketing, Rural Development Center, and Virginia Sea Grant Extension Program, 1992, \$8,000.

- An Economic Impact Analysis of Recreational Boating in Maryland. Maryland Boating Administration and Marine Trades Association of Maryland, 1994, \$12,000.
- Marine Biotechnology, Biosafety and Industry. (with Zilinskas and Levin) Maryland and National Sea Grant Programs 1994-1995, \$136,571.
- A Symposium on Environmental Valuation and Economics of the Chesapeake Bay. NOAA Coastal Ocean Program, 1995-1996, \$17,040.
- The Use of Economic Valuation of the Chesapeake Bay Ecosystem In Bay Policy and Management, EPA Region III to Chesapeake Research Consortium, 1996. \$35,000.
- The Importance of Understanding Ecological Complexity to Predicting Effects of Multiple Stressors in Marine Ecosystems. NOAA Coastal Ocean Program, 1997-2000 \$136,000 (w/I. Strand) (part of \$5 million multi-institutional project).
- A Study of the Effect of Excise Taxes on Maryland Documented Boaters. Maryland Department of Natural Resources, Department of Business and Economic Development, Marine Trades Association of Maryland, 1997. \$25,000.
- Development of a NOAA Coastal Economic's Network. NOAA National Sea Grant Program, 1998 - 1999, \$282,280.
- The Economic Effects of Pfiesteria on Seafood Consumption. NOAA ECOHAB Coastal Ocean Program & Sea Grant Program \$12,000 (subcontract to \$120,000 award to Tim Haab, East Carolina University). 2000-2001.
- The Economic Impacts of Recreational Boating in Maryland. Maryland Department of Natural Resources and Marine Trades Association of Maryland. 2000. \$10,000.
- Economic Information for and Environmental Impact Statement on Introducing a Non-Native Oyster to the Chesapeake Bay. Maryland DNR. \$12,000. 2004-2005. (\$23,856 2005-2007)/
- Trophic Portfolios in Commercial Fisheries. NOAA Chesapeake Bay Office. (\$13,675. 2004-2005)(\$15,399 2005—2006)
- Development of a Web Portal for Fisheries and Resource Economics. National Marine Fisheries Service. \$114,952 2004-2007.
- Evaluation of Geospatial Extension. NASA Space Grant. \$10,000 2005-2006.
- Chesapeake Bay Oyster EIS Implementation Cost Assessment Maryland DNR. \$17,650. 2007-2008

Evaluation of Restoration and Mitigation Plant Species. Northeast Regional Aquaculture Center \$26,730 in 2008, \$26,730 in 2008 (w/Webster, Lazur, Terlizzi)

Maryland Sea Grant Extension Program National Sea Grant College Program. \$321,000 in 2011 (w/ all Sea Grant Extension Faculty)

Sea Grant Regional Watershed Restoration Specialists, Maryland Department of Natural Resources, 03/31/2009-03/31/2010 \$144,000

Chesapeake Bay Policy & Economics Technical Support, Maryland Department of Natural Resources, 1/1/2009 - 12/31/2010 (w/D Parker) \$156,320, Lipton share-\$43,770

Maryland Crabmeat Quality Assurance and Industry Development Program, Maryland Department of Natural Resources, 03/01/2009 - 02/29/2012, \$633,658 (w/T. Rippen), Lipton Share - \$316,829

Fellowships, Prizes and Awards

New York State Regent Scholarship1972-1976

National Sea Grant Fellowship (Knauss Fellow).....1979

Excellence in Extension Programs, University of Maryland, College of Agriculture Alumni Association1994

Outstanding Service Award, Marine Trades Association of Maryland.....1998

Seafood Ambassador, Chesapeake Bay Seafood Industries Association.....2002

Editorships, Editorial Boards and Reviewing Activities for Journals and other Learned Publications:

Editorial Boards

Agricultural and Resource Economics Review 2005, 2006

Estuaries - Co-organizer and guest editor, special issue - From Ecology to Economics: Tracing Human Influence in the Patuxent River Estuary and its Watershed - 2001, 2002, 2003

International Journal of Recirculating Aquaculture - 1999-2005

Journal of Water Resources Planning & Management Special Issue Reviewer (10 Papers) - 1999

Reviewing Activities - (Number of articles in parentheses)

Agribusiness - 1991 (1), 2000 (1).

Aquaculture Economics and Management - 1997 (1), 2011(1)

Agricultural and Resource Economics Review - 1993 (1), 1996 (1), 1997(1), 2004(1), 2005 (8)

American Fisheries Society – 2007 (Book Chapter)

American Journal of Agricultural Economics - 1991(1), 1992 (1) 1993 (1), 1997 (1), 1998 (1), 2009 (1)

Coastal Management - 1997 (1); 1998 (1); 2001 (1); 2002 (1); 2003 (1); 2005 (1)

Environmental Pollution - 2000(1)

Fisheries - 2000 (1), 2004 (1), 2008 (1)

Journal of Agriculture and Applied Economics 2012 (1)

Journal of Environmental Management 2009 (1) 2011(1)

Journal of Recirculating Aquaculture - 2000 (1)

Journal of Shellfish Research 2008 (1)

Journal of the World Aquaculture Society 1991(1), 1994(1)
Marine and Coastal Fisheries 2009 (1)

Marine Ecology Progress Series 2009 (1)

Marine Resource Economics - 1989 (1), 1990 (1), 1991 (1), 1992 (1), 1993 (1) 1994 (1), 1995 (1), 1999 (1), 2001 (1), 2002 (1), 2006 (1), 2007 (1)

National Academy of Sciences, National Research Council 2009(2)

National Geographic (Saving the Chesapeake Bay 2005.

North American Journal of Aquaculture 2008 (1), 2011 (1)

North American Journal of Fisheries Management - 1995 (1), 2000 (1), 2005 (1), 2007(1), 2009(1)

Northeast Regional Aquaculture Center 2010 Cooperatives in Aquaculture

Ocean and Coastal Management 2011 (1) 2012 (3)

The Economics of Aquaculture (T. Bjorndal) 1988 (Book Review for Publisher)

Resources for the Future – Book Review – Economic Analysis of Ecosystem Based Management 2008

Southeast Regional Aquaculture Center – Fact Sheet Review – Oyster Hatcheries - 2008

Teaching and Advising

Teaching

Economics of Natural Resource, AREC 453, 1983.

Guest lecturer on fisheries economics to AREC 240, 1989.

Guest lecturer, Agribusiness Management, 1991

Hybrid Striped Bass Aquaculture Short Course (1/2-day) - Aquaculture Economics, April, 1991 & 1992

MEES Guest Lecturer on aquaculture, 1989-1991, 1994, 1996, 1998

Lecture, undergraduate honors course, 1994-1996.

Lecture, Institute of Applied Agriculture, 1997.

NOAA Minority Institutions Seminar - Environmental Economics, I, February, 2000 (Live Webcast)

NOAA Minority Institutions Seminar - Environmental Economics, II, March, 2000 (Live Webcast)

UMCP Gemstone Lecture – The Economics of Harmful Algal Blooms, November 12, 2008

AREC 200 Spring 2010, 2011, 2012- The Chesapeake Bay Ecosystem; The Intersection of Science, Economics and Policy (co-taught with Doug Parker 2010-2011). A Marquee Course in Science and Technology

Advising:

Major Advisor:

Anthony Dvarskas (MEES) 2003-2007, Completed Ph.D. 2007,
Employed, NOAA Damage Assessment

Andrew Mason (MEES) 2003-2008, Completed M.S
2008, Employed NOAA, National Center for Ocean Science

Geret DePiper (AREC) 2009-2012, Completed Ph.D. 2012
Employed, National Marine Fisheries Service, Woods Hole

Dissertation Committee Member

Mark Bundy (MEES), 1993

Kim Young (ANSC), 1994- 2004

Xiaoyu Tang, 2002-2005

Ravissa Suchato 2007-2009

Jorge Holzer 2010

Stephen Kasperski 2011

Dennis Guignet 2011

Shannon Lyons Green (University of Delaware, Marine Policy) 2011

Michele Baggio 2012

Extension Activities:

Aquaculture Programs

Aquaculture exhibit MD State Fair - September, 1988

Economics of Hybrid Striped Culture in Maryland. Presented at Howard County Extension Program, Ellicott City, January, 1989.

Poster Session on Striped Bass Culture Economics. Presented at Annual Maryland Cooperative Extension Conference, Columbia, MD, March, 1989

Economics of Aquaculture in Maryland. Presentation to the Southern Maryland Delegation and Tri-County Council at the Solomons Symposium on Aquaculture. Solomons, MD, October, 1989.

The Potential of Different Aquaculture Technologies in Maryland. Presented at Wye Field Day, Queenstown, MD, August, 1989.

Planning Committee, Aquaculture in the Mid-Atlantic, 1989-1993

Session Coordinator -Economics, Mid-Atlantic Aquaculture Conference, 1990

Testified before Maryland House Environmental Matters Committee re: Tidal Aquaculture, November, 1989.

Panel Moderator-Perspectives on Investing in Aquaculture at Mid-Atlantic Aquaculture Conference, 1989.

Economic Issues in Maryland Aquaculture. to Coastal Resources Advisory Committee, Annapolis, MD, March, 1989.

University Activities Related to Aquaculture Economics. Presented to the Maryland Aquaculture Advisory Committee, Annapolis, MD, March, 1989.

Exhibit at East Coast Fishermen's Trade Exposition, 1989-2010, Seminar Program Organizer – 2009-2010

Organized and chaired session on Marketing Seafood and Aquacultured Products at Annual East Coast Fisherman's and Aquaculture Trade Expo, February, 1991.

Organized special section on "The Economic Potential of U.S. Aquaculture" at the Annual American Academy for the Advancement of Science (AAAS) meetings, February, 1991.

Led session on Comparing Alternative Aquaculture Enterprises at "Mid-Atlantic Aquaculture Conference". Delivered talk on cost-benefit analysis, June, 1991.

Delivered talk on Aquaculture and Product Life Cycles at Mid-Atlantic Aquaculture Conference, June, 1991.

Presentation on Aquaculture at Wye Field Day, August, 1991.

Panelist at meeting on Closed Loop Aquaculture Systems, October, 1991.

Presentation on Economic Considerations in Aquaculture in Carroll County, 1991

Presentation on Economic Considerations in Aquaculture in Baltimore County, 1991

Presentation on Economic Considerations in Aquaculture in Frederick County, 1991

Gave presentation entitled: Economic Considerations in Aquaculture at Frederick County Extension Office, Frederick , MD, March, 1992.

Aquaculture and the Product Life Cycle, Presentation at College of Marine Studies, Lewes, DE, March, 1992.

Organized and chaired session on "Realities of the Seafood Market" at Mid-Atlantic Aquaculture Conference, June, 1992.

AQUASIM PC, An Aquaculture Finance Program - Presentation at Mid-Atlantic Aquaculture Conference, Dover, Delaware, June, 1993.

Using AQUASIM PC - Presentation at Extension meeting, Dover, Delaware, March, 1993.

Seafood Consumption and Hybrid Striped Bass - Presented to the Hybrid Striped Bass Growers Association, Aquaculture Expo, New Orleans, January, 1994.

The Economics of Aquaculture - Western Maryland Aquaculture Workshop, Keedysville, MD, November, 1994.

Niche Marketing in Aquaculture - Presented at Aquaculture Expo, Washington, DC, June, 1995.

Money Making on the Halfshell. Baltimore Sun Interview.

<http://www.baltimoresun.com/news/opinion/editorial/bal-ed.aquaculture24aug24,0,125712.story>
August 24, 2008.

Maryland Oyster Business Plan Workshop, Kent Island, MD, Nov. 6-7, 2008

Farming the Chesapeake. Baltimore Sun Interview.

www.baltimoresun.com/news/local/bay_environment/bal-te.md.aquaculture03dec03,0,456754.story December 3, 2008

Fish Farming – Baltimore Sun <http://www.baltimoresun.com/features/green/bal-md.gr.fish01jul01,0,7321797.story>

TV Channel 8, O'Malley Announces Plan to Restore Oysters to Chesapeake Bay, December 3, 2009

Baltimore Sun, O'Malley plans to limit oyster harvest. Dec 3, 2009

Federal Reserve Bank of Richmond. Planned coordinated and moderated an industry roundtable and outreach visit by the Bank President and Officers to the Maryland Eastern Shore to learn about aquaculture. October 2011.

Boating/Marine Trades Programs

Boating Update 1993-1995. Presentation to Marine Trades Economic Development Task Force, Annapolis, MD, August, 1996

Boating Update 1993-1995, Presentation to Board of Directors, Marine Trades Association of Maryland, Annapolis, November, 1996

Boating Update, 1996. Presentation at Marine Trades Association of Maryland Annual Conference, Annapolis, MD, March, 1997.

Pfiesteria and Boating. Panel Moderator at Marine Trades Association of Maryland Annual Conference, Annapolis, MD, March, 1998

Boating Economic Update - 1998. Presentation at Marine Trades Association of Maryland Annual Conference, Annapolis, MD, March, 1999.

Boating Economic Update - 1999. Board of Directors, Marine Trades Association of Maryland, April, 2000.

Boating Economic Update -1999. Presentation at Marine Trades Association of Maryland Annual Conference, Annapolis, MD, September, 2000

Maryland Boater Spending and Impacts - 2000. Presentation at Marine Trades Association of Maryland Annual Conference, Annapolis, MD, September, 2001.

Boating Impacts. Radio interview, WTOP, Washington, DC. July, 2001.

The Economics of Maryland and Virginia Charterboat Industries. Charter Boat Industry Workshop, Ocean City, MD. April, 2001.

Boater Impacts - Briefing to Maryland Eastern Shore Delegation, February, 2002.

Boater Impacts - Briefing to Anne Arundel County Delegation, March, 2002

Maryland Boater Spending and Impacts - 2001. Presentation at Marine Trades Association of Maryland Annual Conference, Annapolis, MD, September, 2002.

Maryland Boater Spending and Impacts 2003. Presentation at Marine Trades Association of Maryland Annual Conference. Annapolis, MD, September, 2004.

CNN Interview – Economic Aspects of Boating, Annapolis, MD, May, 2004.

Testimony to Anne Arundel County Council – Value of boating in Anne Arundel County, October, 2005.

Boating Economics and the Annapolis Boat Shows. Annapolis Capitol. October, 2005.

Maryland Boater Spending and Impacts 2004. Presentation at Marine Trades Association of Maryland Annual Conference. Kent Island, MD, September, 2005.

The Value of Boating. WTOP Radio news. July, 2-2005

Baltimore Sun. Reference on boating value in regard to harbor dredging. May, 2006

Maryland Boater Spending and Impacts 2005. Presentation at Marine Trades Association of Maryland Annual Conference. Kent Island, MD, September, 2006.

.Maryland Boating, 2006 Update 2007 Annual Meeting, Marine Trades Association of Maryland. September, 2007

Maryland Boating, 2007 Update 2008 Annual Meeting, Marine Trades Association of Maryland. September, 2007

TV News Interview (WJZ TV) – High price of gas impacts Maryland boaters.

Annapolis Capital (http://www.hometownannapolis.com/cgi-bin/read/2008/06_11-23/TOP) Gas Prices and Boating

Annapolis Capital – Transient Boaters

<http://www.hometownannapolis.com/news/bus/2009/06/28-18/Transients-seek-port-despite-troubled-waters.html>

Boating Update 2009. Marine Trades Association of Maryland Annual Meeting. Annapolis Maryland. September, 2010.

Gazette.Net – Gone Fishin’ for Maryland Tourism Dollars. July 2012

<http://www.gazette.net/article/20120727/NEWS/707279722/0/gazette&template=gazette>

Fisheries Program

Participated in Chesapeake Bay blue crab management workshop June, 1988.

Testified before Annapolis City Council re: Watermen's Cooperative, May, 1989.

Panel discussion and presentation at the International Oyster Conference, October, 1991.

Presentation on Status of Oyster Industry to the Citizens Advisory Committee, Chesapeake Bay Program, April, 1992.

Presentation to National Marine Fisheries Service, Northeast Region - Cost/Benefit Analysis of Fisheries Management Plans, April, 1992

American Agricultural Economics Association meetings, Organized and chaired session on Limited Access in Fisheries, August, 1992.

Twenty Years of the Maryland Watermen's Association - Presentation at East Coast Fishermen's

Trade Show, Ocean City, Maryland, January, 1993.

Valuation of Commercial and Recreational Fisheries - Workshop on Socio-Economic Data & Analysis for Fisheries Management, Annapolis, July, 1994.

The Cost of Blue Crab Management - Blue Crab Planning Workshop, Annapolis, MD, December, 1995.

Effects of Land Based Pollution on Fisheries - Presentation to the United Nations Environmental Program, Washington, DC, October, 1995.

Pollution and Fisheries: An Economic Overview - Presentation to Conference on Pollution and Fisheries, Baltimore, MD, October, 1995.

The Economics of Chesapeake Bay Blue Crab Management - Presentation to the Chesapeake Bay Commission, Richmond, VA, September, 1995.

Workshop Panelist: A Baywide Perspective on Research Needs for Blue Crab Management in Chesapeake Bay, Baltimore, MD, April, 1996

Economic Issues in Blue Crab Management - Presentation to Bi-State Blue Crab Advisory Committee, Crisfield, MD, November, 1996

Economics of Fishery Resource Allocation, Maryland Department of Natural Resources Resource Allocation Committee, February, 1997

Economics of Blue Crab Management. Bi-State Blue Crab Advisory Committee, Chesapeake Bay Commission. Richmond, VA. October, 1999.

Blue Crab Economics - Testimony for House Environmental Matters Committee, November, 2000.

Investing in Blue Crab - Testimony for House Environmental Matters Committee, August, 2000.

Blue Crab Economic Status, Bi-State Blue Crab Advisory Committee, June, 2000.

Alternative Blue Crab Management. MD-VA Natural Resources Colloquium, March, 2000.

ITQ's in Blue Crab Management. Bi-State Blue Crab Advisory Committee Workshop, Solomons, MD, February, 2000.

Managing Blue Crab. Workshop Organizer, Ocean City, MD, January, 2000.

Economic status and alternative management for blue crab., Ocean City, MD, January, 2000.

Status of the Chesapeake Bay Blue Crab. PWP Sail and Power Club, Fairfax, Virginia, October, 2001.

Chesapeake Bay Blue Crab. Interview and quote. Washington Post. August, 2001.

Chesapeake Bay Blue Crab. Radio Interview. Marketplace, National Public Radio, July, 2001.

Alternative Fisheries Management for Chesapeake Bay. Organize and chair 2-day workshop for the Scientific and Technical Advisory Committee, Chesapeake Bay Program.. Linthicum, Maryland, April, 2001.

Economic Challenges to the Blue Crab Industry. Waterman's Trade Show seminar, Ocean City, February, 2001.

Economic Consequences of Non-Native Oyster Introduction to Chesapeake Bay. Ad Hoc Living Resources Subcommittee, Chesapeake Bay Program. Annapolis, MD. May, 2002.

Blue Crab Regulatory Impacts. Testimony, House Environmental Matters Committee. Annapolis, MD. March, 2002.

Blue Crab Seminar. Organizer, Maryland Watermen's Trade Show and Exposition, Ocean City, MD. February, 2002.

Blue Crab Regulatory Impacts. Chesapeake Seafood Industries Association Meeting. Cambridge, MD. January, 2002.

NOAA Fisheries Habitat Workshop Presentation. Long Beach, CA. April, 2003.

Fisheries Collaborative Learning Workshop (w/ M. Paolisso). Training for VA and NC Sea Grant. NC. December 2003.

Review Coordination:Chesapeake Bay Fisheries Ecosystem Plan . November 2003.

Blue Crab Economics. Maryland Department of Natural Resources Blue Crab Task Force. Annapolis, MD. June, 2003.

Invited Legislative Testimony – Emergency Blue Crab Regulations. AERL. Annapolis, MD. March 2003.

Spatial Management in Chesapeake Bay. Workshop co-organizer. Annapolis, MD. April, 2004.

Attitudes on spatial management in Chesapeake Bay. Presentation. Annapolis, MD, April, 2004.

Blue Crab Seminar Program Organizer. East Coast Watermen's Trade Show. Ocean City, MD, February. 2004.

Blue Crab Update. Presentation East Coast Watermen's Trade Show. Ocean City, MD, February. 2004.

Economics of a Non-Native Oyster Introduction EIS. TV interviews WJLA, WBAL, UMTV. December, 2005

Sustainable Fisheries Field Trip – Organized at the request of The World Bank for IPAN. October, 2005.

Blue Crab Ranching. RegionFocus. The Federal Reserve Bank of Richmond. Winter 2005.

Blue Crab Seminar Program Organizer. East Coast Watermen's Trade Show. Ocean City, MD, February. 2005.

Environmental Science & Technology – Interview on markets for farm raised and wild salmon. November, 2006/

NBC News – Interview on worker shortage in crabmeat industry. June, 2006.

National Fishermen – Blue Crab Market Report coverage of worker issues. May, 2006

Changing Value of Fish in Chesapeake Bay - Oxford Marine Lab Noon Seminar Series May, 2007 & Smithsonian Environmental Research Center Seminar, July 2007.

Blue Crab Status – Washington Post Interview (<http://www.washingtonpost.com/wp-dyn/content/article/2007/11/16/AR2007111602259.html>)

Watermen Profile - Baltimore Sun interview, August 19, 2007

Alarm Over Blue Crab Decline – Washington Post Interview
<http://www.washingtonpost.com/wp-dyn/content/article/2008/04/15/AR2008041501994.html?hpid=topnews&sid=ST2008041502012>
April 16, 2008

Blue Crab Concerns – Interview with Baltimore Sun editorial writer (Pete Jensen).
<http://www.baltimoresun.com/news/opinion/editorial/bal-ed.crab17apr17001521,0,4580670.story>
May 9, 2008.

Washington Post, To Some Chesapeake Crabbers, a \$50 Document Is Priceless, August 24, 2009

Baltimore Sun Bid to buy back crabbing licenses falls short, state says, August 17, 2009

Baltimore Sun, Crab license buyback gets a nibble, August 6, 2009

Washington Post – Blue Crab License Buyback July 9, 2009

Annapolis Capital – Blue Crab License Buyback, July 9, 2009

National Fisherman – Blue Crab Industry Status, February 2009.

Blue Crab Stock Recovery – WAMU radio interview, April, 2010

Oyster Leasing – Annapolis Capital [_http://www.hometownannapolis.com/news/top/2010/08/20-22/Oyster-survival-rests-on-hatchery-expansion.html](http://www.hometownannapolis.com/news/top/2010/08/20-22/Oyster-survival-rests-on-hatchery-expansion.html)

Crab License Buybacks – National Fishermen

Seafood Demand and Processing Program

Presentation to Board MD Watermen's Cooperative on obtaining a bank loan from National Coop Bank.

Revised business plan for Maryland's Watermen's Cooperative in order to obtain bank loan.

Arranged tour of Jessup Wholesale Seafood Market for USDA/ERS personnel and Sea Grant Agents

Arranged Cooperative Agreement with USDA/ERS in order to obtain data and assistance on Nationwide Food Consumption Survey for Seafood Demand study.

Held meeting on Cooperative Accounting Practices for MD Watermen's Cooperative.

Met with National Cooperative Bank regarding progress of Maryland's Watermen Cooperative

Represented University at Grand Opening of Maryland Watermen's Cooperative - November, 1989

Forming a Watermen's Cooperative. Presented to the Maryland Watermen's Association, Annapolis, MD, June, 1989.

Forming a Watermen's Cooperative. Presented to the Anne Arundel County Watermen's Association, Annapolis, MD, April, 1989.

Chaired, organized and made presentation on Fishing Cooperatives at East Coast Fishermen's Trade Exposition, 1990.

Presentation to Seafood Marketing Advisory Committee on Assessment Effectiveness of Advertising Expenditures on Sales.

Seafood Cooperatives Virginia Working Watermen's Association, Gloucester Point, VA, February, 1990.

Presentation to Smith Island Watermen regarding Starting a Cooperative, September, 1991.

Profile of the East Coast Oyster Industry - Presentation at Mid-Atlantic Shellfish Workshop, Ocean City, Maryland, January, 1993.

Crabmeat Imports - Maryland Seafood Marketing Advisory Committee, Cambridge, MD, December, 1998

Pfiesteria's Impact on Seafood Sales, Workshop of Pfiesteria and the Seafood Industry, Annapolis MD, April, 1998 and Ocean City, MD, May, 1998.

WAMU Radio Interview - Pfiesteria and Maryland Seafood. September, 1999.

CNN Television Interview - Crabmeat Imports. September, 1999.

CBS Television News Interview - Crabmeat Imports. September, 1999.

The Economics of Maryland's Seafood Industry. Seafood Update, 1999. Maryland Department of Agriculture. Annapolis, MD. August, 1999.

Crabmeat Imports - Fish Expo, Providence, RI, October, 2000.

Maryland's Seafood Industry - Shore Leadership Council, Assateague, MD, September, 2000.

Baltimore Sun Interview - Crabmeat Situation, June 2000.

The Blue Crab Industry ITC Petition. Regional Sea Grant Meeting, Nags, Head, NC, May, 2000.

Testimony, House Environmental Matters Committee, H.B. 69 Crabmeat Labeling, February, 2000.

Maryland's Seafood Industry - MCE Seafood Ambassadors Workshop, January, 2000.

Declining Crabmeat Processing in Maryland. Interview and quote, Baltimore Business Journal, July, 2001.

Maryland Crabmeat Industry. Mark Steiner Radio Program NPR-WYPR, Baltimore. June, 2002

Hurricane Isabel: Estimates of Impacts on Maryland Seafood Processors. Report to Sen. Sarbannes. October, 2003.

Delmarva's Seafood Industry. Rural Community Leadership Project, Washington College, Chestertown, MD. March 2003.

H2-B Visa and Oyster Shuckers. Washington Post, January, 2005.

Crabmeat Imports. St. Petersburg Times. December, 2005

Impact of Foreign Workers – Washington Post, November, 2007.

Crabmeat in Chesapeake Bay Wall Street Journal, August, 2007.

H2-B Visa Gap – Baltimore Sun Interview, <http://www.baltimoresun.com/news/nation/bal-te.visas24mar24,0,5974178.story> March 24,2008

H2-B Visas WYPR Radio – Maryland Morning. April, 2008

Seafood Workers – Eastern Star Democrat

<http://www.stardem.com/articles/2008/09/18/news/48457.txt>. September 18, 2008.

2009 Articles/Interviews on H2-B Visa Issue:

Baltimore Sun http://www.baltimoresun.com/news/local/bay_environment/bal-te.md.visas06feb06,0,2723044,print.story. February 6, 2009

HR Magazine

Annapolis Capital <http://www.hometownannapolis.com/news/top/2009/06/14-51/Crabmeat-stuck-in-legal-political-pickle.html?ne=1>

Baltimore Sun - <http://www.baltimoresun.com/news/maryland/eastern-shore/bal-md.visa07aug07,0,3324249.story>

Gulf Oil Spill Impacts on Local Markets – Interview for NPR Morning Edition

Gulf Oil Spill – Baltimore Business News

Gulf Oil Spill and Seafood – Kojo Nnamdi Show interview, WAMU

<http://thekojonnamdishow.org/audio-player?nid=16647>

Gulf Oil Spill Annapolis Capital, <http://www.hometownannapolis.com/news/top/2010/05/04-51/Gulf-oil-spill-affects-seafood-markets.htm>

Environmental Program

Environmental Valuation Seminar - Half-day seminar to NOAA Program Managers, Silver Spring, Maryland, February, 1993.

Environmental Valuation Seminar - Half-day seminar at Chesapeake Research Conference, Norfolk, VA, June, 1994.

Environmental Valuation Workshop - Five, two-day workshops conducted for NOAA and EPA., 1994.

Economic Value of Chesapeake Bay Restoration Workshop - Organized and Led Workshop of Managers, Biologists and Economists, Elkridge, MD, July, 1996.

The Chesapeake Bay and You, ask the expert, at Beltsville Ag. Res. Cen. Field Day, June 1996.

The Economics of Riparian Forest Buffers. Presentation to the Riparian Forest Buffer Panel, Annapolis, MD, March, 1996.

The Economics of Land Use Change in the Patuxent Watershed. Presentation at Land Use Management in Maryland Seminar - Aspen Institute, Queenstown, MD, March, 1996.

The Impact of Chesapeake Bay Reevaluation on Farmers - 2 AREC Outlook Conference, College Park and Easton, MD, November, 1997.

Session Moderator: Human Processes - Federally Supported Science in the Chesapeake Bay, Laurel, MD, December, 1998

Studying the Economic Effects of Pfiesteria Outbreaks and Information, Regional Sea Grant Extension Meeting, Nags Head, NC, May 2000.

The Role of Economics in Coastal Zone Management. Presentation to the Coastal Zone Management Headquarters Staff, Silver Spring, MD. May, 2001.

Lost Human Use Damage Assessment Report. Presentation to Chalk Point Trustee Council, Annapolis, MD. February, 2001.

What's a Beach Worth. Radio Interview, "Our Ocean World", December, 2002., Rebroadcast, 2004.

Economics Workgroup, Gulf of Mexico Hypoxia Workshop. St. Louis, MO, October 2002.

Coastal Zone Management Performance Measures. NOAA Coastal Managers Meeting, Silver Spring, MD March, 2002.

Environmental Valuation Training Workshop. EPA Region 10. Seattle, WA. April, 2003.

Environmental Valuation Training. Coastal and Oceans Managers Meeting. Washington, DC. March 2003.

Water Quality and the Chesapeake Bay. USDA National Agriculture Research Education and Extension Advisory Board. Smith Island, MD July, 2004.

Social Science Related to NOAA Ecosystem Management. NOAA. Washington, D.C., July, 2004.

Socioeconomics in Coastal and Marine Ecosystems. Presentation to NOAA managers. Silver Spring, MD. May, 2004.

The Pfiesteria Scare oif 1997. Daily Times (Delmvarva). June 2005.

Collaborative For Land Use Education (University of Maryland) Convenor – August 2005.

The Value of Water Quality to Boaters. WTOP Radio Special Program, July 2005.

Session Moderator NAREA Meeting, Non-Market Valuation. Annapolis, MD, June 2005.

Chesapeake Bay Report Card – TV Interview, WJLA 2006

Chesapeake, Strange Days on Planet Earth – National Geographic PBS show, provided background support. 2006

Economics of Health, Environment and Chesapeake Bay - Chesapeake Bay Foundation Annual Educators Conference, February, 2007

Nutrient Trading, Why Now? - Water Quality Trading in the Mid-Atlantic (With Tom Simpson, March, 2007)

Outer Continental Shelf Oil and Gas Drilling off Virginia. Virginia Daily Pilot Interview. December 4, 2008.

Environmental Valuation in NOAA – Resources for the Future/NOAA workshop invitee on Environmental Valuation strategy 2011

The Purpose of the Bay – Keynote Presentation to the Scientific and Technical Advisory Committee, Chesapeake Bay Program, March 2012.

Miscellaneous

Planned coordinated and led discussion at National Sea Grant Coastal Business Initiatives Workshop at National 4-H Center, Chevy Chase, MD, 1991.

Presentation at Workshop on Global Perspectives in Extension, Riverdale, Maryland, 1991

Panelist and presentation at The Economic Impacts of Marine Biotechnology, Baltimore, MD, October, 1991.

Presentation to Greater Baltimore Committee on High Technology - Economic Aspects of Marine Biotechnology, October, 1992.

The Economics of Marine Biotechnology - Presentation to Board of Directors, Christopher Columbus Center, Baltimore, Maryland, April, 1993.

Sea Grant Extension, A University Partnership. Greater Baltimore High Technology Council, Baltimore, October, 1995.

Extension Activities Update - AREC Outlook Conference. Columbia, MD. November, 1999

Maryland's Sea Grant Extension Program. Briefing for Congressman Wayne Gilchrest. March, 2002.

Citation in Lead Sunday Washington Post editorial on slot revenues, oysters and the horse

industry. 2008

Maryland's Version of an Environmental Circuit Rider Program. Local Government Advisory Committee, Chesapeake Bay Program, March 2012

Service:

Professional

Office and committee memberships:

Bi-State Blue Crab Advisory Committee, Technical Workgroup,
Chesapeake Bay Commission, 1996-2007.

Maryland Legislative Seafood Task Force 2003-2005

Maryland Seafood Program Management Team 2006

Erosion Vulnerability Assessment Advisory Committee, Maryland DNR and
Army Corps of Engineers 2006-2008

Maryland Fisheries Task Force, Alternative Management. 2008

Sustainable Fisheries eXtension Community of Practice –co- Leader, 2010-2011

Ecosystem Based Fisheries Management for Chesapeake Bay Socio-Economic
Quantitative Ecosystem Team co-Chair, 2011

Organization memberships:

American Fisheries Society, Socioeconomic Section
American Agricultural Economics Association
Association of Environmental and Resource Economists
International Institute of Fisheries Economics and Trade

Unpaid reviewing activities for agencies:

American Fisheries Society - Reviewed book on "Monetary Values of Fish", 1992.

Chesapeake Bay Program - Ambient Water Quality Criteria for Dissolved Oxygen, Water Clarity
and Chlorophyll a for Chesapeake Bay and Tidal Tributaries, 2002.

Chesapeake Research Consortium - Economics of Chesapeake Bay ms, 1992.

Connecticut Sea Grant - proposal 1989, 2011.

Cooperative Institute for New England Mariculture and Fisheries Proposal 1-2001.

Delaware Sea Grant proposal review 1-2002.

EPA Region I - Reviewed Long Island Sound Economic Study.

Florida Sea Grant External Review Panel 1999, 2003 Proposal Review, 1 – 2001; 1-2003, 3-2005, 1-2007

Georgia Sea Grant 1-2005.

Great Lakes Commission Proposal review 1 – 2004.

Hawaii Sea Grant Peer Review Panel – 2008 – 10 Proposals

Hudson River Foundation Proposal review - 1996, 1997, 2000 (10 proposals)

Illinois-Indiana Sea Grant Proposals Reviewed, 1- 1996; 6 (Review Panel) - 1997.

Indian River National Estuary Scope of Work Economic and Finance Plan, 1993

Indian River National Estuary Program proposals, 7 - 1994

Louisiana Sea Grant Proposal, 1 – 2001, 1 - 2003; Member, External Program Assessment Team - 2001.

Maine Sea Grant 1-2005

Maryland Agricultural Experiment Station 2011-1

Maryland Department of Natural Resources - reviewed Economic Impact of Maryland Commercial Fishing (Ahmadi), 1988.

Maryland Resource Based Industries Development Corporation (MARBIDCO) 1-2007

Michigan Sea Grant Proposal 1 - 1998; 2 – 1999; 1-2011 (review panel)

Mid Atlantic Regional Water Quality Program 1 publication -2006

Mississippi-Alabama Sea Grant Proposal review 2-2011

MIT Sea Grant Proposal review, 1 - 1998; 1 – 1999; 1-2010

National Aquarium in Baltimore – Aquaculture Program Review – 2004.

National Coastal Resources & Development Institute - Proposal review, 1989, 1992.

National Fish and Wildlife Foundation 1-2006

National Marine Fisheries Service Reviewed Working Papers for the Development of an Economic Health Index for the Fishing Industry (Kearney/Centaur), 1988.

National Marine Fisheries Service MARFIN Projects Reviewed 2 – 1993; 1-2003, 1-2004.

National Marine Fisheries Service - Saltonstall-Kennedy proposals, 3 - 1993; 2 - 1995; 3-2001, 1-2007, 1-2008 1-2009

National Marine Fisheries Service – SE Cooperative Research Program 1-2009

National Marine Fisheries Service Economics Division– Technical Report Review, 2011

National Marine Fisheries Service Climate Change Coordination – Technical Report Review, 2012

National Oceanic Partnership Program proposal review 1-2002.

National Sea Grant Proposal review, 1 - 1997; 5 - 2001. 8-2005

New England Fisheries Management Council – Swept Area Seabed Impact Model Peer Review Panel February, 2011

New Hampshire Sea Grant 1-2007

New Jersey Sea Grant Coastal Ecosystem Health Proposal Review - 2001. Science Advisory Board 12-2005.

New York Sea Grant Special Project Proposal Review - 2000 (2); Project Report – 2001; Science Review Panel 4-2005; 1-2006

NOAA Coastal Services Center 1-2007

NOAA/EPA Ecohab Program Proposal Review, 1 - 2001; 1-2002, 2-2004. 4-2006, 1-2011

Northeast Regional Aquaculture Center – 2005 (1)

Northeast Agricultural & Resource Economics Association Annual Meetings – 2-1992; 9-2006

NOW Council on Earth and Life Sciences, Netherlands – proposal review, 2004.

Ohio Sea Grant Proposal review, 1 - 1997; 1 – 1999; 1-2005

Oregon Sea Grant fishery economics proposal, 1992, 1994, 2011

Peconic Estuary Program economic study, 1994.

Rhode Island Sea Grant summer flounder research program, 4 - 1994; 1 - 1996

South Carolina Sea Grant - Proposal 1-1997, 1-2011; Publication-2008

Texas Sea Grant 1-2007

University of Delaware, Agricultural Experiment Station - Reviewed publication, 1992

University of Florida - proposal for Caribbean Basin Advisory Group, 1992.

USDA, CSREES/NRI Proposal review, - 2 - 1997, 1 - 1999, 1-2001.

Virginia Institute of Marine Science, Special Fisheries Grants 25 - 1999, 22-2000, 23-2001; 20-2002; 5-2003, 18-2004, 8-2005, 9-2006, 4-2007, 14-2008, 12-2009, 16-2010, 18-2011

Virginia Sea Grant - Proposal Review, 2000. Extension Program Proposal Review - 2001; Proposal review, 2002, Proposal Review – 2004.

Virginia Tech Extension - Blue Ridge Aquaculture Business Plan Reviewed, 1993.

Woods Hole Sea Grant Reviewed “Economics of Marine Biotechnology” proposal

Other unpaid services to local, State and Federal agencies:

NOAA, National Ocean Service Roundtable. Washington, DC, February, 2004.

State of Maryland - Trustee representative under Oil Pollution Act for State of Maryland on the Economic Group to Determine Lost Human Use Value for Patuxent River Oil Spill, 2000-2001.

Great Lakes Environmental Valuation Task Force - Northeast-Midwest Institute, 1997, 1998.

National Academies of Science peer review, Improving the Collection and Use of Fisheries Data, 2000.

National Acid Precipitation Assessment Program - National Review Panel, 1996-1997

National Sea Grant Office - Developed Oyster Social and Economic Research Strategy, 1992.

National Sea Grant Office - Participated in site review for Ohio Sea Grant Program, 1991.

National Sea Grant Office - Florida Sea Grant Site Visit, 1991.

USC Sea Grant - Technical Review Panel, 2000.

Virginia Sea Grant - Participated in internal proposal review for VA Sea Grant Program, 1991.

Other non-University committees, commissions, panels, etc.:

National Advisory Committee, Minnesota Department of Tourism/DOC/USDA National Program on Rural Tourism Development Training Program, 1991.

Marina Research Technical Advisory Committee, International Marina Institute, 1991.

Blue Crab Fishery Management Plan Workgroup, 1994

Maryland Clean Marina Committee, 1997-1999

Chesapeake Futures Steering Committee, 1999

Coast & Ocean Workgroup. Designing a Report on the State of the Nation's Ecosystems. H.J. Heinz Center for Science, Economy and the Environment, 1998, 1999.

Panel of Economic Experts. The National Ocean Economics Project: The Contribution of the Coast and Coastal Ocean to the U.S. Economy. 1999.

Coastal Management Performance Indicators Study Panel. H.J. Heinz Center for Science, Economy and the Environment, 2001-2002.

Mid-Atlantic Fisheries Management Council, Scientific and Statistical Committee 2010-2011

Scientific and Technical Advisory Committee, Chesapeake Bay Program, 1994-2006. Chair-elect, 2005-2006, **Chair** 2007-2008, **Past Chair** 2009-2011

Atlantic States Marine Fisheries Commission Technical Committee 2004-2011
Croaker, spot, eel, sea trout, bluefish

Maryland Oyster Advisory Commission, 2007-2011

Maryland Resource Based Industries Development Corporation Board Member (Gubernatorial

Appointment), 2011.

Chesapeake Bay Commission Advisory Council on the Economics of Nutrient Trading Study, 2011

International Activities:

Travel to Norway to evaluate net-pen culture of salmon and applicability of the technology to Chesapeake Bay - June, 1989.

Travel to West Germany to evaluate closed system aquaculture technology - June, 1989.

Farmer to Farmer Program, Rio de Janeiro, Brazil to evaluate aquaculture enterprises - April, 1996.

Delegation member, United States – Japan Natural Resources (UJNR) aquaculture panel – November, 2006

Invited collaborator on U.S.-Korea Aquaculture exchange – February, 2006

Travel to Eilat, Israel for collaboration with Israeli and Egyptian scientists on aquaculture project. 2008. Cyprus meeting, 2010.

Travel to Korea (NOAA-funded) for work on offshore aquaculture, 2010.

Paid consultancies:

The World Bank - A Fishery Development Strategy, 1988.

Aquafarm Associates (Boulder, CO) - A Market Analysis for Hybrid Striped Bass, 1988

Versar, Inc. - Evaluation of Report on Stocking Anadromous Salmonids in the Delaware River, 1990.

National Marine Fisheries Service - Development of an environmental impact statement and regulatory impact review of the Swordfish Fishery Management Plan, 1991

National Marine Fisheries Service - Development of an aquaculture policy, 1992-1993.

U.S. Agency for International Development, Regional Office, Western and Central Africa - Development of guidance on "non-traditional" project evaluation, 1992-1994.

National Marine Fisheries Service - Cost/benefit analysis of the inshore-offshore allocation of Alaskan pollock in the Bering Sea and Gulf of Alaska, 1992.

National Oceanic and Atmospheric Administration - Environmental Valuation Workshops, 1992-1994

National Marine Fisheries Service - An evaluation of bankruptcies in the Alaskan pollock offshore fleet, 1994.

EPA Region 10 - Conduct environmental valuation workshop, 1994

NOAA - Conduct series (3) of environmental valuation workshops, 1995.

Tyson's Seafood Group - Examination of Community Development Quotas in Alaskan fisheries.

U.S. Department of Justice vs. District of Columbia re: Blue Plains Sewage Treatment Plan - Economic Analysis of Potential Environmental Damages, 1996

NOAA - Environmental Valuation Workshop (1), 1996

Yukon Delta Fisheries Development Association - Alaskan Groundfish Community Development Quota Application, 1997.

NOAA Environmental Valuation Workshops (2), 1997

NOAA Environmental Valuation Workshops (2), 1998

NOAA Caribbean Planning for Adaptation to Climate Change, 2000

NOAA Fisheries Habitat Program, 2003

Mid-East Regional Cooperation (USAID), Egypt-Israel aquaculture, 2008, 2009, 2010

Assessment of Korea Offshore Aquaculture, NOAA/NOS 2007, 2008, 2009, 2010, 2011

Inter-American Development Bank, Barbados Coastal Management and Planning Program Pre-Assessment, 2010.

University

Extension Faculty Senate - AREC Representative

Extension Faculty Senate - Legislative Affairs Committee - 1993

Search Committee - Assistant Dean, Ag. & Nat. Res. Programs, CES - 1996

Needs Assessment Group - Cooperative Extension Service - 1996, 1997

AREC Probationary Review Committee, Chair - 1998

AREC Promotion and Tenure Committee, Chair - 1998

AREC Faculty Advisory Committee - 1998-2000, 2005-2007

AGNR Faculty/Staff Excellence Awards Committee, 2000
Louisiana State University, Graduate Faculty Letter, 2003
University of Florida, Promotion & Tenure Letter, 2003
AREC Extension Committee 2005-2008
AREC Computer Oversight Committee, 2004-2010
Faculty Activity Report Advisory Committee – 2008, 2009, 2009
AREC Qualifying Paper Committee, 2010-2011