

CURRICULUM VITAE
3/2017
DAVID B. EGGLESTON

Director

Center for Marine Science and Technology
North Carolina State University
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and

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RESEARCH INTERESTS

Marine ecology; Ecosystem functions & services, Population connectivity, Bio-physical interactions, Marine conservation, Fisheries science; Experimental marine benthic ecology, Detecting ecological impacts, Behavioral ecology, Population dynamics, Habitat restoration, Underwater soundscapes, Marine science education

ACADEMIC DEGREES

- B.S. 1980 Old Dominion University (Major: Biology).
M.A. 1988 The College of William and Mary, School of Marine Science (Major: Marine Ecology, Minor: Resource Management).
Ph.D. 1991 The College of William and Mary, School of Marine Science (Major: Fisheries Ecology, Minor: Statistics).
Post-doctoral fellow, 1992-93. University of Washington, College of Ocean & Fisheries Science.

EXPERIENCE

- 1980-1983: Musician; Toured U.S. in Rock & Roll, R&B and Blues bands; Numerous studio recordings.
1983-1985: Scuba Instructor (PADI OWSI #16990), Nautilus Dive, Surf & Ski/Force-E, Boca Raton, Pompano Beach & Key Largo, FL.
1985-present: Scientific Diver, AAUS (multiple University & Marine Lab Programs).
1985-1990: Graduate Research Assistant, Virginia Institute of Marine Science.
1985-Present: Scientific Diver, American Academy of Underwater Sciences.
1985-1987: Fishery Port Sampler, NOAA/Northeast Fishery Statistics Division.
1987-1989: Adjunct Assistant Professor, Thomas Nelson Community College, VA.

1989-1991: Expedition Leader, Earthwatch-The Center for Field Research, “Yucatan Fishermen”, Yucatan, Mexico.

1990-1992: Research Associate, NURP, Caribbean Marine Research Center, Bahamas.

1992-1993: Research Associate, University of Washington, College of Ocean and Fishery Sciences.

1993-1999: Assistant Professor, North Carolina State University, Department of Marine, Earth & Atmospheric Sciences.

1997-98: Visiting Assistant Professor, University of Washington, School of Fisheries.

1998-1999: Expedition Leader, Earthwatch-The Center for Field Research, “Nassau groupers”, Exuma Cays, Bahamas.

2000-2002: Chief Scientist, *MV Sea Ray* and *RV Coral Reef II*, Research cruises to Nassau grouper spawning aggregations, Exuma Cays, Bahamas.

1999-2004: Associate Professor, North Carolina State University, Department of Marine, Earth & Atmospheric Sciences.

2004-Pres.: Professor, North Carolina State University, Department of Marine, Earth & Atmospheric Sciences.

2006-Pres.: Director, Center for Marine Science and Technology, North Carolina State University.

2012 Chief Scientist, *RV Cape Hatteras*, Research cruise in support of NSF-funded Deep-Sea SEEP Connectivity Study (October 2012).

2014 Scientist, Deep-Submersible Vehicle *Alvin* Dives 4722, 4724, 4726 (571m to 2236 m).

2015 Scientist, Deep-Submersible Vehicle *Alvin* Dive 4799 (2166 m).

2015-Pres. Director, Undergraduate Programs, *Semester@CMAST*, Center for Marine Sciences and Technology.

AWARDS

1990 John M. Zeigler Student Achievement Award, The College of William and Mary, School of Marine Science.

1992-93 Postdoctoral fellowship, University of Washington, College of Ocean and Fishery Sciences.

1998 National Science Foundation, Early Career Award.

1998 Outstanding Teacher Award, NC State University.

1999 NC Academy of Outstanding Teachers.

1999 Nominated for Coastal Steward of the Year by NC Sea Grant; National Competition.

2005-06 Alumni Distinguished Undergraduate Professor, NC State University (College of Physical & Mathematical Sciences).

2008-09 Outstanding Extension Service Award, NC State University.

2014-15 Alumni Distinguished Undergraduate Professor, NC State University.

2016 Gold Award in the Education Digital Marketing Awards Contest;
<https://www.youtube.com/watch?v=NOS1ry7s5QE>

ADMINISTRATIVE RESPONSIBILITIES & ACCOMPLISHMENTS

Director, Center for Marine Sciences and Technology, NC State University (2006-Present).

The Center for Marine Sciences & Technology (CMAST) is a 53,000 ft² facility located on Bogue Sound in Morehead City, NC and houses 45-65 faculty, staff and students that span a range of partnerships,

including three Colleges from NC State University (College of Sciences, College of Veterinary Medicine, College of Agriculture & Life Sciences) and five Departments (Biology; Marine, Earth & Atmospheric Sciences; Clinical Sciences; Toxicology; Food, Bioprocessing & Nutrition). Other partners include: NCSU's Science House, NC Sea Grant Program; Carteret Community College, NC Marine Biotechnology Center of Innovation, NC Division of Marine Fisheries and Marine Mammal Stranding Program, and NC Aquarium Conservation Research Program. CMAST hosts an average of \$8 million per year in active research programs.

CMAST also includes a 1500ft² Marine Magnetic Resonance & Imaging Facility, an Unmanned Surface Vehicle for detailed seafloor and water quality mapping in shallow systems, a 5,000ft² marine science warehouse facility surrounded by 1.5 acres of secure boat and equipment storage, a 3,000ft² seawater laboratory facility shared with UNC-Chapel Hill's Institute of Marine Sciences, and local access to NCSU's Marine Aquaculture Research Center.

The director position administers the center's budget, staff positions, operations and facility needs, and reports to relevant Promotion and Tenure Committees regarding resident faculty, and reports to the CMAST Administrative Committee (Vice Chancellor of Research, Innovation & Economic Development, Chair; Dean of College of Sciences; Dean of College Veterinary Medicine; Dean of College of Agriculture & Life Sciences; Chair of the NCSU Coastal & Marine Sciences Council).

This position is responsible for (i) Strategic planning and implementation, (ii) Annual budget request and administration, (iii) Maintenance of facilities, including internet technology; (iv) Supervision of center staff, and advising Promotion & Tenure decisions, (v) Outreach, (vi) Fundraising; (vii) Promotion and oversight of partnership agreements, and (viii) Representing CMAST and NCSU Coastal & Marine Sciences to a variety of groups, ranging from the general public and local community, to industry, to elected officials, to the NC Marine Science & Education Partnership, to the UNC General Administration's Coastal and Marine Sciences Council.

Major Accomplishments (in collaboration with many individuals)

- Strategic Initiatives
 - Creation and establishment of \$ 1 million Guest Housing Complex for CMAST.
 - Creation of blueprint for *NC Marine Sciences Millennial Campus* (& associated *Program Efficiency Council*) between NC State University's Center for Marine Sciences and Technology (CMAST), and UNC Chapel Hill's Institute of Marine Sciences (IMS) via UNC General Administration to (i) promote industry partnerships, (ii) brand and market the marine science enterprise in Carteret County, and (iii) enhance the campus atmosphere among CMAST, IMS, and Carteret Community College (pending approval by UNC Board of Governors).
 - Creation of a *CMAST Semester@CMAST* Program for NC State University undergraduate students (offered in Spring Semester).
 - Creation of an undergraduate semester program called *Coastal Research for Undergraduate Students in North Carolina (CRUS-NC)* between NC State University's Center for Marine Sciences and Technology (CMAST), UNC Chapel Hill's Institute of Marine Sciences (IMS), UNC-W, and ECU's Coastal Studies Institute via UNC General Administration

to (i) promote a collaborative educational experience for undergraduate students among the different UNC-System marine labs in NC.

- Creation of a partnership with the NC Aquarium Systems to host the *Conservation Research Coordinator* to promote research and education/outreach activities.
 - Establishment of a contract between NCSU/CMAST and the NC Marine Biotechnologies Center of Innovation for their services as a broker for securing industry partners/contracts for CMAST's Marine Magnetic Resonance Facility.
 - Creation of strategic plan for CMAST in consultation with NCSU Faculty, and in accord with (i) NCSU's Strategic Plan entitled "The Pathway to the Future: 2011-20" and (ii) recommendations for "Field Stations & Marine Laboratories of the Future: A Strategic Vision (2013)".
 - Creation of a partnership with NCSU's College of Sciences and *The Science House* to host regional director of The Science House. Promote education outreach.
 - CMAST Summer Fellows Program for hands-on undergraduate research experiences.
 - Creation of a partnership to host the NC Marine Biotechnology Center of Innovation's Director of Research. Promote research and economic development.
 - Creation of a partnership with NOAA/NMFS and NC Division of Marine Fisheries to host the Marine Mammal Stranding Network for central NC coast. Promote research & training; Education outreach.
 - Funding and construction of CMAST building addition to house a Marine Magnetic Imaging & Resonance Facility & Program. Promote research, training, and economic development.
 - Self-Assessment/Review of CMAST. Directed review of CMAST for the period 2008-12 in response to request by UNC GA and delivered to AAAS External Review Team. During 2013-14, responded to 14 recommendations of AAAS Review Team, such as creation of NC Coastal & Marine Sciences Consortium. Improve efficiencies and synergize research/teaching enterprise among UNC-System Programs.
 - Led the development of numerous multi-institution, inter-disciplinary proposals ranging from NSF's Sustainability Research Network to NCSU's Faculty Excellence-Cluster Hire program.
- Budget
 - Restructuring of budget and administrative oversight to Office of Vice Chancellor for Research, Innovation & Economic Development to improve efficiencies.
 - Implementation of university-wide financial accounting and human resource systems to improve efficiencies.
 - Maintained programs & staff, improved infrastructure and created partnerships during budget cuts (18%) associated with 2007-2010 recession. Provided budget/center reports to UNC-GA and NC Governor's Office during recession to improve efficiencies.
 - Achieved annual budget increases since 2012.
 - Facility
 - Obtained funding from NSF for construction of an Un-Manned Surface Vehicle (USV)

- for CMAST.
- Obtained funding from NSF and NCSU for an addition to CMAST Building to house and set-up the world's largest Marine Magnetic Resonance Facility.
- Restructuring of internet technology, voice-over-IP phone networks, and teleconferencing systems. MOU established with NCSU Communications Technology for support. Modernize and improve efficiencies.
- Creation of partnership with Microelectronics Center of North Carolina (MCNC) for CMAST to serve as broadband *Point-of-Presence* for Rural Broadband Initiative. CMAST provides fiber-optic, broadband service to university/agency partners such as NOAA Beaufort Laboratory, Duke University Marine Laboratory and UNC-Chapel Hill's Institute of Marine Sciences. Modernize and improve efficiencies.
- Successful evacuation, restoration of facility, and re-population of CMAST Building after extensive water damage from Hurricane *Irene* (2011). Safety & security.
- Comprehensive waterproofing of roof, wall & window systems of CMAST Building. Safety and security, modernize facility.
- Re-structured agreement with NCSU & Carteret Community College facilities for planned facility equipment repair and building renovation schedule. Modernize facility.
- Established wind & solar power demonstration projects at CMAST and Marine Aquaculture facility via grants, partnerships and donors. Modernize facility; Education outreach.
- Communications
 - Restructured web-site (2008 & 2013) to improve communications.
 - Developed newsletter (CMAST Communicator) and social media presence to improve communications.
- Fundraising & Development
 - Formed external advisory board
 - Initiated fundraising/development opportunities that have generated ~\$2 million in cash, in-kind donations, and living trust of property (see "Fundraising/Development" below for specific examples).

ADMINISTRATIVE ASSIGNMENTS & SERVICE

North Carolina State University

1995-1998	Chair, Outreach Committee, Dept. of Marine, Earth & Atmospheric Sciences (MEAS).
1997-98	Chair, Search Committee for <i>Coastal Fluid Dynamicist</i> , Dept. MEAS.
1997-98	Member, Search Committee for <i>Aquatic Ecologist</i> , Dept. of Zoology.
1999-2003	Member, Graduate Support Committee, Dept. MEAS.
1999-2005	Member, Public Outreach Committee, Dept. MEAS.
2000-2001	Member, Search Committee for <i>Fisheries Ecologist</i> , Dept. of Zoology.
2000-2001	Member, Search Committee for <i>Department Head</i> , Dept. MEAS.
2000-2004	Chair, Peer review of Teaching Committee, Dept. MEAS.
2000-2005	Member, Awards Committee, College of Physical & Mathematical Sciences.
2002-2003	Member, Search Committee for <i>Physical Oceanographer</i> , Dept. MEAS.
2002-2004	Member, Teaching Action Committee, College of PAMS.
2002-2004	Member, Evaluation of Teaching Committee, NC State University Standing

Committee.

2003-05 Associate Director, Graduate Programs, Department of Marine, Earth & Atmospheric Sciences

2003-Pres. Chair, NC State University, Scientific Diving Control Board.

2004-06 Member, Internal Assessment Team for NC State University's Center for Marine Science and Technology, NC State University.

2005-06 Chair, Graduate program review committee for Fisheries and Wildlife Sciences, Colleges of CNR & CALS.

2005 Chair, Teleconferencing Committee, Dept. MEAS.

2005 Member, Search Committee for *Fishery Biologist*, Dept. Zoology.

2005 Member, PAMS Committee for *Campaign Kickoff for Alumni & Friends of NCSU*.

2008 Chair, Search Committee for *Oceanographer*, Dept. MEAS.

2010-12 Chair & Member, PAMS Research Advisory Committee.

2010-Pres. Member, Peer-Review of Teaching Committee, Dept of MEAS, NC State University.

2010-Pres. Member, Graduate Program Committee, Dept of MEAS.

2010-2012 Member, Search Committee for *Biological Oceanographer*, Dept. MEAS.

2010-2012 Member, University Strategic Planning Committee, *Partnerships, Innovation & Entrepreneurship*.

2011-2013 Member, *Executive Committee*, Dept. MEAS.

2014-Pres. Member, University Global Partnership Network, *One Health Initiative*.

2014-2015 Member, Search Committee for *Physical Oceanographer*, Dept. of MEAS.

2014-Pres. Member, Search Committee for *Dean*, College of Sciences.

2015-Pres. Member, *Food Animal Science Academy Advisory Board*

University of North Carolina System

2006-07 Member, President Bowles *Marine Science Task Force*.

2006-10 Member, *Marine Science Technology Transfer Working Group*.

2006-09 Member, NC Coastal Studies Institute, *Scientific Coordinating Committee*.

2007-10 Member, *North Carolina Environmental Observing Network System* (NC-EONS).

2008-Pres. Member, *Marine & Coastal Sciences Council*.

2009-10 *Technical Representative*, EPA's Ecosystem Services Partnership.

2011 Member, Search Committee for *Communications Specialist*, UNC-Institute of Marine Science, Morehead City, NC

2012-2015 Member, *Coastal & Marine Sciences Self-Assessment Team & Working Group*.

2014-2015 Member, UNC General Administration Task Force, *NC State University/ CMAST and UNC Chapel Hill/ IMS Efficiency Study*.

2014-Pres. Member, UNC General Administration Task Force, *Coastal & Marine Science, Semester-At-The-Coast Program*.

2016-Pres. Member, Steering Committee for *2017 NC Coastal Conference* (NC Sea Grant)

APPOINTMENTS & SERVICE TO PROFESSIONAL ORGANIZATIONS

1993 National Undersea Research Center, Carolina Capes Strategic Planning Committee.

1993 Sigma-Xi, Proposal Panel Member.

1994-1999 Duke/University of North Carolina Oceanographic Consortium, Panel Member.

1995-1999 South Atlantic Fisheries Management Council, Scientific and Statistical Committee.

1998-2004 NC Blue Crab Fishery Management Plan Action Committee, NC Dept. Health & Natural Resources, NC Division of Marine Fisheries.

1999-2001 Member, Marine Habitat Classification workshop, co-sponsored by the Ecological Society of America and NOAA/National Marine Fisheries Service, Long Key, FL.

1999-2000 Consultant (unpaid), NC Museum of Natural Sciences, Raleigh, NC, *Arthropod and Oceans Exhibits*.

1999-2002 Member, NSF-Sponsored National Center for Ecological Analysis and Synthesis, Nursery Habitat workshop, Santa Barbara, CA.

2000 Chair and Co-Host, Blue Crab Symposium, Wilmington, NC, March 2000.

2000 - 2002 Guest Editor, *Bulletin of Marine Science*.

2000 Proposal Review Panel Member, NOAA/National Sea Grant Fisheries Habitat Program, Silver Spring, MD.

2000-2001 Guest subject-matter editor, *Marine and Freshwater Research*.

2000-2002 Chair of organizing committee for NSF-funded Biocomplexity Incubation Activity, *Biocomplexity in North Carolina's Coastal Aquatic Systems*.

2001 Member of NOAA's *Grays Reef Task Force* to identify research priorities.

2002-2003 Member, Monitoring Working Group, NOAA National Marine Sanctuary Program.

2002-2010. Scientific Advisory Committee for the Blue Crab, NC Division of Marine Fisheries.

2002 Proposal Review Panel member, NOAA/NURC/West Coast and Polar Region Programs.

2003-05 Advisory Board, Southeast Center for Ocean Science Education Excellence program (COSEE).

2004-05 Member, Blue crab collaborative learning working group. NC Sea Grant.

2004 Proposal Review Panel Member, EPA STAR-Fellowship Program, Washington, D.C

2005 Proposal Review Panel Member, Florida Sea Grant.

2005-Pres. Advisory Board, *Applied Marine Biology Program*, Carteret Community College, Morehead City, NC

2006-Pres. Member, *Marine Science and Education Partnership*, Carteret Co., NC

2007-2011. Member, *NC Eastern Region, Center of Innovation in Marine Biotechnology Planning Team*

2007 Member, Proposal Panel Team, *NOAA CSCOR Multistress Panel*.

2007-Pres. Member, National Association of Marine Laboratories (NAML) & Southern Association of Marine Laboratories (SAML).

2009-2010 Member, *NC Biotechnology Center, Agri-Business Working Group for Marine and Aquaculture*.

2010-2012. Advisory Board, Member-At-Large, *Southeastern Estuarine Research Society*.

2010-Pres. Member, Scientific Advisory Committee for *Strategic Habitat Areas*, NC Division of Marine Fisheries.

2012-Pres. Board Member, Southeastern Universities Research Association (SURA), Coastal and Environmental Committee.

2012-Pres. Treasurer, Southern Association of Marine Laboratories (SAML).

2012-Pres. Board Member, National Association of Marine Laboratories (NAML).
 2011-2013 Secretary, SouthEastern Estuarine Research Society (SEERS).
 2012-Pres. Member, External Advisory Committee for Georgia Coastal Ecosystems LTER.
 2013 Panelist, National Science Foundation, Post-Doctoral Program in Biological Oceanography.
 2013-14 Member, NC Sea Grant Research Day, Steering Committee.
 2013 Panelist, National Science Foundation, Biological Oceanography Program.
 2014 Co-Host, Workshop on *Improving the Accuracy of Fishery-Independent Survey Indices* (w Dr. Mary Fabrizio), Virginia Institute of Marine Science.
 2014-Pres. Editorial Board, *Frontiers in Marine Science*, Marine Conservation and Sustainability.
 2016-2017 Member, NC Sea Grant Research Day, Steering Committee.
 2017 Member, External Review Team, College of William & Mary's School of Marine Science (VIMS), Graduate program.

INTERNATIONAL ENGAGEMENT

1989-92: Academic Review Committee; Biosphere Reserve Sian Ka'an, Quintana Roo, Mexico.
 1994-96 Adjunct Asst. Professor, Unidad Merida, Merida, Mexico.
 1999-2001 Member, Organizing Committee for Sixth International Lobster Conference, Key West, FL.
 2000 Visiting Scholar, Tohoku Fisheries Research Institute, Shioyama, Japan, July-September, 2000.
 2005-06 Member, International Scientific Committee for the 3rd Int. Symposium on Stock Enhancement & Sea Ranching, Seattle, WA, Sept. 2006.
 2005-06 Hosted international scholar, Dr. Francis Nunoo. Department of Oceanography & Fisheries, University of Ghana, Legon, Ghana.
 2008-2009 Member, External Advisory Board, SPICOSA (Science and Policy Integration for COastal Zone Assessment), European Union.
 2010-11 Member, International Scientific Committee for the 4th Int. Symposium on Stock Enhancement & Sea Ranching, Shanghai, China, April 2011.
 2012 Hosted international scholar, Dr. Marcos Rodrigues. Conselho Nacional de Desenvolvimento Científico e Tecnológico, SEBIE (Serviço de Bolsas Individuais no Exterior) , Brazil.
 2012-Pres. Member, International working group on the value of coastal habitats for exploited species. International Council for the Exploration of the Seas (ICES).
 2014-015. Member, University Global Partnership Network, *One Health Initiative*, NC State University.

FUNDED GRANTS (PI unless noted otherwise)

1. 1990 NOAA/National Undersea Research Program: "Recruitment dynamics of the Caribbean spiny lobster (*Panulirus argus*) in the central Bahamas". - \$100,000/1 yr. (co-PI with R. Lipcius).
2. 1990 Consejo Nacional de Ciencia y Tecnologia (Mexico): "Ecology and management, R. Lipcius &

- E. Sosa-Cordero).of juvenile spiny lobsters in Ascension Bay, Mexico". - \$50,000/2 yrs. (co-PI w/ D. Miller).
3. 1991 NOAA/National Undersea Research Program: "Recruitment dynamics and stock enhancement of the Caribbean spiny lobster". - \$140,533/1 yr. (co-PI with R. Lipcius).
 4. 1992 NOAA/National Undersea Research Program: "Recruitment dynamics and sustainable resource use in the Caribbean spiny lobster". - \$140,384/1 yr. (co-PI with R. Lipcius).
 5. 1993 Washington Sea Grant: "Use of intertidal oyster shell to enhance habitat for 0+ Dungeness crab: effects on species assemblages and management implications". - \$180,807/2 yrs. (co. PI w/ D. Armstrong).
 6. 1993 NOAA/National Undersea Research Program: "Fisheries oceanography and recruitment in the Caribbean and Sub-Tropics (FORECAST)". - \$1,100,000/2 yrs. (co-PI with R. Lipcius, J. Shenker, A. Stoner).
 7. 1994 Cooperative Institute of Fisheries Oceanography: "Habitat heterogeneity, species-area relationships and population sources and sinks: A process oriented research approach to marine biodiversity". - \$24,998/1 yr.
 8. 1994 NC State University, Faculty Research & Professional Development: "A process oriented research approach to marine biodiversity". \$5,000/8 mo.
 9. 1995 NOAA/National Undersea Research Program: "Recruitment dynamics and sustainable resource use in the Caribbean spiny lobster". - \$270,000/2 yrs. (co-PI w/ R. Lipcius)
 10. 1995 EPA-EMAP Carolinian Province Project: "Use of the burrowing amphipod, *Leptocheirus plumulosus*, as a bioindicator of habitat degradation in North Carolina estuaries". \$6,996/5 mo.
 11. 1995 NC Sea Grant/Fisheries Moratorium Steering Committee: "Evaluation of fisheries resource data collection, analysis and availability: an example protocol using the blue crab" \$14,351/1 yr.
 12. 1995 NC Sea Grant: "Testing hydrodynamic predictions of larval recruitment limitation and identification of early juvenile 'source' habitats. ~\$70,000/2 yrs. (PI w/ L. Xie, R. Lipcius, co-PIs).
 13. 1996 NC Division of Marine Fisheries: "Population dynamics of the blue crab in North Carolina: Statistical analyses of long-term fisheries data". \$30,341/2 yrs.
 14. 1996 NC State University, Outreach and Professional Development: "Blue crabs, high school students, and the scientific method: NCSU outreach in coastal NC. \$3,000/1 yr.
 15. 1996 WA Sea Grant: "Seasonal and spatial indices of population biomass and production of crab (*Cancer magister*) in a Washington estuary. \$30,330 1 yr. (co-PI w/ D. Armstrong).
 16. 1997 Earthwatch-The Center for Field Research. "Nassau groupers". \$6,852/1 yr.
 17. 1997 NOAA/National Undersea Research Program: "Recruitment and metapopulation of the Caribbean spiny lobster". \$49,961/1 yr. (co-PI w/ R. Lipcius).
 18. 1997 South Carolina Marine Resources Research Institute: "Measurements of settlement and post-settlement abundance of gag grouper in North Carolina". \$14,015/1 yr.
 19. 1997 NC State University, Outreach and Professional Development: "Blue crabs, high school students, and the scientific method: NCSU outreach in coastal NC. \$3,000/1 yr.
 20. 1998 Earthwatch-The Center for Field Research. "Nassau groupers". ~\$8,500/1 yr.
 21. 1998 NC Sea Grant. "Understanding population dynamics of the blue crab in North Carolina: an integrated modeling, field research and educational outreach program. \$94,642/2 yrs. (PI w/L. Xie co-PI).

22. 1998 Z. Smith Reynolds Foundation. “Research experiences for teachers and students: partnerships to transfer coastal research to public education”. \$33,139/1 yr.
23. 1998 National Science Foundation, Early Career Program & Biological Oceanography. “The scientific method, stochastic dynamics and deterministic forcing: an integrated modeling, field research and educational outreach program to understand population dynamics of the blue crab.” \$466,405/5 yrs.
24. 1999 NC Sea Grant/ NC Division of Marine Fisheries: “Stock assessment of the blue crab (*Callinectes sapidus*) in North Carolina”. \$44,000/ 1.5 yrs. (P.I.w/ J. Hightower co-PI).
25. 2000 NC Sea Grant. “Direct and indirect effects of water quality on trophic interactions in a eutrophic coastal river: movement patterns, foraging, and mortality of blue crabs.” \$81,416/2 yrs. (PI w/ T. Wolcott co-PI).
26. 2000 National Science Foundation. “Impact of larval transport and benthic habitat quality upon recruitment dynamics: poor nursery habitat decouples larval supply from reproductive output of Caribbean spiny lobster”. \$84,786/ 2 yrs. (co-PI w/ R/ Lipcius)
27. 2000 NOAA/National Undersea Research Program/Caribbean Marine Research Center, “Spawning aggregations of the Nassau grouper: essential habitat, population structure, and fish movement patterns”, \$31,206/1 yr. (PI w/ J. Hightower, P. Rand, C. Dahlgren, A-M. Eklund, S. Bolden, co-PI’s).
28. 2000 NC Fisheries Research Grant Program/NC Sea Grant Program. “Population dynamics and stock assessment of the blue crab (*Callinectes sapidus*) in North Carolina”. \$57,710/2 yrs. (PI w/ J. Hightower and E. Johnson co-PI’s).
29. 2000 NOAA/National Undersea Research Program-Wilmington “Coupling of Gulf Stream water intrusions with postlarval settlement of snapper/grouper and lobster at a mid-shelf reef, Onslow Bay, NC, \$14,011/1 yr., co-PI w/D. Lindquist, PI, and T. Potts and F. Bingham co-PI’s).
30. 2000 NOAA/NC Sea Grant. “Blue crab symposium 2000”, \$5,000/1 yr.
31. 2000 NOAA/ Chesapeake Bay Program Office. “Blue crab symposium 2000”, \$3,000/1 yr.
32. 2000 National Science Foundation. “Biocomplexity Incubation Activity: Interactions between life and the environment in the coastal zone, NC”, \$71,164/2 yrs., P.I. w/ T. Hopkins (NCSU) and D. Kamykowski (NCSU).
33. 2001 NC Fisheries Resource Grant Program/NC Sea Grant. “Mortality and CPUE of blue crab in North Carolina’s soft shell crab industry”, \$84,848/16 mos.
34. 2001 NOAA/National Undersea Research Program/Caribbean Marine Research Center. “Spawning aggregations of the Nassau grouper: essential habitat, population structure, and fish movement patterns”, \$21,010/ 1 yr., P.I. w/ P. Rand (NCSU/ZOO), C. Dahlgren (CMRC), and A-M. Eklund (NMFS/Miami).
35. 2001 NC Sea Grant. “Use of emerging technology to determine nursery origin and essential fish habitat (EFH) for summer flounder, *Paralichthys dentatus*. \$8,843/1yr. (co-PI w/ T. Kellison, PI and W. Showers co-PI).
36. 2001 NC Fisheries Resource Grant Program/NC Sea Grant. “Field assessment of spawning sanctuaries and possible migration corridors for the blue crab spawning stock in North Carolina”, \$85,953/18 mos.
37. 2001 NC Fisheries Resources Grant Program/NC Sea Grant. “Blue crab stock enhancement potential: field releases and pond rearing”, \$48,920/12 mos. (co-PI w/T. Kellison PI).

38. 2002 NOAA/NURP/Caribbean Marine Research Center. “Connectivity and spatial dynamics of a Nassau grouper metapopulation in the Bahamas: fulfilling urgent, key information needs for conservation”. \$70,000/2 yrs. (PI w/ P. Rand, A-M Eklund, C. Dahlgren co-PIs).
39. 2002 University of Miami/RSMAS. “Application and refinement of underwater 3-D video to quantify spatial structure of fish schools using Nassau grouper spawning aggregations”, \$10,988/12 mos. (PI w/ P. Rand co-PI)
40. 2002 The Oceans Conservancy. “Fish and spiny lobster density, size-structure, and fish diversity within multiple backreef habitats of Great White Heron National Wildlife Refuge”. ~\$200k/4 years. (PI).
41. 2002 National Sea Grant Program. “Is growth a reliable indicator of essential fish habitat?” \$197,305/2 yrs. (PI w/ J. Hare and S. Searcy co-PIs).
42. 2002 NC Sea Grant/ Fisheries Resource Grant Program. “High school students and the blue crab: an educational outreach program to test a ‘recruitment failure hypothesis’ for the blue crab”. \$40,889/1 yr.
43. 2002 NC Sea Grant Fisheries Resource Grant Program. “Economic and biological feasibility of blue crab pond culture”. \$36,310/1 yr. (w/ T. Kellison co-PI).
44. 2002 National Science Foundation. “Collaborative: estuarine crab transport: linking post-settlement dispersal, bio-physical mechanisms and hydrodynamic corridors”. \$470,542/3 yrs. (PI w/ T. Hopkins and R. Forward co-PIs).
45. 2002 Univ. MD/Center for Marine Biotechnology/Blue Crab Advanced Research Consortium. “Ecological feasibility of blue crab stock enhancement: field and laboratory experiments in NC”. \$40,000/1 yr.
46. 2002 NOAA/National Marine Fisheries Service. “Determination of a recruitment index methodology and the establishment of recruitment indices for estuarine-dependent finfish, blue crab and shrimp on the NC coast”. \$75,000/3 yrs. (co-PI w/ L. Pietrafesa PI and L. Xie, D. Dickey, J. Morrison co-PIs).
47. 2003 NC Department of Transportation. “A comparison of the impacts of culverts versus bridges on stream habitat and aquatic fauna”; \$483,449/2 yrs.; co-PI w/ J. Levine (PI), G. Cope, A. Bogan, D. Shea and J. Gregory.
48. 2003 Univ. MD/Center for Marine Biotechnology/Blue Crab Advanced Research Consortium. “Ecological feasibility of blue crab stock enhancement: field and laboratory experiments in NC”; \$120,000/2 years.
49. 2004 National Fish & Wildlife Foundation. “Impact of sport divers on lobsters and coral reefs”. \$43,632 1/yr.
50. 2005 NC Sea Grant/Blue Crab Research Grant Program. “Blue crab stock enhancement: further progress in freshwater pond rearing”. \$32,581/1 yr.
51. 2005 NC Sea Grant/Blue Crab Research Grant Program. “Blue crab dependence on SAV nurseries in Albemarle Sound”. \$42,479/1 yr.
52. 2005 NC Sea Grant. “Oyster dispersal and meta-population dynamics in Pamlico Sound: Part I, larval dispersal”. \$102,029/2 years, PI with C. Cudaback, co-PI.
53. 2006 NC Sea Grant, FRG Program. “Oyster dispersal and meta-population dynamics in Pamlico Sound: Part II, settlement, survival and spawning potential”. \$62,222/1 yr.

54. 2006 NOAA, University of Maryland, BCARC. Blue crab (*Callinectes sapidus*), an integrated research program of basic biology, hatchery technologies, and potential for replenishing stocks. \$5 million/5 yrs., co-PI.
55. 2007 NC Sea Grant, FRG Program. “Oyster dispersal and meta-population dynamics in Pamlico Sound: Part II, settlement, survival and spawning potential”. \$40,000/1 yr.
56. 2007 NC Sea Grant/Blue Crab Research Grant Program. “Blue crab stock enhancement: further progress in freshwater pond rearing”. \$19,000/1 yr.
57. 2007 NC Sea Grant/Blue Crab Research Grant Program. “Blue crab dependence on SAV nurseries in Albemarle Sound”. \$42,479/1 yr.
58. 2007 UNC General Administration, “Initiation of an Inter-Institutional Environmental Observation Network System for North Carolina (NC EONS)”, \$54,000/2 yrs. PI.
59. 2008 NC Sea Grant. “Oyster dispersal and meta-population dynamics in Pamlico Sound: Part II, settlement, survival and spawning potential”. \$87,000/2 yrs.
60. 2008 NC Sea Grant. “Timing and route of movement in mature female blue crabs in a tidal estuary”. \$68,772/1 yr.
61. 2008 NOAA, University of Maryland, BCARC. “Blue crab (*Callinectes sapidus*), an integrated research program of basic biology, hatchery technologies, and potential for replenishing stocks”. \$96,578/1 yr.
62. 2008 NOAA/National Sea Grant. “Designing marine reserve networks for oyster restoration: metapopulation and graph theoretic approaches”. NMFS-Sea Grant Fellowship in Population Dynamics. D. Eggleston, \$115,500/3 yrs.
63. 2008 US Geological Survey. “Southeast Climate Science Center”. \$574,153. 6/08-5/13. co-PI with D. Shea (PI) and 4 other co-PIs.
64. 2009 NC Blue Crab Research Program, NC Sea Grant, “Timing and route of movement in mature blue crabs in northeastern NC”, \$6,000/1 yr.
65. 2009 NOAA Habitat Restoration, American Re-investment and Recovery Act. “Ecological performance measures of large-scale, sub-tidal oyster restoration. \$225,000/18 months (Total grant was \$5 million w/ NC Coastal Federation, NC Division of Marine Fisheries, UNC-W; T. Miller, NCCF, PI).
66. 2009 NC Division of Marine Fisheries/DEHNR/APNEP. “Performance-based aquatic vegetation monitoring”. \$40,518/2 yrs.
67. 2009 NC Division of Marine Fisheries. “Informing Habitat Enhancement in Pamlico Sound”. D. Eggleston (PI), C. Hardy, R. Luettich (co-PIs), 199,888, 2 yrs.
68. 2009 NOAA-OAR/FAU/UNC-W. “Connectivity between deep and shallow ecosystems: Ecosystem-based management of new shelf edge MPAs”. D. Eggleston (PI), R. He, D. Kamykowski, J. Buckel (co-PIs). \$10,000/1 yr.
69. 2010 NSF-Biological Oceanography. “Collaborative research: Connectivity in western Atlantic seep populations: Oceanographic and life history processes underlying genetic structure”. D. Eggleston (co-PI), C. VanDover (PI), C. Cunningham, R. He, S. Maskalova, C. Young (co-PIs). ~\$1.9 million (NCSU portion = \$479,403/4 yrs.
70. 2010 US Geological Survey. “Southeast Climate Science Center”, D. Eggleston (co-PI), D. Shea (PI), 4 other co-PIs, \$1,517,123/4 yrs.
71. 2010 NC Green Business Fund. “Evaluation of a Small-Scale Wind Turbine to Support the NC Marine Aquaculture Industry”. D. Eggleston (PI) with B. Miles (co-PI). \$278,566/1 yr.

72. 2010 NC Fishery Resource Grant Program. “Identifying sustainable substrates for oyster restoration and artificial reefs”. D. Eggleston (co-PI), N. Lindquist (PI). \$120,000/2 yrs.
73. 2011 NC Sea Grant. “Metapopulation dynamics guides oyster restoration and shell budgets in NC”. D. Eggleston (PI), A. Ringwood (co-PI); \$98,759/2 yrs.
74. 2011 NSF-Biological Oceanography. “Collaborative research: Interacting effects of local demography and larval connectivity on estuarine metapopulation dynamics”. D. Eggleston (PI), J. Fodrie, R. Luettich, E. North (co-PIs), \$1,245,539/3 yrs. (NCSU portion = \$588,075).
75. 2012 NSF Doctoral Dissertation Improvement Grant, IOS. Underwater soundscapes and their potential role in the settlement of estuarine benthic invertebrates. PI w/ A. Lillis & D. Bohnenstiehl, \$14,999/2 yrs.
76. 2012 NSF-Improvements to Field Stations & Marine Laboratories. “Development of *in-vivo* marine magnetic spectral imaging capabilities”. D. Eggleston (PI), M. Stoskopf & J. MacDonald (co-PIs); \$336,000/1 yr. + \$174k cost-sharing from NCSU.
77. 2012 NSF-Biological Oceanography. “Can you hear me now? Estuarine soundscapes and their role in larval settlement”. D. Eggleston (PI), D. Bohnenstiehl (co-PI), \$466,341/3 yrs.
78. 2013 NC Sea Grant. “Metapopulation dynamics guides oyster restoration and habitat protection”. D. Eggleston (PI) & B. Puckett, \$98,562 (+\$50k for RA)/2 yrs.
79. 2013. NC Estuarine Research Reserve Program. ‘Estuarine Soundscapes: Spatiotemporal Patterns of Biological and Anthropogenic Sounds in a North Carolina Reserve and Implications for Conservation’. PI w/ S. Brown (co-PI), \$10,000/1 yr.
80. 2015. NC Estuarine Research Reserve Program. Quantifying the Impact of an Invasive Species on Ecosystem Service Provision: Applications for *Phragmites australis* Management in the NC Coastal Reserve System. D. Eggleston (PI) w S. Theurekauf (co-PI), \$9,999/ 1 yr.
81. 2015. NOAA/ NMFS, Fisheries and the Environment Program (FATE). Use of a Bio-Physical Modeling Framework to Develop a Recruitment Index for Inclusion in Stock Assessments in the Gulf of Mexico. M. Karrauskas (PI), D. Eggleston and 5 others (co-PI). \$195,110/2 yrs.
82. 2015. NSF-Improvements to Field Stations & Marine Laboratories. “Acquisition of Unmanned Surface Vehicle for High-Resolution Mapping of the Shallow Seabed and Water Column. D. Eggleston (PI), D. Bohnenstiehl, C. Osburn, J. Buckel (co-PIs); \$349,970/1yr.
83. 2016. North Carolina Biotechnology Center. “Using Oyster Reef Soundscapes to Enhance Oyster Larval Settlement Under Commercial Hatchery Conditions”. D. Eggleston (PI), D. Cerino (Carteret Community College, co-PI), \$98,789/1 yr.
85. 2016. NC Division of Marine Fisheries, CRFL Program. “Evaluating cultch oyster reefs as essential fish habitat”. D. Eggleston (PI), D. Bohnenstiehl (co-PI), \$453,475/ 3 yrs. (pending).
86. 2017. NSF-Biological Oceanography. “Do soundscape characteristics reflect biodiversity and habitat complexity in marine systems? D. Eggleston (PI), D. Bohnenstiehl (co-PI), \$695,655/3 yrs. (pending).
87. 2017. NOAA/NMFS/MARFIN. Evaluating the Efficacy of Management Zones in the FKNMS: Integrating Visual Surveys, Habitat Data, and Passive Acoustics to Monitor Reef Fish Assemblages, Spawning, and Grazing Activity. D. Eggleston (PI), D. Bohnenstiehl (co-PI), \$418,767/3 yrs. (pending).

88. 2017. NOAA/CRCP. Evaluating the Efficacy of Management Zones in the FKNMS: Integrating Passive Acoustics and Visual Surveys of Live Coral Cover, Reef Fish Assemblages, Spawning and Grazing Activity. D. Eggleston (PI), D. Bohnenstiehl (co-PI), \$67,902/1 yr. (pending).

FOUNDATION & DEVELOPMENT ACTIVITIES

1. 2002. *Sustainable Fisheries Foundation* within NC State University's College of Physical & Mathematical Sciences Foundation. (PAMS Foundation). Joint venture with former graduate student Juan Chavez to fund student research via profits from his fishing bait business.
2. 2009-2016. *Skeleton Crew* fundraising program to re-articulate dolphin skeleton for display in the CMAST building lobby
(http://www.skeleton-crew.org/media/Skeleton%20Crew%20Brochure_final.pdf)
3. 2010. Living Trust for *CMAST's Visiting Scholars Program* in collaboration with NCSU's PAMS Foundation. Anonymous donor (~ \$1.5 million).
4. 2011. Worked NC Senator Jean Preston to initiate *Sustainable Fisheries License Plate fundraising* program-- NC House Bill 289. Specialized NC license plate program.
5. 2011. Worked with anonymous donor and NC State University's College of Agriculture and Life Sciences to provide supplemental funding to Wind/Solar Power demonstration project for NCSU's Marine Aquaculture Research Center (\$38k).
6. 2012. Partnered with the *Guy Harvey Foundation* and *36° North* on CMAST fund-raising activity during NC Seafood Festival (~\$2k).
7. 2012. Initiated donation of horizontal wind turbine demonstration project from Green Sky Wind Systems, LLC for CMAST (~\$50k).
8. 2013. Formed External Advisory Board for NC State University's CMAST.
9. 2014. Donation of 26 ft Regulator Center Console Boat to NC State University's CMAST.

PUBLICATIONS (Peer-Reviewed)

1. **Eggleston, D. B.** (1990). Behavioural mechanisms underlying variable functional responses of blue crabs (*Callinectes sapidus*) feeding on juvenile oysters (*Crassostrea virginica*). *Journal of Animal Ecology* 59(2):613-628.
2. **Eggleston, D. B.** (1990). Foraging behavior of the blue crab, *Callinectes sapidus*: effects of prey density and size. *Bulletin of Marine Science* 46(1):62-82.
3. **Eggleston, D. B.**, R. N. Lipcius, D. L. Miller, and L. Coba-Cetina. (1990). Shelter scaling regulates survival of juvenile Caribbean spiny lobster *Panulirus argus*. *Marine Ecology Progress Series* 62:79-88.
4. **Eggleston, D. B.** and E. A. Bochenek. (1990). Stomach contents and parasite infestation of school bluefin tuna, *Thunnus thynnus*, collected from the mid-Atlantic Bight, Virginia. *U.S. Fishery Bulletin* 88(2):389-394.
5. **Eggleston, D. B.** (1990). Variable functional responses of blue crabs (*Callinectes sapidus*) feeding on juvenile oysters (*Crassostrea virginica*): effects of predator sex and size, and prey size. *Journal of Experimental Marine Biology and Ecology* 143:73-90.
6. **Eggleston, D. B.**, & R. N. Lipcius. (1992). Shelter selection by spiny lobster under variable predation risk, social conditions and shelter size. *Ecology* 73(3):992-1011.
7. **Eggleston, D. B.**, R. Lipcius, & D. Miller. (1992). Enhancement of spiny lobster survival by artificial shelters: habitat, scaling, and spatial effects upon predation intensity. *Proceedings of the Gulf*

- and Caribbean Fisheries Institute* 42:127-134.
8. **Eggleston, D. B.**, R. N. Lipcius, & A. H. Hines. (1992). Variation in density-dependent predation by blue crabs upon infaunal clam species with contrasting distribution and abundance patterns. *Marine Ecology Progress Series* 85:55-68.
 9. **Eggleston, D. B.**, R. Lipcius, & D. Miller. (1992). Artificial shelters and survival of juvenile Caribbean spiny lobster: spatial, habitat and lobster size effects. *U.S. Fishery Bulletin* 90(4):691-702.
 10. Briones-Fourzan, P., E. Lozano-Alvarez & **D. B. Eggleston**. (1994). The use of artificial shelters ("casitas") for research and harvesting of spiny lobster in Mexico. Pages 340-337 *In*: Phillips, B. F., J. S. Cobb & J. Kittaka (eds.), "Spiny lobster management: Current situation and perspectives". *Fishing News Books, Blackwell Scientific Publications, Oxford, UK*
 11. Mueller, K. W., G. D. Dennis, **D. B. Eggleston**, & R. I. Wicklund. (1994). Size-specific social interactions and feeding modes in a population of mutton snapper, *Lutjanis analis* (Pisces: Lutjanidae) in the central Bahamas. *Environmental Biology of Fishes* 40:175-188.
 12. Mintz, J., R. Lipcius, **D. Eggleston** and M. Seebo. (1994). Survival of juvenile Caribbean spiny lobster: Effects of shelter size, geographic location and conspecific abundance. *Marine Ecology Progress Series* 112:255-266.
 13. **Eggleston, D.** & D. Armstrong. (1995). Pre- and post-settlement determinants of estuarine Dungeness crab recruitment. *Ecological Monographs* 65:191-254.
 14. **Eggleston, D. B.** (1995). Recruitment in Nassau grouper (*Epinephelus striatus*): Post-settlement abundance, microhabitat features, and ontogenetic habitat shifts. *Marine Ecology Progress Series* 124:9-22.
 15. **Eggleston, D.**, R. Lipcius, J. Grover. (1997). Predator and shelter effects on coral reef fish and spiny lobster prey. *Marine Ecology Progress Series* 149:43-59.
 16. Feldman, K., D. Armstrong, **D. Eggleston**, B. Dumbauld. (1997). Effects of substrate selection behavior and post-settlement survival on recruitment success of the thalassinidean shrimp, *Neotrypaea californiensis*, to intertidal shell and mud habitats. *Marine Ecology Progress Series* 150:121-136.
 17. Lipcius, R., W. Stockhausen, **D. Eggleston**, B. Hickey. (1997). Hydrodynamic decoupling of spawning stock, habitat quality and recruitment in the Caribbean spiny lobster: source-sink dynamics? *Journal of Marine and Freshwater Research* 48:807-815.
 18. **Eggleston, D.**, L. Etherington, W. Elis. (1998). Organism response to habitat patchiness: species- and habitat-dependent recruitment of decapod crustaceans. *Journal of Experimental Marine Biology and Ecology* 223:111-132.
 19. **Eggleston, D.**, D. Armstrong, W. Elis, W. Patton. (1998). Estuarine fronts as conduits for larval transport: hydrodynamics and spatial distribution of megalopae. *Marine Ecology Progress Series* 164:73-82.
 20. Grover, J., **D. Eggleston**, J. Shenker. (1998). Transition from pelagic to demersal phase in early-juvenile Nassau grouper, *Epinephelus striatus*: pigmentation, squamation, and ontogeny of diet. *Bulletin of Marine Science* 62: 97-113.
 21. **Eggleston, D.**, J. Grover, R. Lipcius. (1998). Ontogenetic diet shifts in Nassau grouper: trophic linkages and predatory impact. *Bulletin of Marine Science* 63:111-126.
 22. **Eggleston, D. B.**, R. N. Lipcius, L. S. Marshall, Jr. and S. G. Ratchford. (1998). Spatiotemporal variation in postlarval recruitment of the Caribbean spiny lobster in the central Bahamas: lunar

- and seasonal periodicity, spatial coherence, and wind forcing. *Marine Ecology Progress Series* 174:33-49.
23. Ratchford, S. G. and **D. B. Eggleston**. (1998). Size- and scale-dependent chemical attraction contributes to an ontogenetic shift in sociality. *Animal Behaviour* 56:1027-1034.
 24. Lipcius, R. N., **D. B. Eggleston**, D. L. Miller, T. Camarena. (1998). Spiny lobster survival in seagrass and algae: an inverted size refuge and non-linear survival function. *Marine and Freshwater Research* 49:807-816.
 25. **Eggleston, D. B.**, W. E. Elis, L. L. Etherington, C. P. Dahlgren, M. H. Posey. (1999). Organism response to habitat patchiness and diversity: habitat colonization by estuarine macrofauna. *Journal of Experimental Marine Biology and Ecology* 236:107-132.
 26. **Eggleston, D. B.** (1999). Application of landscape ecological principles to oyster reef habitat restoration. Pages 213-277 in Luckenbach, M. W., R. Mann and J. A. Wesson (eds.) *Oyster Reef Habitat Restoration: A Synopsis and Synthesis of Approaches*. Virginia Institute of Marine Science Press.
 27. Xie, L. and **D. B. Eggleston**. (1999). Computer simulations of wind-induced estuarine circulation patterns and estuary-shelf exchange processes: the potential role of wind forcing on larval transport. *Estuarine, Coastal and Shelf Science* 49:221-234.
 28. Lipcius, R. N. and **D. B. Eggleston**. (2000). Introduction: ecology and fishery biology of spiny lobsters. Pages 1-42 in Phillips, B. F., J. S. Cobb and J. Kittaka (eds.). *Spiny Lobster Management*. Fishing News Books, Blackwell Scientific Publications, Oxford.
 29. Briones-Fourzan, P., E. Lozano-Alvarez and **D. B. Eggleston**. (2000). The use of artificial shelters (Casitas) in research and harvesting of Caribbean spiny lobsters in Mexico. Pages 420-446 in Phillips, B. F., J. S. Cobb and J. Kittaka (eds.). *Spiny Lobster Management*. Fishing News Books, Blackwell Scientific Publications, Oxford.
 30. Ratchford, S. G. and **D. B. Eggleston**. (2000). Temporal shift in the release of a chemical attractant contributes to a diel shift in sociality. *Animal Behaviour* 59:793-799.
 31. Taylor, D. L. and **D. B. Eggleston**. (2000). Effects of hypoxia on an estuarine predator-prey interaction: foraging behavior and mutual interference in the blue crab *Callinectes sapidus* and the infaunal clam prey *Mya arenaria*. *Marine Ecology Progress Series* 196:221-237.
 32. Dahlgren, C. P. and **D. B. Eggleston**. (2000). Ecological processes underlying ontogenetic habitat shifts in a coral reef fish. *Ecology* 81(8):2227-2240.
 33. Etherington, L. L. and **D. B. Eggleston**. (2000). Large-scale blue crab recruitment: linking postlarval transport, post-settlement planktonic dispersal, and multiple nursery habitats. *Marine Ecology Progress Series* 204:179-198.
 34. **Eggleston, D. B.** (2000). Hurricanes, high school students, and the blue crab. Pages 43-50 In D. Haase and B. Wojenowski (eds.), *Proceedings of the Conference on K-12 Outreach from University Science Departments*, The Science House, NC State University, Raleigh, NC 27695-8211.
 35. Kellison, G. T., **D. B. Eggleston**, and J. S. Burke. (2000). Comparative behavior and survival of hatchery reared versus wild summer flounder (*Paralichthys dentatus*). *Canadian Journal of Fisheries and Aquatic Sciences* 57:1870-1877.
 36. Blackmon, D. C. and **D. B. Eggleston**. (2001). Factors influencing planktonic, post-settlement dispersal of early juvenile blue crabs. *Journal of Experimental Marine Biology and Ecology* 257:183-203.

37. Dahlgren, C. P. and **D. B. Eggleston** (2001). Spatiotemporal variability in abundance, size and microhabitat associations of early juvenile Nassau grouper, *Epinephelus striatus*, in an off-reef nursery system. *Marine Ecology Progress Series* 217:145-156.
38. Beck, M., K. Heck, Jr., D. Childers, **D. Eggleston**, B. Gillanders, B. Halpern, C. Hays, K. Hoshino, T. Minello, R. Orth, P. Sheridan, and M. Weinstein. (2001). The identification, conservation and management of estuarine and marine nurseries for fish and invertebrates. *BioScience* 51:633-641.
39. **Eggleston, D. B.** and C. P. Dahlgren. (2001). Distribution and abundance of Caribbean spiny lobster in the Key West National Wildlife Refuge: relationship to habitat features and impact of an intensive recreational fishery. *Marine and Freshwater Research* 52:1567-1576.
40. Lipcius, R. N., W. T. Stockhausen, **D. B. Eggleston**. (2001). Marine reserves for Caribbean spiny lobster: empirical evaluation and theoretical metapopulation recruitment dynamics. *Marine and Freshwater Research* 52:1589-1598.
41. Seitz, R. D., R. N. Lipcius, A. H. Hines and **D. B. Eggleston**. (2001). Density-dependent predation, habitat variation, and the persistence of marine bivalve prey. *Ecology* 82:2435-2451.
42. Kellison, G.T. and **D.B. Eggleston**. (2002). Density-dependent predation and implications for stock enhancement with Japanese flounder (*Paralichthys olivaceus*). *Journal of Fish Biology* 60:968-980.
43. Gillanders, B., K. Able, J. Brown, **D. Eggleston** and P. Sheridan. (2003). Evidence of connectivity between juvenile and adult habitats for mobile marine fauna: an important component of nurseries. *Marine Ecology Progress Series* 247:281-295.
44. Kellison, G.T., **D.B. Eggleston**, J.C. Taylor and J.S. Burke. (2003) An assessment of biases associated with caging, tethering, and habitat-specific trawl sampling of summer flounder (*Paralichthys dentatus*). *Estuaries* 26(1):64-71.
45. Kellison, G.T., **D. B. Eggleston**, J.C. Taylor, J.S. Burke and J.A. Osborne. (2003) Pilot evaluation of summer flounder stock enhancement potential using experimental ecology. *Marine Ecology Progress Series* 250:263-278.
46. Beck, M. W., Heck, Jr., D. Childers, **D. Eggleston**, B. Gillanders, B. Halpern, C. Hays, K. Hoshino, T. Minello, R. Orth, P. Sheridan, and M. Weinstein (2003) The role of nearshore ecosystems as fish and shellfish nurseries. *Issues in Ecology, Ecological Society of America* 11:1-12.
47. **Eggleston, D. B.**, E. G. Johnson, G. T. Kellison and D. A. Nadeau. (2003) Intense removal and non-saturating functional responses by recreational divers on spiny lobster prey. *Marine Ecology Progress Series* 257:197-207.
48. Bell G. W., **D. B. Eggleston** and T. G. Wolcott. (2003). Behavioral responses of free-ranging blue crabs to episodic hypoxia. I. Movement. *Marine Ecology Progress Series* 259:215-225.
49. Bell G. W., **D. B. Eggleston** and T. G. Wolcott. (2003.) Behavioral responses of free-ranging blue crabs to episodic hypoxia. II. Feeding. *Marine Ecology Progress Series* 259:227-235.
50. Chaves, J. C. and **D. B. Eggleston**. (2003). Blue crab mortality in North Carolina's soft-shell industry: biological and operational considerations. *Journal of Shellfisheries Research* 22:241-249.
51. Etherington, L. and **D. Eggleston**. (2003). Spatial dynamics of large-scale, multi-stage crab

- dispersal: determinants and consequences for recruitment. *Canadian Journal of Fisheries and Aquatic Sciences* 60:873-887.
52. Etherington, L. L., **D. B. Eggleston**, and W. Stockhausen (2003). Partitioning loss rates of early juvenile blue crabs from seagrass habitats into mortality and emigration. *Bulletin of Marine Science* 72(2):371-392.
 53. **Eggleston, D. B.** (2003). Introduction to the Proceedings of the Blue Crab Symposium. *Bulletin of Marine Science* 72(2):261-263.
 54. Kellison, G.T. and **D.B. Eggleston**. (2004). Coupling ecology and economy: Modeling optimal release scenarios for summer flounder (*Paralichthys dentatus*) stock enhancement. *U.S. Fishery Bulletin* 102:78-93.
 55. Forward, R. B. Jr., N.B. Reynolds, H. Diaz., J. H. Cohen and **D. B. Eggleston**. (2004). Endogenous swimming rhythms of juvenile blue crabs, *Callinectes sapidus* as related to horizontal transport. *Journal of Experimental Marine Biology and Ecology* 299:63-76.
 56. Reynolds, N. B. and **D. B. Eggleston**. (2004). Environmentally-controlled, density-dependent secondary dispersal in a local estuarine crab population. *Oecologia* 140:280-288.
 57. Burkholder, J, **D. Eggleston**, H. Glasgow, C. Brownie, R. Reed, G. Melia, C. Kinder, G. Janowitz, R. Corbett, M. Posey, T. Alphin, D. Toms, N. Deamer. (2004). Comparative impacts of major hurricanes on the Neuse River and Western Pamlico Sound ecosystems. *Proceedings of the National Academy of Sciences* 101:9291-9296.
 58. **Eggleston, D B.**, C. P. Dahlgren and E. G. Johnson. (2004). Fish density, diversity and size-structure within multiple back-reef habitats of Key West National Wildlife Refuge, USA. *Bulletin of Marine Science* 75:175-204.
 59. Forward, R. B. Jr., N.B. Reynolds, H. Diaz., J. H. Cohen and **D. B. Eggleston**. (2005). Endogenous swimming rhythms underlying secondary dispersal of early juvenile blue crabs, *Callinectes sapidus*. *Journal of Experimental Marine Biology and Ecology* 316:91-100.
 60. Bell, G. W. and **D. B. Eggleston**. (2005). Species-specific avoidance responses to chronic and episodic hypoxia. *Marine Biology* 146:761-770.
 61. Darcy, M. C. and **D. B. Eggleston**. (2005). Do habitat corridors influence animal dispersal and colonization in estuarine systems? *Landscape Ecology* 20:841-855.
 62. **Eggleston, D. B.**, G. W. Bell and A. D. Amavisca. (2005). Interactive effects of hypoxia and cannibalism on juvenile blue crab mortality. *Journal of Experimental Marine Biology and Ecology* 325:18-26.
 63. Parsons, D. P. and **D. B. Eggleston**. (2005). Indirect effects of recreational fishing on spiny lobster behavior (*Panulirus argus*). *Marine Ecology Progress Series* 303:235-244.
 64. Parsons, D. M. and **D. B. Eggleston**. (2006). Human disturbance, natural predators and unobserved mortality in a spiny lobster, *Panulirus argus*, fishery. *Journal of Experimental Marine Biology and Ecology* 334:196-205.
 65. Lipcius, R.N., **D.B. Eggleston**, K.L. Heck, Jr., R.D. Seitz and J. van Montfrans. (2007). Ecology of postlarval and young juvenile blue crabs. In *The Blue Crab, Callinectes sapidus* (Eds. Victor S. Kennedy and L. Eugene Cronin), pp. 535-564. University of Maryland Sea Grant Press, 800 pp.
 66. Drew, C. A. and **D. B. Eggleston**. (2006). Currents, landscape structure, and recruitment success along a passive-active dispersal gradient. *Landscape Ecology* 21:917-931.
 67. Reynolds, N. B., **D. B. Eggleston** and R. A. Luettich. (2006). Secondary dispersal of early juvenile

- blue crabs within a wind-driven estuary. *Limnology and Oceanography* 51; 1982-1995.
68. Nunoo, F. K. E., **D. B. Eggleston** and C. J. Vanderpuye. 2006. Abundance, biomass and species composition of nearshore fish assemblages in Ghana, West Africa. *African Journal of Marine Science* 28(3&4): 689–696.
 69. Taylor, J. C., **D. B. Eggleston**, P. S. Rand. (2006). Nassau grouper (*Epinephelus striatus*) spawning aggregations: hydroacoustic surveys and geostatistical analysis. In *Emerging Technologies in Reef Fisheries Management*, J. C. Taylor (ed.), p. 18-25. NOAA Professional Paper NMFS 5, Seattle, WA, USA.
 70. Rand, P. S., J. C. Taylor, and **D. B. Eggleston**. (2006). A video method for quantifying size distribution, density and three dimensional spatial structure of fish spawning aggregations. In *Emerging Technologies in Reef Fisheries Management*, J. C. Taylor (ed.), p. 4-9. NOAA Professional Paper NMFS 5, Seattle, WA, USA.
 71. Parsons, D. M. and **D. B. Eggleston**. (2007). Potential population and economic consequences of sub-lethal injuries in the spiny lobster fishery of the Florida Keys. *Marine and Freshwater Research* 58(2) 166-177.
 72. Reyns, N. B., **D. B. Eggleston**, and R. A. Luettich. (2007). Dispersal dynamics of postlarval blue crabs, *Callinectes sapidus*, within a wind-driven estuary. *Fisheries Oceanography* 16(3): 257-272.
 73. Searcy, S. P., **D. B. Eggleston**, J. A. Hare. (2007). Is growth a reliable indicator of habitat quality and Essential Fish Habitat? *Canadian Journal of Fisheries and Aquatic Sciences* 64:681-691.
 74. Searcy, S., **D. B. Eggleston**, J. Hare. (2007). Environmental influences on the relationship between juvenile and larval growth for Atlantic croaker, *Micropogonias undulates*. *Marine Ecology Progress Series* 349:81-88.
 75. **Eggleston, D. B.**, E. G. Johnson, G. T. Kellison, G. R. Plaia and C. Huggett. (2008). Pilot evaluation of early juvenile blue crab stock enhancement using a replicated BACI design. *Reviews in Fisheries Science* 16 (1-3): 91-100.
 76. Lipcius, R. N., **D. B. Eggleston**, S. J. Schreiber, R. D. Seitz, J. Shen, M. Sisson, W. T. Stockhausen and H. V. Wang. (2008). Importance of metapopulation connectivity to restocking and restoration of marine species. *Reviews in Fisheries Science* 16 (1-3): 101-110.
 77. **Eggleston, D. B.**, D. M. Parsons, G. T. Kellison, G. R. Plaia and E. G. Johnson. (2008). Functional response of sport divers to lobsters with application to fisheries management. *Ecological Applications* 18:258-272.
 78. Zohar, Y., A. H. Hines, O. Zmora, E. G. Johnson, R. N. Lipcius, R. D. Seitz, **D. B. Eggleston**, A. R. Place, E. Schott, J. Stubblefield and J. Sook Chung. (2008). The Chesapeake Bay Blue Crab: (*Callinectes sapidus*): A multidisciplinary approach to responsible stock enhancement. *Reviews in Fisheries Science* 16 (1-3): 25-35.
 79. Drew, C. A. and **D. B. Eggleston**. (2008). Local juvenile fish densities in Florida Keys mangroves correlates with regional landscape characteristics. *Marine Ecology Progress Series* 362:233-243.
 80. Vander Pluym, J.L., **D.B. Eggleston**, and J.F. Levine. (2008). Impacts of road crossings on fish movement and community structure. *Journal of Freshwater Ecology* 23(4): 545-574.

81. **Eggleston, D. B.** and D. M. Parsons. 2008. Disturbance-induced spill-in of Caribbean spiny lobster to marine reserves. *Marine Ecology Progress Series* 371: 213-220.
82. Moorman, M. C., **D. B. Eggleston**, C. B. Anderson, A. Mansilla and P. Szjener. (2009). The implications of North American Beaver and Trout invasion on native diadromous fish in the Cape Horne Biosphere Reserve, Chili. *Transactions of the American Fisheries Society* 138:306-313.
83. **Eggleston, D. B.**, G. W. Bell, S. P. Searcy. (2009). Do Blue Crab Spawning Sanctuaries in North Carolina Protect the Spawning Stock? *Transactions of the American Fisheries Society* 138: 581-592.
84. Bell, G. W., **D. B. Eggleston** and E. J. Noga. (2009). Environmental and physiological controls of blue crab avoidance behavior during exposure to hypoxia. *Biological Bulletin* 217:161-172.
85. **Eggleston, D. B.**, N. B. Reyns, L. L. Etherington, G. Plaia, L. Xie. (2010). Tropical storm and environmental forcing on regional blue crab settlement. *Fisheries Oceanography* 19(2): 89-106.
86. Bell, G. W., **D. B. Eggleston** and E. J. Noga. (2010). Molecular keys unlock the mysteries of variable survival responses of blue crabs to hypoxia. *Oecologia*. 163: 57-68.
87. Johnson, E. G. and **D. B. Eggleston**. (2010). Population density, loss and movement of blue crabs in salt marsh creeks of the Newport River estuary. *Marine Ecology Progress Series* 407: 135-147.
88. Rindone, R. R. & **D. B. Eggleston**. (2011). Predator-prey dynamics between recently established Stone Crabs (*Menippe spp.*) and oyster prey (*Crassostrea virginica*). *Journal of Experimental Marine Biology & Ecology* 407:216-225.
89. Haase, A., **D. Eggleston**, R. Luettich, R. Weaver, B. Puckett. (2012). Estuarine circulation and predicted oyster larval dispersal among a network of reserves. *Estuarine, Coastal & Shelf Science* 101:33-43.
90. Puckett, B. J. and **D. B. Eggleston**. (2012). Oyster Demographics in a Network of No-Take Reserves: Recruitment, Growth, Survival, and Density Dependence, Marine and Coastal Fisheries: Dynamics, Management, and Ecosystem Science, 4: 605-627.
91. Mroch, R., **D. Eggleston**, B. Puckett. (2012). Spatiotemporal variation in oyster fecundity and reproductive output in a network of no-take reserves. *Journal of Shellfisheries Research*. 31(4): 1091-1101.
92. **Eggleston, D. B.**, W. F. Herrnkind and A. H. Hines. (2013). Behavior and ecology of mobile animals: insights from *in situ* observations. Pages 99-114 in M. Lang (Editor), *Research and Discoveries: The Revolution of Science Through Scuba*. **Smithsonian Institution Press**, Washington, D. C.
93. Vasconcelos R, **D. B. Eggleston**, O. Le Pape, and I. Tulp. (2013). Patterns and processes of habitat-specific demographic variability in exploited marine species. *ICES Journal of Marine Science*, doi:10.1093/icesjms/fst136.
94. Lillis, A., **D. B. Eggleston**, and D. R Bohnenstiehl. (2013). Oyster larvae settle in response to habitat-associated underwater sounds. *PloSONE* 8(10): e79337. doi:10.1371/journal.pone.0079337
95. Pierson, K. J. and **D. B. Eggleston**. (2014). Response of estuarine fish to large-scale oyster reef restoration. *Transactions of the American Fisheries Society*. 143 (1): 273-288.

96. Dunn, R., **D. Eggleston**, N. Lindquist. (2014). Substrate effects on demographic rates of Eastern oyster (*Crassostrea virginica*). *Journal of Shellfisheries Research*. 33:177-185.
97. Puckett, B. J., **D. B. Eggleston**, P. C. Kerr, R. Luetlich. (2014). Larval dispersal and population connectivity among a network of marine reserves. *Fisheries Oceanography* 23(4):342-361.
98. Lillis, A., **D. Eggleston**, D. Bohnenstiehl. (2014). Habitat-associated estuarine soundscapes: Distinct acoustic characteristics of sub-tidal oyster reefs compared to surrounding soft-bottom habitats. *Marine Ecology Progress Series*. 505:1-17.
99. Lillis, A., **D. Eggleston**, D. Bohnenstiehl. (2014). Soundscape variation from a larval perspective: the case for ambient habitat sound as a settlement cue for weakly swimming larvae. *Marine Ecology Progress Series* 509: 57-70.
100. Dunn, R., **D. Eggleston**, N. Lindquist. (2014). Oyster-sponge interactions and bioerosion of reef-building substrate materials: implications for oyster restoration. *Journal of Shellfisheries Research*. 33(3): 1-12.
101. Qian, H., Y. Li, R. He, **D. B. Eggleston**. (2014). Connectivity in the Intra-American Seas and implications for potential larval transport. *Coral Reefs*. doi:10.1007/s00338-014-1244-0.
102. Eggleston, D., E. Millstein & G. Plaia. (2015). Timing and route of migration of mature female blue crabs in a tidal estuary. *Biology Letters*. Doi:10.1098/rsbl.2014.0936
103. Lillis, A., D. Bohnenstiehl, and **D. Eggleston**. (2015). Soundscape manipulation enhances larval recruitment of a reef-building mollusk *PeerJ*. doi 10.7717/peerj.999
104. Bohnenstiehl, D., A. Lillis, **D. Eggleston** (2016). The curious acoustic behavior of estuarine snapping shrimp: temporal patterns of snapping shrimp sound in sub-tidal oyster reef habitat. *PLoS ONE*. 11(1): e0143691. doi:10.1371/journal.pone.0143691
105. Kroll, I., A. Poray, B. Puckett, **D. Eggleston**, J. Fodrie. (2016). Environmental effects on elemental signatures in the shells of the Eastern oyster, *Crassostrea virginica*: implications for the use of geochemical tagging to assess population connectivity. *Marine Ecology Progress Series*. 543:173-186, doi:10.3754/meps/11549.
106. Puckett, B. J. and **D. B. Eggleston**. (2016). Metapopulation dynamics guide marine reserve design: importance of connectivity, demographics, and stock enhancement *Ecosphere*. 7(6): 1-23, e01322.
107. Ricci, S., **D. Eggleston**, D. Bohnenstiehl, and A. Lillis. (2016). Temporal soundscape patterns and processes in an estuarine reserve. *Marine Ecology Progress Series* 550:25-38, doi:10.3354/meps11724.
108. Theuerkauf, S., **D. Eggleston**, B. Puckett, and K. Theuerkauf. (2016). Wave exposure structures the distribution of oysters on natural intertidal reef but not on hardened shoreline structures. *Estuaries & Coasts* doi 10.1007/s12237-016-0153-6
109. Lillis, A., D. Bohnenstiehl, J. Peters, **D. Eggleston**. (2016). Tuned into the reef: Larval settlement of reef-building coral *Montastraea faveolata* varies under exposure to the ambient reef soundscapes of different quality. *PeerJ* doi 10.7717/peerj.2557
110. Theuerkauf, S. J., **D. B. Eggleston**, K. W. Theuerkauf, and B. J. Puckett. (2017). Oyster Density and Demographic Rates on Natural Intertidal Reefs and Hardened Shoreline Structures. *Journal of Shellfisheries Research*. 36(1): 1-4.
111. Theuerkauf, S. J., B. J. Puckett, K. W. Theuerkauf, E. J. Theuerkauf, and **D. B. Eggleston** (2017). Density-dependent role of an invasive marsh grass on ecosystem service provision. *PlosOne*, doi:10.1371/journal.pone.0173007.

112. Ricci, S., **D. Eggleston**, and D. Bohnenstiehl. (in press). Use of passive acoustic monitoring to characterize fish spawning behavior and habitat use within a complex mosaic of estuarine habitats. *Bulletin of Marine Science*. (Proceedings of Fish At Night Conference).
113. Peters, J., **D. Eggleston**, B. Puckett. (in review). Oyster demographics in harvested reefs versus no-take reserves: Implications for larval spillover. *Transactions of the American Fisheries Society*.
114. McVeigh, D., **D. Eggleston**, A. Todd, C. Young, and R. He (in review). Variation in larval behavior alters potential larval dispersal and population connectivity of a deep-sea bivalve. *Deep-Sea Research Part I*.
115. Theuerkauf, K. W., **D. B. Eggleston**, and S. J. Theuerkauf. (in review). An exotic species alters patterns of marine community development. *Ecological Monographs*.
116. **Eggleston, D.**, G. Plaia and B. Puckett. (in prep.) Spatiotemporal variation in oyster larval settlement within a large, wind-driven estuary. *Estuaries & Coasts*.
117. **Eggleston, D.**, B. Puckett, R. Lipcius, K. Rose, M. Wilbur, and J. Van Der Meer. (in prep.). Habitat quality mediates the effects of larval connectivity on a marine metapopulation. *Ecological Modeling*.

(copies of manuscripts in review or in prep are available upon request)

Technical reports, non peer-reviewed book chapters, popular articles, videos

1. **Eggleston, D. B.** (1988). Remote sensing of offshore water mass features: present and potential benefits to Virginia's recreational fishery for marlin and tuna. *Scientific Report in Applied Marine Science and Ocean Engineering No. 295 of the Virginia Institute of Marine Science*, College of William and Mary, Gloucester Point, VA 23062. 34 pp.
2. **Eggleston, D. B.**, R. N. Lipcius, D. L. Miller. (1990). Stock enhancement of Caribbean Spiny Lobster. *The Lobster Newsletter* 3(1):10-11.
3. **Eggleston, D. B.** & R. N. Lipcius. (1992). Dynamics of shelter selection in the Caribbean spiny lobster. *The Lobster Newsletter* 5(1):7-8.
4. **Eggleston, D.** and S. McKeena. (1996). Evaluation of fisheries resource data collection, analysis and availability: an example protocol using the blue crab. *UNC-Sea Grant*-96-01, 23 pp.
5. **Eggleston, D.** (1997). Use of a burrowing amphipod, *Leptocheirus plumulosus*, as a bioindicator of habitat degradation in North Carolina estuaries. *Final Report to the EPA E-MAP Carolinian Province Project*, 29 pp.
6. **Eggleston, D. B.** (1998) Population dynamics of the blue crab in North Carolina: Statistical analyses of fisheries survey data. *Final Report for Contract M-6053 to the NC Department of Environmental Health and Natural Resources, Division of Marine Fisheries*, 66 p.
7. **Eggleston, D. B.** (1999). Habitats, hurricanes, and the blue crab. Journal of the NC Wildlife Federation, Summer 1999.
8. "Blue Crab Secrets", Video Produced by UNC-TV.
9. **Eggleston, D. B.**, C. P. Dahlgren and E. G. Johnson. (2000). Fish and Caribbean spiny lobster distribution and abundance patterns in the Key West National Wildlife Refuge: an initial assessment in the Lakes and Marquesas regions. Report #2 in partial fulfillment of a challenge Cost-Share Agreement between the Center for Marine Conservation and U.S. Fish and Wildlife Service for Contract 1448-40181-99-6. 71 pp.
10. "Nassau grouper: Keeper of the Reef", 2001. Video, Produced by ION Digital, Reno, NV.

11. **Eggleston, D. B.**, J. Hightower, P. Rand, C. Dahlgren, A-M.Eklund, and S. Bolden. (2001). Spawning aggregations of Nassau grouper: essential habitat, population structure and fish movement patterns. Final Report for Project CMRC-99-NRDE-03-00A to the Caribbean Marine Research Center, 10 pp.
12. **Eggleston, D. B.** and J. C. Chaves. (2002). Blue crab mortality in North Carolina's soft-shell industry: biological and operational considerations. Final report to the NC Sea Grant/ Fisheries Research Grant Program for Project 01-FEG-03, 38 p.
13. **Eggleston, D. B.**, P. Rand, C. Taylor, A-M. Eklund, J. Schull. (2003). Connectivity and spatial dynamics of a Nassau grouper metapopulation in the Bahamas: fulfilling urgent, key information needs for conservation. Final Report for Contract CMRC-01-NRDE-04, Caribbean Marine Research Center, 40 pp.
14. Lipcius, R.N., W.T. Stockhausen and **D.B. Eggleston**. (2003). Metapopulation dynamics and marine reserves: Caribbean spiny lobster in Exuma Sound, Bahamas. In: Chapter 7, The Bahamas: Tropical Island Nation) **Coastal-Marine Conservation: Science and Policy** (Eds. Ray, G.C. and J. McCormick-Ray). Blackwell Scientific, Oxford, UK.
15. **Eggleston, D. B.**, J. Hightower and E. Johnson. (2004). Population dynamics and stock assessment of the blue crab in North Carolina. Final Report to the NC Sea Grant/Blue Crab Research Program for Project for Projects 99-FEG-10 and 00-FEG-11, 230 pp.
16. **Eggleston, D. B.** and C. P. Dahlgren. (2004). Ingress of postlarval spiny lobster and larval fish to the Key West National Wildlife Refuge: An Initial Assessment in the Lakes and Marquesas Regions. Final Report in Partial Fulfillment of a Challenge Cost-Share Agreement between The Oceans Conservancy and U.S. Fish and Wildlife Service for Contracts 1448-40181-99-6 and 1448-40181-00-6143, June 2004, 33 pp.
17. **Eggleston, D. B.**, S. P. Searcy, G. Plaia, and N. B. Reynolds. (2004) Ingress of postlarval spiny lobster and larval fish to the Great White Heron National Wildlife Refuge: an initial assessment of Atlantic Ocean versus Gulf Stream sources. Final Report in Partial Fulfillment of a Challenge Cost-Share Agreement between The Oceans Conservancy and U.S. Fish and Wildlife Service for Contracts 1448-40181-99-6 and 1448-40181-00-6143. June 2004. 38 pp.
18. **Eggleston, D. B.** G. W. Bell, E.G. Johnson, and G. T. Kellison. (2004). Fish and spiny lobster density, size-structure, and fish diversity within multiple back reef habitats of Great White Heron National Wildlife Refuge, USA. Final Report in Partial Fulfillment of a Challenge Cost-Share Agreement between the Center for Marine Conservation and U.S. Fish and Wildlife Service for Contracts 1448-40181-99-6 and 1448-40181-00-6143, June, 2004, 75 pp.
19. **Eggleston, D. B.** G. Plaia, E. G. Johnson, G. T. Kellison, C. Huggett. (2004). Blue Crab Stock Enhancement: Ecological Feasibility and Pond Culture. Final Report for 02-STOK-02 to the North Carolina Fishery Research Grant Program, Blue Crab Research Program, NC Sea Grant, July 2004, 60 pp.
20. **Eggleston, D. B.**, N. B. Reynolds, G. Plaia, and G. M. Parkins. (2005). High School Students and the Blue Crab: An Educational Outreach Program to Test Recruitment Hypotheses. Final Report for 02-POP-04 to the North Carolina Fisheries Research Grant Program, NC Sea Grant, October 2005, 91 pp.
21. **Eggleston, D. B.**, G. W. Bell, S. P. Searcy, E. G. Johnson, T. Alphin, G. Plaia, M Posey. (2006). Field Assessment of Spawning Sanctuaries and Possible Migration Corridors for the Blue

- Crab Spawning Stock in North Carolina. Report 01-POP-08 to the NC Blue Crab Research Program, NC Sea Grant, Raleigh, NC, 44 pp.
22. **Eggleston, D. B.**, G. R. Plaia, W. Phillips. (2007). Blue crab dependence on SRV nurseries in Albemarle Sound, NC. Report 05-BIOL-03 to the NC Blue Crab Research Program, NC Sea Grant, Raleigh, NC, 36 pp.
 23. Ballance, E. G. and **D. B. Eggleston**. (2008). “Oyster dispersal and metapopulation dynamics in Pamlico Sound: Part II, settlement, survival and spawning potential”. Report 06-EP-03 to the North Carolina Fishery Research Grant Program, NC Sea Grant, 33 pp.
 24. **Eggleston, D. B.**, G. R. Plaia, H. Daniels. (2009). “Blue crab stock enhancement: further progress in freshwater pond rearing”. Report 07-STOK-01 to the NC Blue Crab Research Program, NC Sea Grant, Raleigh, NC, 15 pp.
 25. Ballance, G., **D. Eggleston**, G. Plaia, B. Puckett. 2009. Oyster Settlement and Reef Mapping in Pamlico Sound. Final Report for Fisheries Research Grant, 07-EP-04, NC Division of Marine Fisheries, Morehead City, NC, 20 pp.
 26. **Eggleston, D. B.**, G. R. Plaia, W. Phillips. (2010). “Blue Crab Dependence on SRV Nurseries in Albemarle Sound”. Report 05-BIOL-07 to the NC Blue Crab Research Program, NC Sea Grant, Raleigh, NC, 25 pp.
 27. Bell, G., **D. Eggleston**, K. Bridges. (2010). “The timing and route of migration of mature female blue crabs in the White Oak River”. Final Report: NC Sea Grant, NC Blue Crab and Shellfish Research Program, 08-POP-04, 36 pp.
 28. **Eggleston, D.**, E. Millstein, G. Plaia, R. Howell. (2011). “The timing and route of migration of mature female blue crabs in the White Oak River” Final Report: NC Sea Grant, NC Blue Crab and Shellfish Research Program, 08-POP-04, 29 pp.
 29. **Eggleston, D.**, B. Efland, G. Plaia, B. Puckett, R. Rindone, K. Pierson. (2011). Ecological Performance and Recreational Fishing Impacts of Large-Scale, Sub-Tidal Oyster Restoration. Final Report to NOAA/ARRA and NC Coastal Federation, NC Coastal Federation, Newport, NC, 74 pp.
 30. ICES. (2012). Report of the Workshop on the Value of Coastal Habitats for Exploited Species (WKVHES), 25-29 June 2012, Copenhagen, Denmark. ICES CM 2012/SSGSUE:05. 70 pp.
 31. Kenworthy, W. Judson, Christine A. Buckel, Dean E. Carpenter, **David B. Eggleston**, Don Field, Cecilia S. Krahforst, Joseph J. Luczkovich and Gayle R. Plaia. (2012). Development of submerged aquatic vegetation monitoring protocols in North Carolina. Final report to the NC Division of Marine Fisheries. Coastal Recreational Fishing License Fund Project 172 pp.
 32. ICES. 2013. Report of the Working Group on the Value of Coastal Habitats for Exploited Species (WGVHES), 17-21 June, 2013, ICES Headquarters, Copenhagen, ICES CM 2013/SSGSUE:04 21 pp.
 32. **Eggleston, D.**, A. Lillis and D. Bohnenstiehl. 2015. Soundscapes and larval settlement: larval bivalve responses to habitat-associated underwater sounds. Pages 255-264 In: A.N. Popper and A. Hawkins (eds.), *The Effects of Noise on Aquatic Life*, Advances in Experimental Medicine and Biology, Springer, New York.
 33. Lillis, A., **D. Eggleston** and D. Bohnenstiehl. 2015. Soundscapes and larval settlement: characterizing the stimulus from a larval perspective. Pages 637-646 In: A.N. Popper and A.

Hawkins (eds.), *The Effects of Noise on Aquatic Life*, Advances in Experimental Medicine and Biology.

34. **Eggleston, D. B.**, B. Puckett, C. Hardy and R. Leuttich. 2013. Informing habitat enhancement in Pamlico Sound. Final Report to NC Coastal Recreational Fishing License Program for Project 2010-H-004, pp. 66.

PRESENTATIONS

Contributed:

Estuarine Research Federation (1987, 1995); Marine Benthic Ecology Meetings (1987, 1990, 1992, 1994-96, 1998-2002); Gulf & Caribbean Fisheries Institute Meetings (1988-1992); Blue Crab Conference, Virginia Beach, VA (1988); National Shellfisheries Association (1990); Annual Meeting of the Ecological Society of America (1990, 1992, 1994, 1995); Fifth Intl. Conference on Artificial Habitats for Fisheries (1991); Western Society of Naturalists (1993); Annual Meeting for Society of Conservation Biology, Victoria, B.C. (1997); ICES Recruitment Dynamics meeting; Baltimore., MD (1997), Blue Crab Symposium, Wilmington, NC (2000); International Lobster Conference and Workshop, Key West, FL (2000), Crustacean Society Meeting, Williamsburg, VA (2003); Marine Benthic Ecology Meeting, Williamsburg, VA (2005), Mangroves as Fish Habitat, Miami, FL (2006), International Conference on Sea Ranching & Stock Enhancement, Seattle, WA (2006), Benthic Ecology Meeting, Atlanta, GA (2007), Benthic Ecology Meeting, Wilmington, NC (2010), Southeastern Estuarine Research Society, Athens, GA (2011), AFS-Tidewater Chapter, Beaufort, NC (2012), Effects of Noise on Aquatic Life, Budapest, Hungary (2013), Sixth International Conference on Shellfish Restoration, Charleston, SC (2014), National Shellfisheries Association Meeting, Monterey, CA (2015), Effects of Noise on Aquatic Life, Dublin, Ireland (2016).

Invited:

Primera Reunion de Evaluacion Academica-Reserva de la Biosfera Sian Ka'an, Chetumal, Mexico (1989); The College of William and Mary (1988, 1991); Association of Marine Laboratories of the Caribbean, Freeport, Bahamas (1991); Florida Institute of Technology (1991); Centro de Investigaciones de Quintana Roo, Chetumal, Mexico (1991); University of Washington (1992); University of Oregon (1992); Texas A&M (1992); North Carolina State University (1993 & 1994), University of North Carolina - Wilmington (1994), East Carolina University (1995); Harvard University (1996); Duke University (1997); American Fisheries Society (NC Chapter Meeting), Raleigh, NC (1997), International Crustacean Congress-Amsterdam (1998), NC Science Teachers Conference (1998), NC State University, School of Veterinary Medicine (1999), University of Maryland (1999) Conference on K-12 Outreach from University Science Departments, Raleigh, NC (2000), Mt. Olive College, NC (2000), University of North Carolina-Chapel Hill (2000), NC Marine Fisheries Commission, Greenville, NC (2001), NC Commercial Fishing Show, New Bern, NC (2001), Abdus Salam International Centre for Theoretical Physics, Trieste, Italy (2001), NC Division of Marine Fisheries (2002), Duke University (2002), Blue Crab Advanced Research Consortium, Baltimore, MD (2002-04), American Fisheries Society, NC State University chapter, Raleigh, NC (2003), University of Maryland, Chesapeake Biological Laboratory, Solomon's, MD (2003), University of Washington (2003), Spiny lobster workshop, Key West, FL (2003), Center for Marine Science and Technology, Morehead City, NC (2003), NC State University, Dept. of MEAS, Raleigh, NC

(2003), NC Commercial Fishing Show, New Bern, NC (2004), Duke University (2004), NC Wesleyan College (2005), Blue Crab Advanced Research Consortium, Ocean Springs, MS (2005), Marine Benthic Ecology Meeting, Blue crab Session, Williamsburg, VA (2005), NC American Fisheries Society Chapter meeting, Raleigh, NC (2005), American Fisheries Society, Anchorage, AK (2005); University of North Carolina-Chapel Hill (2006), Southeast Center for Ocean Science Education Excellence program (2006), U.S. Senate and House staff briefing, Washington, DC (2006), NC Biotechnology Center, Marine Science and Aquaculture Meeting, Morehead City, NC (2006), University of North Carolina-Institute of Marine Sciences (2006), Joint AERS/SEERS Meeting, Atlantic Beach, NC (2007), NC DMF/NC Aquarium/NC Coastal Federation Oyster Summit, Pine Knoll Shores, NC (2007), NOAA/NMFS Beaufort Laboratory, NC (2007), Chesapeake Biological Laboratory, Solomon's, MD (2008), Chesapeake Bay Foundation/MD DNR, Annapolis, MD (2009), NC Fisheries Forum, New Bern, NC (2009), Duke University Marine Laboratory (2009), Old Dominion University (2009), Coastal & Estuarine Research Federation Meeting, Portland, OR (2009), Sigma Xi-Scientific Society, Research Triangle Park (2010), The Revolution of Science Through SCUBA, Washington, DC (2010), Restore America's Estuaries, Galveston, Texas (2010), University of Texas, Port Aransas Marine Lab., Port Aransas, TX (2011), College of Charleston, SC DNR, Charleston, SC (2011), National Shellfisheries Association Meeting, Baltimore, MD (2011), Coastal & Estuarine Research Federation Meeting, Daytona Beach, FL (2011), Benthic Ecology Meeting, Norfolk, VA (2012), East Carolina University (2012), State University of New York-Stony Brook (2012), Old Dominion University, Norfolk, VA (2013), Coastal & Estuarine Research Federation Meeting, San Diego, CA (2013), Acoustic Society of America, San Francisco, CA (2013), University of Oregon, OIMB, Charleston, OR (2014), UNC-W, Wilmington, NC (2014), Coastal Connections, NC Sea Grant, Raleigh, NC (2015); University of Florida, Gainesville, FL (2015), NC State, OLLI, Raleigh, NC (2016), University of Washington, Seattle, WA (2016), San Diego State University (2017), NC Biotechnology Center, RTP, NC (2017).

Invited Workshops & Panels:

Infaunal Predation Workshop, The University of Connecticut (1986); Portunid Ecology Workshop, Smithsonian Environmental Research Center (1987); International Workshop on Lobster Ecology and Fisheries, Havana, Cuba (1990); Blue Crab Recruitment Workshops (held in conjunction with the Annual Marine Benthic Ecology Meetings) (1989-1992); Caribbean spiny lobster workshops (held in conjunction with the Annual Gulf and Caribbean Fisheries Institute Meetings (1988-1993); Marine Biotechnology/Technology Reinvestment Project, RTP, NC (1994); NC Ocean Task Force, Wilmington, NC (1994); Albemarle-Pamlico Estuarine Study, NOAA/COP planning workshop (1994); U.S. Southeastern & Caribbean Reef Fish workshop, Charleston, SC (1994); Oyster Reef Restoration workshop, Williamsburg, VA (1995); NC Fisheries Moratorium Steering Committee, Wilmington, NC (8/95, 11/95); United States-Australia workshop on recruitment and population dynamics of coral reef fishes, Cairns, Australia (1995), International Flatfish Workshop, RTP, NC (1998), NOAA Strategic Planning Workshop: Sustainable Fisheries, Washington, D.C. (1998-99), National Center for Ecological Analysis and Synthesis, Nursery habitats (1999-2002), Watersheds & Coastal Zone Simulation Modeling, Trieste, Italy (2000), Mid-Atlantic habitat Workshop, Natural Resources Defense Council, New York (2000), NOAA/NMFS Strategic Planning Workshop, Washington, D.C.

(2001), Grays Reef Marine Sanctuary Strategic Planning Meeting, Savannah, GA (2001), Biocomplexity in North Carolina's Aquatic Ecosystems, Morehead City, NC (2001), NC Commercial Fishing Show, New Bern, NC (2002), BackReef Workshop, Caribbean Marine Research Center, Bahamas (2002), Center of Marine Biotechnology, Baltimore, MD (2002), National Marine Sanctuary Program, Monterey, CA & Miami, FL (2002), Spiny lobster workshop, Key West, FL (2003), NC Sea Grant Program Assessment Team visit, CMAST, Morehead City NC (2003), Center for Marine Biotechnology, Baltimore, MD (2004), Blue Crab Collaborative Learning, Edenton, NC (2005), Center for Marine Biotechnology, Baltimore, MD (2006), NC Marine Science Task Force, Atlantic Beach, NC (2007), Center for Marine Biotechnology, Baltimore, MD (2007 & 2008), NOAA in the Carolinas, Beaufort, NC (2008), Marine Ecosystem Modeling, Beaufort, NC (2008), EPA Coastal Carolinas Program, RTP NC (2008), SPICOSA, Brest, France (2008), EPA Ecosystem Services Partnership, Washington, DC (2009), Carteret County Scientific Diving Symposium, Pine Knoll Shores, NC (2010), COSEE Teacher Training, Global Climate Change, Morehead City, NC (2010), COSEE, Broadening Diversity Participation in Ocean Sciences, Raleigh, NC (2010), NOAA/FAU/HBOI Cooperative Institute for Ocean Exploration & Research, Ft. Pierce, FL (2011), Global Issues Seminar Series, "State of the Oceans", NC State University, Raleigh, NC (2012), International Council for the Exploration of the Seas, Copenhagen, Denmark (2012 & 2013), Georgia Coastal Ecosystems-Long Term Ecological Reserve (2013), Sarasota Bay Scallop Restoration Program, Mote Marine Lab., Sarasota FL (2013), One Health, University of Surrey, Surrey, UK (2014), NC Sea Grant Symposium, Raleigh, NC (2014); Improving the accuracy of fishery-independent survey indices, VIMS (2014; ICES Fisheries Habitats Working Group, Lisbon, Portugal (2014), Southern Universities Research Consortium, Washington, DC. (2014), Oyster Summit, Raleigh, NC (2015), Coastal Science Connections, Raleigh, NC (2015); ICES Fisheries Habitats Working Group, Palermo, Italy (2015).

TEACHING EXPERIENCE

- 1983-85. PADI Open Water Scuba Instructor (taught Open Water through Divemaster levels), Force-E, Pompano Beach, Boca Raton & Key Largo, Florida.
- 1986-87: Virginia Department of Education, Programs for the Gifted, The College of William and Mary, School of Marine Science.
- 1988-89. Christopher Newport College, Newport News, VA; "General Biology"
- 1988-89: Earthwatch-Expedition Leader; "Spiny lobsters"; Punta Allen, Mexico
- 1985-89: Open Water through Divemaster Levels of SCUBA curriculum, Department of Physical Education, The College of William and Mary
- 1989-90: Teaching Assistant, "Biological Oceanography", The College of William and Mary, School of Marine Science
- 1987-89: "General Biology" (Lecture and Laboratory), Thomas Nelson Community College, Newport News, VA
- 1990-91: Performed numerous lectures in the following courses at The College of William and Mary, School of Marine Science: "Theoretical Ecology", "Fisheries Ecology", "Experimental Design", and "Biological Oceanographic Processes".
- 1992-93: "Fisheries Ecology and Management", University of Washington, School of Fisheries (with D. Armstrong)

1998-2000. Earthwatch Expedition Leader—"Nassau grouper"; Lee Stocking Island, Bahamas.

1994-Pres. "Marine Benthic Ecology", "Biological Oceanography", "Introductory Oceanography"; "Ecology of Coastal Resources"; "Population Dynamics of Coral Reef Fishes"; "Quantitative Ecology and Experimental Design"; "Ecology of Fishes"; "Design and Analysis of Ecological Experiments"; North Carolina State University

PROFESSIONAL ACTIVITIES AND SOCIETIES

Reviewer:

Australian Journal of Ecology, Biological Bulletin, Bulletin of Marine Science, Choice (book reviews), Crustaceana, Ecology, Ecological Monographs, Ecology Letters, Ecological Applications, Estuarine, Coastal & Shelf Science, Ethology Ecology & Evolution, Fisheries Science, Journal of Experimental Marine Biology and Ecology, Journal of Shellfisheries Research, Limnology and Oceanography, Marine Ecology Progress Series, Oikos, Marine Biology, Marine & Freshwater Research, Proceedings of the Gulf and Caribbean Fisheries Institute, Proceedings of the National Academy of Sciences, Schmidt Ocean Institute, Transactions of the American Fisheries Society, U.S. Fishery Bulletin, Wetlands.

AAAS, EPA, National Sea Grant College Program (National Office and various State programs), National Science Foundation, National Undersea Research Program, NOAA Coastal Ocean Program, Minerals Management Program, Smithsonian Scholarly Studies Program, Sigma-Xi Grants-in-aid-of-Research, Israeli Science Foundation, NSF/NOAA Cameo program, Schmidt Ocean Institute, SPICOSA External Review Team, European Union.

Professional Societies:

American Academy of Underwater Sciences, American Fisheries Society, Divers Alert Network, Southern University Research Association, Southeastern Estuarine Research Society, National & Southern Association of Marine Laboratories

Certifications:

Beginning and Advanced Hydric Soils Identification (NCSU); ASTM Phase I Environmental Site Assessments (ASTM); Beginning and Advanced Wetland Plant Identification and Delineation (Wetland & Environmental Services, Inc. Myrtle Beach, SC), U.S. Coast Guard Captain's License, 6-passenger; Professional Association of Dive Instructors, Open Water Instructor; National Undersea Research Program Nitrox Research Diver; AAUS-scientific diver (> 3,000 hrs).

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Graduate Students at NCSU (both graduated and current):

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