# CURRICULUM VITAE 10/2018 DAVID B. EGGLESTON

#### Director

Center for Marine Science and Technology North Carolina State University 303 College Circle Drive Morehead City, NC 28557 (252) 222-6301 (o) 222-6303 (fax) www.cmast.ncsu.edu/

### and

Alumni Distinguished Undergraduate Professor North Carolina State University Department of Marine, Earth, and Atmospheric Sciences Raleigh, NC 27695-8208 (919) 515-7840 (o) 515-7802 (fax) eggleston@ncsu.edu

#### www.eggleston.cmast.ncsu.edu

#### 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 <u>The College of William and Mary</u>, School of Marine Science (Major: Marine Ecology, Minor: Resource Management).
- Ph.D. 1991 <u>The College of William and Mary</u>, 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: <u>Scuba Instructor</u> (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.
- 1985-1987: 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: <u>Research Associate</u>, University of Washington, College of Ocean & Fishery Sciences.
- 1993-1999: <u>Assistant Professor</u>, North Carolina State University, Department of Marine, Earth & Atmospheric Sciences.
- 1997-98: <u>Visiting Assistant Professor</u>, University of Washington, School of Fisheries.
- 1998-1999: <u>Expedition Leader</u>, 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: <u>Associate Professor</u>, North Carolina State University, Department of Marine, Earth & Atmospheric Sciences.
- 2004-Pres.: <u>Professor</u>, North Carolina State University, Department of Marine, Earth & Atmospheric Sciences.
- 2006-Pres.: <u>Director</u>, Center for Marine Science and Technology, North Carolina State University.
- 2012 <u>Chief Scientist</u>, 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. <u>Director</u>, Undergraduate Programs, *Semester-At-CMAST*, Center for Marine Sciences and Technology, NC State University, Morehead City, NC.
- 2017-Pres. Chair, Marine Sciences Faculty, NC State University.

#### 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 ft<sup>2</sup> 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 1500ft<sup>2</sup> Marine Magnetic Resonance & Imagining Facility, an Unmanned Surface Vehicle for detailed seafloor and water quality mapping in shallow systems, a 5,000ft<sup>2</sup> marine science warehouse facility surrounded by 1.5 acres of secure boat and equipment storage, a 3,000ft<sup>2</sup> 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, Dean of College of Sciences; Dean of College Veterinary Medicine; Dean of College of Agriculture & Life Sciences; Chair of the NCSU Coastal & Marine Sciences Faculty).

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, (viii) providing annual activity reports, and coordinating 5-year external reviews of program, and (ix) 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
  - O Doubled number of faculty. Added the following tenure-track positions: (i) Quantitative Fisheries, (ii) Seafood Technology, and (iii) Shellfish Pathology Program/Emerging Diseases.
  - o Creation and establishment of \$ 1.3 million Guest Housing Complex for CMAST.
  - o Creation of a *CMAST Semester-At-CMAST* Program for NC State University undergraduate students (offered in Spring Semester) [Includes SACS accreditation].
  - O 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.
  - o Creation of a partnership with the NC Aquarium Systems to host the Conservation

- Research Coordinator to promote research and education/outreach activities.
- o 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.
- O 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)".
- O 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.
- o CMAST Summer Fellows Program for hands-on undergraduate research experiences.
- o 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.
- O 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.
- Five-Year, Self-Assessment/External Review of CMAST. Directed external review of CMAST for the period 2012-17 as mandated for all Centers/Institutes by UNC GA and NC State.

#### Budget

- o Restructuring of budget and administrative oversight to Office of Vice Chancellor for Research & Innovation to improve efficiencies.
- o Implementation of university-wide financial accounting and human resource systems to improve efficiencies.
- o 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.
- o Achieved annual budget increases since 2012.

#### Facility

o 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.
- O 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.
- o 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.
- o Re-structured agreement with NCSU & Carteret Community College facilities for planned facility equipment repair and building renovation schedule. Modernize facility.
- o Established wind & solar power demonstration projects at CMAST and Marine Aquaculture facility via grants, partnerships and donors. Modernize facility; Education outreach.

### Communications

- o Restructured web-site (2008, 2013, 2018) to improve communications.
- Developed newsletter (CMAST Communicator) and social media presence to improve communications.
- o Increased Social media presence.
- o Coordinate CMAST Seminar series, 2006-Present.
- o Coordinate local NCSU Alumni Events with the NCSU Alumni Association

### • Fundraising & Development

- o Formed external advisory board
- o 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).
- Initiated and coordinate CMAST/Crystal Coast Oyster Roast in collaboration with NC State University Alumni Association.

#### 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 Coastal Fluid Dynamicist, Dept. MEAS.
1997-98	Member, Search Committee for Aquatic Ecologist, 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 Fisheries Ecologist, Dept. of Zoology.
2000-2001	Member, Search Committee for Department Head, Dept. MEAS.

2000-2004	Chair, Peer review of Teaching Committee, Dept. MEAS.
2000-2004	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
2002-2004	Committee.
2003-05	Associate Director, Graduate Programs, Department of Marine, Earth &
2003-03	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.
2014-2015	Member, Search Committee for Dean, College of Sciences.
2015-2017.	Member, Food Animal Science Academy Advisory Board
2017-Pres.	Chair, NC State University, Marine Science Faculty
2017-Pres.	Member, Search Committee, Seafood Technology, Dept of Food, Bioprocessing,
	Nutrition Sciences.
2017-Pres.	Member, Search Committee, Quantitative Fisheries Scientist, Dept. Applied
	Ecology
2018-Pres.	Member, Search Committee, Shellfish Pathologist, Department of Clinical
	Sciences, College of Veterinary Medicine
	Hairramitry of Month Canalina System
2006-07	<u>University of North Carolina System</u> Member, President Bowles <i>Marine Science Task Force</i> .
2006-10	Member, Marine Science Technology Transfer Working Group.
2006-09	Member, NC Coastal Studies Institute, Scientific Coordinating Committee.
2007-10	Member, Not Coastal Studies Histitute, Steenigh Coordinating Committee.  Member, North Carolina Environmental Observing Network System (NC-EONS).
2008-Pres.	Member, Marine & Coastal Sciences Council.
2000-1103.	TYTCHTOCT, TYTUTING & COUSIUS SUCHUS COUNTIL.

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	
2003-05	Programs.  Advisory Board, Southeast Center for Ocean Science Education Excellence program	
2003-03	(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, <i>Applied Marine Biology Program</i> , Carteret Community College, Morehead City, NC	
2006-Pres.	Member, Marine Science and Education Partnership, Carteret Co., NC	

2007-2011. 2007	Member, NC Eastern Region, Center of Innovation in Marine Biotechnology Planning Team Member, Proposal Panel Team, NOAA CSCOR Multistress Panel.
2007-Pres.	Member, National Association of Marine Laboratories (NAML) & Southern
2009-2010	Association of Marine Laboratories (SAML).  Member, NC Biotechnology Center, Agri-Business Working Group for Marine and
2009-2010	Aquaculture.
2010-2012.	Advisory Board, Member-At-Large, Southeastern Estuarine Research Society.
2010-Pres.	Member, Scientific Advisory Committee for <i>Strategic Habitat Areas</i> , NC Division of Marine Fisheries.
2012-Pres.	Board Member, Southeastern Universities Research Association (SURA), Coastal and Environmental Committee.
2012-2017	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.
2018-Pres.	President-Elect, Southern Association of Marine Laboratories
2018-Pres.	Advisory Board Member, Bald Head Island Conservancy.
	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, Shiogama,
	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).

2014-15. 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 <u>Consejo Nacional de Ciencia y Tecnologia (Mexico)</u>: "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 <u>Washington Sea Grant</u>: "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 <u>Cooperative Institute of Fisheries Oceanography</u>: "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 <u>EPA-EMAP Carolinian Province Project</u>: "Use of the burrowing amphipod, *Leptocheirus plumulosuf*, 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 <u>WA Sea Grant</u>: "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 <u>South Carolina Marine Resources Research Institute</u>: "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 <u>National Science Foundation, Early Career Program & Biological Oceanography.</u> "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 <u>National Science Foundation</u>. "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 <u>National Science Foundation</u>. "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 <u>University of Miami/RSMAS</u>. "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 <u>The Oceans Conservancy</u>. "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 <u>National Sea Grant Program</u>. "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 <u>National Science Foundation</u>. "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 <u>Univ. MD/Center for Marine Biotechnology/Blue Crab Advanced Research Consortium</u>. "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 <u>Univ. MD/Center for Marine Biotechnology/Blue Crab Advanced Research Consortium</u>. "Ecological feasibility of blue crab stock enhancement: field and laboratory experiments in NC"; \$120,000/2 years.
- 49. 2004 <u>National Fish & Wildlife Foundation</u>. "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 <u>UNC General Administration</u>, "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 vr.
- 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 <u>US Geological Survey</u>. "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 <u>NOAA-OAR/FAU/UNC-W</u>. "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 <u>US Geological Survey</u>. "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. Karrnauskas (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.
- 84. 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.
- 85. 2017. NC Sea Grant. "Evaluating Cultch Oyster Reefs as Essential Fish Habitat". D. Eggleston (PI), \$119,828/2 yrs.
- 86. 2018. NOAA, Coral Reef Conservation Program. "Integrating Visual Ecological Surveys, Passive Acoustics and Habitat Photogrammetry to Characterize Reef Fish Assemblages, Spawning Activity & Resilience Among Management Zones in the FKNMS Post-Hurricane Irma. D. Eggleston (PI), D. Bohnenstiehl (co-PI), \$65,053/1 yr.
- 87.2018. <u>The Nature Conservancy</u>. Research and Extension in Support of a Stock Assessment Survey for Oysters in North Carolina, \$233,859/3 yrs.
- 88. 2018. Atlantic States Marine Fisheries Commission Marine Aquaculture Pilot Projects. Evaluation of Bay Scallop *Argopecten irradians*, Aquaculture in North Carolina as a Means for Industry Crop Diversification and Restoration of Wild Stocks. D. Eggleston (co-PI), w/ C. Weirich(PI) and A. Wilbur (co-PI). \$33,616 to NCSU.
- 89. 2018. National Sea Grant, Aquaculture. Expanding Aquaculture of Soft Blue Crabs: Technology Transfer and Production Cost Analysis of Hatchery, Pond, and Shedding Phases. Co-PI with H. Perry (PI) and 3 others. \$1.5 million/3 years.
- 90. 2018. <u>Albemarle-Pamlico National Estuary Partnership and NC Sea Grant</u>. Interacting effects of invasive marsh grass and wave energy on shoreline stability and essential fish habitat. Co-PI with graduate student E. Voight, \$10,000/1 year.
- 91. 2018. National Science Foundation, Biological Oceanography. (pending). "Collaborative Research: Dispersal Depth and the Transport of Deep-Sea Methane-Seep Larvae Around a Biogeographic Barrier". D. Eggleston (PI) and R. He (co-PI) for NC State University. \$667, 901/4 years. Collaborative with C. Young (overall PI, Univ OR) and S. Arellano (WWU).

### 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.
- 10. 2016-Pres. Coordinate CMAST/Crystal Coastal Oyster Roast via the NC State University Alumni Association.

### 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.
- 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: speciesand 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. Reyns, 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. Reyns, 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. Reyns, 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.
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### (copies of manuscripts in review or in prep are available upon request)

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

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- 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.
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- 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 (Partial Lists)

### 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, Triest, 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, Gainsville, 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), National Shellfisheries Association, Seattle, WA (2018).

### **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, Ocean Broadening Diversity Participation in Sciences, Raleigh, NC 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), ICES Fisheries Habitats Working Group, Amsterdam, Netherlands (2016), ICES Fisheries Habitats Working Group, Malta, (2017), NOAA/US Navy Soundscape Workshop, Woods Hole, MA (2018), NC Sea Grant, External Review, Presenter, Healthy Ecosystems Panelist, Raleigh, NC (2018).

### **TEACHING EXPERIENCE**

1983-85. PADI Open Water Scuba Instructor (taught Open Water through Diversater 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 Divernaster 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"; "Marine Conservation Biology"; 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, Frontiers in Marine Science, PlosOne.

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 (> 4,000 hrs).

#### Current Collaborators:

D. Bohnenstiel (NCSU/MEAS); R. He (NCSU); J. Fodrie (UNC-CH); R. Luettich (UNC-CH); S. Maskalova (Univ. OR); E. North (Univ. MD); B. Puckett (NC NERRS); M. Stoskopf (NCSU); C. Young (Univ OR).

### Graduate Students at NCSU (both graduated and current):

D. Blackmon (M.S.); G. Bell (M.S., Ph.D. post-doc); S. Brown (M.S.); O. Caretti (M.S.); J. Chaves (M.S.); C. Dahlgren (Ph.D.); M. Darcy (M.S.); A. Drew\* (Ph.D.); R. Dunn (M.S.); C. Durham (M.S.); L. Etherington (M.S. & Ph.D.); W. Elis (M.S.); T. Kellison (Ph.D. & post-doc); K. Jenkins (M.S.; A. Lillis\* (Ph.D. & post-doc); R. Lyon (M.S.); E. Millstein (M.S.); D. McVeigh (PhD); M. Moorman (M.S.); R. Mroch (M.S.); G. Parkins (M.S.); D. Parsons\*\* (Ph.D.); B. Perez\*\*\* (M.S.); J. Peters (M.S.); K. Pierson (M.S.); B. Puckett (Ph.D & post-doc.); N. Putman (post-doc); S. Ratchford (Ph.D.); D. Taylor (M.S.); Eric Johnson (Ph.D. & post-doc); N. Reyns (Ph.D. & post-doc); R. Rindone (M.S.); S. Searcy (Ph.D.); K. Simmons (PhD); S. Theurekauf (Ph.D.); J. Vander Plyum (M.S.), E. Voigt (PhD).

International (or U.S. territory) student: \* Canada; \*\* New Zealand; \*\*\* Puerto Rico

# **REFERENCES**

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Dr. Anson H. Hines, Director Smithsonian Environmental Res. Center P.O. Box 28 Edgewater, MD 21037 (301) 798-4424 hines@serc.si.edu

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Additional references available upon request