

David Lenox Taylor

Roger Williams University
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Education

University of Rhode Island, Graduate School of Oceanography, Narragansett, RI (Grad: Dec 2003)

- Doctorate in Biological Oceanography
- Cumulative G.P.A. 3.8/4.0
- Major advisor: Dr. Jeremy S. Collie

North Carolina State University, Raleigh, NC (Grad: May 1999)

- Masters of Science in Marine Science
- Cumulative G.P.A. 3.6/4.0
- Major advisor: Dr. David B. Eggleston

Bucknell University, Lewisburg, PA (Grad: May 1997)

- Bachelor of Arts with Honors in Biology
 - Cumulative G.P.A. 3.7/4.0
 - *Magna Cum Laude*
 - *Phi Beta Kappa*
 - *Sigma Xi Scientific Research Society*
 - Major advisor: Dr. Daniel Hoffman
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Research Experience & Interests

Professor, Roger Williams University, Bristol, RI (Jul 2017 – present)

Associate Professor, Roger Williams University, Bristol, RI (Jul 2011 – Jun 2017)

Assistant Professor, Roger Williams University, Bristol, RI (Jul 2005 – Jun 2011)

- Research interests: Trophic interactions and recruitment dynamics of early life stages of estuarine and marine fishes; biochemical and molecular techniques to address food web dynamics; fish and invertebrate behavioral ecology and physiology; otolith microstructure analysis; estuarine and marine ecotoxicology, finfish and shellfish habitat restoration
- Courses taught: *Biology I*, *Biology II*, *Oceanography*, *Marine Vertebrate Zoology*, *Ichthyology*, *Fisheries Science*, *Neotropical Marine Biology* (Republic of Panama)

Postdoctoral Associate, Rutgers University, Tuckerton, NJ (Jun 2004 – Jun 2005)

- Coastwide patterns of juvenile recruitment of bluefish, *Pomatomus saltatrix*
- Cohort identification and growth-mortality estimation of bluefish, *Pomatomus saltatrix*, as revealed by sagittal otolith microstructural analysis
- Advisor: Dr. Kenneth W. Able

Doctorate in Oceanography, URI, GSO (Graduated Dec 2003)

- Effects of water temperature on predator-prey interaction between sand shrimp, *Crangon septemspinosa*, and early life stages of winter flounder, *Pseudopleuronectes americanus*

Environmental Careers Organization, Narragansett, RI (May 2003 – May 2004)

- Collaborative project with Environmental Protection Agency, Atlantic Ecology Division; assessing habitat suitability of Mount Hope Bay, RI for juvenile winter flounder, *Pseudopleuronectes americanus*

URI/NOAA Cooperative Marine Education and Research, URI, GSO (Jan 2002 – Jan 2004)

- Cooperative research program with National Marine Fisheries Service, Behavioral Ecology Branch, Sandy Hook Bay, NJ; examination of crustacean (decapod) physiology, feeding behavior, and impact on juvenile winter flounder, *Pseudopleuronectes americanus*, year-class strength and recruitment

Research Assistant in Geographic Information System, URI, GSO (Sep 2001 – Dec 2001)

- GIS habitat mapping of commercially valuable demersal fish species along northwestern Atlantic as a function of abiotic parameters

Research Assistant in Marine Benthic Ecology, URI, GSO (Sep 2001 – Dec 2001)

- Impact of fishing gear on marine invertebrate populations in Georges Bank; identification and enumeration of preserved specimens from research cruises

Aquatic Field Ecologist, Applied Science Associates, Narragansett, RI (Apr 2001 – May 2004)

- Monthly freshwater fish electroshock and seine survey in Blackstone River, RI

Research Assistant in Marine Fish and Invertebrate Ecology, URI, GSO (Sep 1999 – Sep 2001)

- Fish trawl assistant for GSO Narragansett Bay Bottom-Trawl Survey aboard R/V *Cap'n Bert*; quantitative sampling and data management of fish and invertebrate populations in Narragansett Bay, RI

Masters of Science in Marine Science, North Carolina State University (Graduated May 1999)

- Effects of episodic hypoxia on interspecific predator-prey interaction between blue crab, *Callinectes sapidus*, and the infaunal clam, *Mya arenaria*

Research Assistant in Marine Benthic Ecology, North Carolina State University (Aug 1997 – May 1999)

- Evaluation of population structure and abundance of blue crab, *Callinectes sapidus*, as a function of recruitment success and habitat selection within coastal areas of North Carolina

Woods Hole Marine Science Consortium Intern, Woods Hole, MA (Summer 1997)

- Effects of salinity on sediment nitrogen cycling, including ratio of free to exchangeable ammonium in sediments, inorganic nitrogen fluxes across sediment-water interface, and denitrification

Honors Thesis for Degree of Bachelor of Arts with Honors in Biology, Bucknell University (Apr 1997)

- Larval development and settlement of the marine polychaete, *Chaetopterus pergamentaceus*; examination of possible inducers to settlement and metamorphosis

Research Assistant in Ichthyology, Bucknell University (Summer 1995)

- Morphological examination of skeletal structure of family Cichlidae attempting to identify newly established species, Lake Peten, Guatemala

**Research
Cruise
Experience**

National Oceanic and Atmospheric Administration Undersea Research Program, Mid-Atlantic Bight National Undersea Research Center, Tuckerton, NJ (Jul 2004)

- Effects of mobile fishing gear on nursery and tilefish, *Lopholatilus chamaeleonticeps*, habitats associated with the shelf edge of the New York Bight
- R/V *Megan E. Miller*, Port: New Haven, CT

ECOHAB: The Ecology and Oceanography of Harmful Algal Blooms: A National Research Agenda, National Oceanic and Atmospheric Administration/Coastal Ocean Program, Washington D.C. (Aug 2003)

- ECOHAB: Zooplankton grazing of toxic *Alexandrium* spp. as a mechanism in the control of bloom formation and toxin transfer
- R/V *Endeavor*, Port: Narragansett, RI

Teaching Experience

Professor, Roger Williams University, Bristol, RI (Jul 2017 – present)

Associate Professor, Roger Williams University, Bristol, RI (Jul 2011 – Jun 2017)

Assistant Professor, Roger Williams University, Bristol, RI (Jul 2005 – Jun 2011)

- Instructor for Biology *I*, Biology *II* (lecture and laboratory), Oceanography (laboratory), Marine Vertebrate Zoology (lecture and laboratory), Ichthyology (lecture and laboratory), Fisheries Science, and Neotropical Marine Biology (Winter Intersession, Republic in Panama)

Aquavet, Program in Aquatic Veterinary Medicine, Cornell University, College of Veterinary Medicine, NY (program held at Roger Williams University, Bristol, RI) (Summers 2011 – 2015)

- Lecture and laboratory instructor for fish taxonomy and anatomy

Guest Lecturer, Department of Marine and Coastal Sciences, Rutgers University, New Brunswick, NJ (Fall 2004)

- Guest lecturer for introductory Marine Sciences course

Adjunct Professor, Department of Biological Sciences, University of Rhode Island, Kingston, RI (Jan 2004 – May 2004)

- Lecture and laboratory instructor for the upper division Invertebrate Zoology course

Office of Marine Programs – Outreach Scientist, Narragansett, RI (Sep 2000 – May 2004)

- Lead instructor and scientist for Narragansett Bay Sampling Cruises aboard R/V *Cap'n Bert*

Metcalf Institute for Marine and Environmental Reporting, Narragansett, RI (Jun 2000 – 2003)

- Lead instructor for Metcalf Institute Fellowship Program; leading field research programs, assessing fish stocks in Narragansett Bay, RI, and assisting fellows in analysis of data, hypothesis construction, data interpretation, and presentation of conclusions

Scientists in the Classroom – Outreach Program, Raleigh, NC (May 1998 – May 1999)

- Instructor of marine science for elementary and middle school classes

Teaching Assistant in Oceanography, North Carolina State University (Aug 1997 – May 1998)

- Laboratory instructor for introductory oceanography emphasizing four disciplines: biological, chemical, physical, and geological

Invited Addresses

Roswell S. Bosworth, Jr. Lecture, Bristol, RI (Feb 2019)

- Mercury contamination in local fisheries and risks to human consumers

Annual Summer Undergraduate Research Fellow Keynote Lecture, Newport, RI (Jul 2015)

- Mercury contamination in local fisheries and risks to human consumers

Roger Williams University Shellfish Reception, Bristol, RI (Nov 2014)

- Mercury in marine fishes of Rhode Island

Rotary Club of Barrington and Warren, Warren, RI (Nov 2013)

- Mercury in marine fishes of Rhode Island

University of Rhode Island, College of Continuing Studies, Providence, RI (Mar 2013)

- Mercury in estuarine fishes of Rhode Island

U.S. Environmental Protection Agency, Atlantic Ecology Division Seminar Series, Narragansett, RI (May 2012)

- An ecologist's perspective on mercury contamination in Narragansett Bay, Rhode Island

- Rhode Island Network for Molecular Toxicology 2008 Annual Winter Retreat**, Providence, RI (Feb 2011)
- Fate of mercury contaminants in the Narragansett Bay, Rhode Island
- Southern Connecticut State University, 6th Annual Long Island Sound Seminar Series**, New Haven, CT (Mar 2009)
- Mercury in estuarine fishes of Rhode Island
- Dartmouth College**, Hanover, NH (Nov 2007)
- Bioaccumulation of total mercury in estuarine fishes from Narragansett Bay, Rhode Island
- From Local to Global: The Rhode Island Model for Harnessing Wind Power Worldwide**, Narragansett, RI (Apr 2007)
- Wind power impact on wildlife (moderator and session coordinator)
- Mercury Workshop**, Durham, NH (Nov 2006)
- Fate and bioavailability of mercury in aquatic ecosystems and effects on human exposure
- Bluefish Research Coordination Workshop**, New Brunswick, NJ (Feb 2005)
- Recruitment dynamics of bluefish (*Pomatomus saltatrix*): Coastwide patterns of juvenile recruitment
 - Cohort dynamics of summer-spawned bluefish, *Pomatomus saltatrix*, as determined by length-frequency and otolith microstructure analysis
- Narragansett Bay Chapter of the Military Officer's Association of America**, Wakefield, RI (Mar 2004)
- The past, present, and future health of Narragansett Bay, Rhode Island
- University of Rhode Island Colloquium**, Kingston, RI (Feb 2004)
- Crangonid shrimp predation on the early-life history stages of winter flounder
- Northeast Fisheries Science Center**, Woods Hole, MA (Apr 2003)
- Sand shrimp predation on post-settled flounder: Analyzing predator stomach contents with Immunoassays
- Savannah State University**, Savannah, GA (Jan 2003)
- Immunological detection of juvenile flounder in the stomach contents of predatory shrimp
- James J. Howard Marine Sciences Laboratory**, Sandy Hook, NJ (Oct 2002)
- Sand shrimp *Crangon septemspinosa* predation on juvenile winter flounder
- Millstone Environmental Laboratory, Ecological Advisory Meeting**, Waterford, CT (May 2002)
- Detecting invertebrate predation on the early life stages of winter flounder with the Öuchterlony Immunoassay
- Friends of Oceanography Breakfast Seminar**, Narragansett, RI (Oct 2000)
- Crabs or clams: Who benefits under low oxygen conditions?

Professional Associations & Services

- Narragansett Bay Estuary Program Scientific Committee**, (Sep 2019 – present)
- Narragansett Bay Estuary Program Steering Committee**, (Sep 2015 – 2019)
- North Atlantic Chapter of the Society for Environmental Toxicology and Chemistry**, (May 2007 – present)
- Board of Directors member (May 2007 – Jun 2010)

Rhode Island Marine Fisheries Council, Scientific Advisor, (Mar 2007 – present)

- Scientific advisor to bluefish/weakfish and winter flounder fishery panels

Rhode Island Aquatic Invasive Species (RIS) Working Group, (Jan 2007 – present)

- RI AIS Volunteer Monitoring Team Leader (Jun 2010 – present)

Manchester Street Power Station Project Advisor, (Dec 2008 – 2010)

American Fisheries Society, (Sep 2001 – present)

Southern New England Chapter of American Fisheries Society, (Sep 2001 – present)

- Board of Directors member and Program Development Committee Chair (Jun 2003 – present)

New England Estuarine Research Society, (Sep 1999 – present)

Atlantic Estuarine Research Society, (Mar 1998 – Mar 2000)

Sigma Xi Scientific Research Society, (Apr 1997 – present)

Honors & Awards

Roger Williams University Hybrid Teaching Hero, Student Senate Academic Affair Committee, Roger Williams University (Awarded Nov 2020)

Marine Ecology Progress Series, Feature Article (Awarded Feb 2019)

Roger Williams Excellence in Teaching Award, Roger Williams University (Nominated 2009, 2015, 2017, 2021)

Roger Williams Professor of the Semester Award, Roger Williams University (Nominated Fall 2008)

Roger Williams University Foundation Fund Based Research Grant, Roger Williams University (Awarded Apr 2009-2021)

Southern New England Chapter of the American Fisheries Society Special Achievement Award – Distinguished Service to Chapter (Awarded Jun 2016)

Southern New England Chapter of the American Fisheries Society Irwin Alperin Outstanding Member Award (Awarded Jun 2012)

Faculty Merit Review Committee Award, Roger Williams University (Awarded May 2007-2011)

Presidential Honoring for Positive Contribution to Academic Community, Roger Williams University (Awarded Jun 2010)

Commitment to Excellence, Cooperative Education and Internship Program, Roger Williams University (Awarded Apr 2009)

Executive Award, Roger Williams University (Awarded May 2007)

John E. Skinner Memorial Award, Honorable Mention – AFS, 133rd Annual Meeting, Quebec City, Quebec, Canada (Aug 2003)

Outstanding Student Paper – AFS, 132nd Annual Meeting, Baltimore, MD (Aug 2002)

Saul B. Saila Best Student Paper Award – SNEC, Bristol, RI (Jun 2002)

Bostwick H. Ketchum Best Graduate Student Paper Award – NEERS, Bar Harbor, ME (May 2002)

Best Student Paper Award – SETAC, Portland, ME (Apr 2002)

Saul B. Sails Best Student Paper Award – SNEC, Groton, CT (Jan 2002)

Joshua MacMillan Graduate Fellowship in Fisheries Oceanography, URI, GSO (Awarded May 2002)

Germaine and Francis Webb Graduate Fellowship in Oceanography, URI, GSO (Awarded May 2001)

Graduate School of Oceanography Alumni Award, URI, GSO (Awarded Nov 2000 and Feb 2001)

Bachelor of Arts with Honors in Biology, Bucknell University (Awarded Apr 1997)

Phi Beta Kappa, Bucknell University (Inducted Apr 1997)

Sigma Xi Scientific Research Society, Bucknell University (Inducted Apr 1997)

Outstanding Greek Senior, Bucknell University (Awarded Apr 1997)

Mortar Board, Bucknell University (Inducted Apr 1996)

Omicron Delta Kappa, Bucknell University (Inducted Apr 1996)

Dean’s List, 8 semesters, Bucknell University

Magna Cum Laude, Bucknell University

Grants & Acquired Funding

- Rhode Island Coastal Ecology Assessment, Innovation, & Modeling (RI C-AIM) RWU Faculty Summer Research Grant** (Awarded Jun 2021), \$6,834
- Modeling spatial-temporal dynamics of a persistent contaminant in Rhode Island inshore and coastal fisheries
- Rhode Island Coastal Ecology Assessment, Innovation, & Modeling (RI C-AIM) RWU Faculty Summer Research Grant** (Awarded Jun 2020), \$6,000
- Assessing changes in coastal ecosystem engineers and associated communities in Narragansett Bay
- Pittsburgh Conference Memorial National College Grants Program** (Awarded Mar 2020), \$8,942
- Pittcon YSI Grant
- Rhode Island Department of Environmental Management, Division of Marine Fisheries Cooperative Agreement** (Awarded Jul 2019), \$75,000
- Assessing mercury contamination of common marine recreational finfish species of Rhode Island and adjacent waters
- NSF Rhode Island Experimental Program to Stimulate Competitive Research (EPSCoR) Faculty Research Support** (Awarded Jun 2019), \$7,650
- Assessing changes in coastal ecosystem engineers and associated communities in Narragansett Bay
- Rhode Island Science & Technology Advisory Council, RI Research Alliance Collaborative Grant Award** (Subaward May 2018), \$29,854
- Assessing changes in coastal ecosystem engineers and associated communities in Narragansett Bay

Rhode Island Science & Technology Advisory Council, RI Research Alliance Collaborative Grant Award (Subaward May 2018), \$19,066

- Exploring the capabilities of a new benthic lander system for investigating sediment biogeochemical exchange: A critical boundary condition for ecosystem modeling in Narragansett Bay

NSF Improvements in Facilities, Communications, and Equipment at Biological Field Stations and Marine Laboratories (Awarded Sep 2016), \$158,449

- Expanding access to marine research and training in Narragansett Bay

NSF Rhode Island Experimental Program to Stimulate Competitive Research (EPSCoR) Faculty Research Support (Awarded Jun 2016), \$6,700

- Temperature-mediated changes in blue crab *Callinectes sapidus* abundance in the Narragansett Bay and its trophodynamic effect on winter flounder *Pseudopleuronectes americanus* populations

NSF Rhode Island Experimental Program to Stimulate Competitive Research (EPSCoR) Faculty Research Support (Awarded Jun 2015), \$7,500

- Temperature-mediated changes in blue crab *Callinectes sapidus* abundance in the Narragansett Bay and its trophodynamic effect on winter flounder *Pseudopleuronectes americanus* populations

NIH/NCRR INBRE: Rhode Island Network of Biomedical Research Excellence Student Training Grant (Awarded May 2015), \$64,688

- Risks and benefits of consuming Rhode Island coastal marine fishes

Rhode Island STAC/Research Alliance Collaborative Grant (Subaward Feb 2015), \$19,570

- Pushing to new limits for models of RI Bays and Sounds

NSF Rhode Island Experimental Program to Stimulate Competitive Research (EPSCoR) Faculty Research Support (Awarded Jun 2014), \$7,500

- Biotic interactions between blue crabs (*Callinectes sapidus*) and age-0 winter flounder (*Pseudopleuronectes americanus*): Is climate change altering estuarine food-web dynamics?

NIH/NCRR INBRE: Rhode Island Network of Biomedical Research Excellence Student Training Grant (Awarded May 2014), \$33,231

- Mercury and selenium concentrations in coastal marine fishes

Bureau of Ocean Energy Management (Subaward Sep 2013), \$18,038

- Southern New England Cooperative Ventless Trap Survey

Rhode Island STAC/Research Alliance Collaborative Grant (Awarded May 2013), \$121,914

- Temperature-mediated changes in Rhode Island's benthic community: What are the implications for local food webs and fisheries?

NIH/NCRR INBRE: Rhode Island Network of Biomedical Research Excellence Student Training Grant (Awarded May 2013), \$31,092

- Mercury and selenium concentrations in Rhode Island estuarine and coastal fishes

Rhode Island Saltwater Anglers Foundation, Rhode Island Recreational Fishing Advancement Grant (Awarded Feb 2013), \$12,166

- Mercury contamination in scup (*Stenotomus chrysops*) from Rhode Island waters

Coastal Vision (Subaward Sep 2012), \$24,673

- Diet analysis of flounders and gadids from the Rhode Island/Block Island Sound

NSF Rhode Island Experimental Program to Stimulate Competitive Research (EPSCoR) Faculty Research Support (Awarded Jun 2012 and Sep 2012), \$9,050

- Temperature-mediated changes in the geographic distribution of juvenile summer flounder and its trophodynamic effect on local winter flounder populations
- Temperature-mediated changes in blue crab *Callinectes sapidus* abundance in the Narragansett Bay and its trophodynamic effect on winter flounder *Pseudopleuronectes americanus* populations

NIH/NCRR INBRE: Rhode Island Network of Biomedical Research Excellence Student Training Grant (Awarded May 2012), \$34,652

- Mercury contamination in Rhode Island estuarine and coastal fisheries

Southern New England Collaborative Research Initiative (Awarded Jun 2010), \$152,849

- Mapping and characterizing fish habitat in Rhode Island's transitional seas
- Sub-contract (\$10,000)

NIH/NCRR INBRE: Rhode Island Network for Excellence in Biomedical and Behavioral Research, (Awarded May 2009), \$352,905

- Fate of mercury contaminants in Narragansett Bay, Rhode Island

U.S. Army Corps of Engineers (Awarded May 2008), \$23,580

- Oyster restoration in Town Pond, Portsmouth, RI

Nature Conservancy (Awarded Sep 2006), \$3,000

- Implementing the use of reef-ball artificial structures for oyster enhancement and finfish habitat restoration in Narragansett Bay, Rhode Island

NIH/NCRR INBRE: Rhode Island Network for Molecular Toxicology (Awarded Jan 2006), \$481,398

- Mercury contaminants in commercial and recreational finfish of Narragansett Bay, Rhode Island

URI/NOAA Cooperative Marine Education and Research (Awarded Jan 2002), \$76,466

- Effects of water temperature on sand shrimp predation on juvenile winter flounder
- Student investigator

Graduate School of Oceanography Alumni Award (Awarded Feb 2001), \$750

- Immunological detection of winter flounder, *Pseudopleuronectes americanus*, eggs and juveniles in the stomach contents of crustacean predators

Sigma Xi Grants-in-Aid Research Program (Awarded Feb 2001), \$550

- Immunological detection of winter flounder, *Pseudopleuronectes americanus*, eggs and juveniles in the stomach contents of crustacean predators

Graduate School of Oceanography Alumni Award (Awarded Nov 2000), \$1,200

- Effect of temperature on the functional response and foraging behavior of the sand shrimp, *Crangon septemspinosa*, preying on juvenile winter flounder
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Journal & Proposal Peer Reviews**Journal Peer Reviews**

- *Aquatic Living Resources* (Nantes, France)
- *Behavioral Ecology* (Oxford, United Kingdom)
- *Canadian Journal of Fisheries and Aquatic Sciences* (Ottawa, Ontario)
- *Ecological Research* (New York, New York)
- *Fishery Bulletin* (La Jolla, California)
- *Journal of Experimental Marine Biology and Ecology* (Orlando, Florida)
- *Marine Biology* (Heidelberg, Germany)
- *Marine Ecology Progress Series* (Oldendorf/Luhe, Germany)
- *Marine Pollution Bulletin* (Coventry, United Kingdom)
- *North American Journal of Fisheries Management* (Bethesda, Maryland)
- *Transactions of the American Fisheries Society* (Bethesda, Maryland)

Proposal Peer Reviews

- *Hudson River Foundation* (New York, New York)
- *Maryland Sea Grant* (College Park, Maryland)
- *National Oceanic and Atmospheric Administration National Undersea Research Program* (Silver Spring, Maryland)

Publications

* Denotes Roger Williams University undergraduate student

Taylor, DL, MM Fehon*, KJ Cribari*, and AK Scro* (2022) Blue crab *Callinectes sapidus* dietary habits and predation on juvenile winter flounder *Pseudopleuronectes americanus* in southern New England tidal rivers. *Marine Ecology Progress Series*. doi: 10.3354/meps13909.

Taylor, DL and MM Fehon* (2021) Blue crab (*Callinectes sapidus*) population structure in southern New England tidal rivers: Patterns of shallow-water, unvegetated habitat use and quality. *Estuaries and Coasts*. 44:1320-1343.

Taylor, DL, KJ Cribari*, and A Scro* (2019) Piscivory in age-0 summer flounder (*Paralichthys dentatus*) with a focus on predator-induced mortality of post-settlement winter flounder (*Pseudopleuronectes americanus*). *Marine Ecology Progress Series*. 612:7-28.
• *Featured Article*

Taylor, DL and NM Calabrese* (2018) Mercury content of blue crabs (*Callinectes sapidus*) in southern New England coastal habitats: Contamination in an emergent fishery and risks to human consumers. *Marine Pollution Bulletin*. 126:166-178.

Taylor, DL and CL Gervasi* (2017) Feeding habits and dietary overlap between age-0 winter flounder (*Pseudopleuronectes americanus*) and summer flounder (*Paralichthys dentatus*) in southern New England tidal rivers. *Fishery Bulletin*. 115:167-185

Taylor, DL and PR Williamson* (2017) Mercury contamination in Southern New England coastal fisheries and dietary habits of recreational anglers and their families: Implications to human health and issuance of consumption advisories. *Marine Pollution Bulletin*. 114:144-156

Malek, AJ, JS Collie, and **DL Taylor** (2016) Dietary guilds and trophic structure of the fish community in Rhode Island Sound and Block Island Sound, US. *Journal of Fish Biology*. 89:1513-1536

- Taylor, DL**, J McNamee, J Lake, CL Gervasi*, and DG Palance* (2016) Juvenile winter flounder (*Pseudopleuronectes americanus*) and summer flounder (*Paralichthys dentatus*) utilization of Southern New England nurseries: Comparisons among estuarine, tidal river, and coastal lagoon shallow-water habitats. *Estuaries and Coasts*. 39:1505-1525
- Taylor, DL** (2014) Biotic interactions between age-0 summer and winter flounder in New England tidal rivers. 14th Flatfish Biology Conference, December 3-4, 2014. *Northeast Fisheries Science Center Reference Document 14-15*, Abstract.
- Scro, AK*, KJ Cribari*, KR Markey, and **DL Taylor** (2014) Specificity and sensitivity of a PCR-based approach for detecting winter flounder in blue crab stomachs. 14th Flatfish Biology Conference, December 3-4, 2014. *Northeast Fisheries Science Center Reference Document 14-15*, Abstract.
- Teffer, AK, MD Staudinger, **DL Taylor**, and F Juanes (2014) Trophic influences on mercury accumulation in top pelagic predators of southern New England. *Marine Environmental Research*. 101:124-134
- Taylor, DL**, NJ Kutil*, AJ Malek, and JS Collie (2014) Mercury bioaccumulation in cartilaginous fishes from Southern New England coastal waters: Contamination from a trophic ecology and human health perspective. *Marine Environmental Research*. 99:20-33
- Piraino, MP* and **DL Taylor** (2013) Assessment of nonlethal methods for predicting muscle tissue mercury concentrations in coastal marine fishes. *Archives of Environmental Contamination and Toxicology*. 65:715-723
- Taylor, DL** and D Palance* (2012) Historical abundance of juvenile summer flounder (*Paralichthys dentatus*) in Rhode Island estuaries and tidal rivers. 13th Flatfish Biology Conference, December 4-5, 2012. *Northeast Fisheries Science Center Reference Document 12-28*, Abstract
- Taylor, DL**, JC Linehan*, DW Murray, and WL Prell (2012) Indicators of sediment and biotic mercury contamination in a southern New England estuary. *Marine Pollution Bulletin*. 64:807-819
- Szczebak, JS* and **DL Taylor** (2011) Ontogenetic patterns in bluefish *Pomatomus saltatrix* feeding ecology and the effect on mercury biomagnification. *Environmental Toxicology and Chemistry*. 30:1447-1458
- Gervasi, C* and **DL Taylor** (2010) Abundance, growth, and diet of juvenile summer flounder (*Paralichthys dentatus*) and winter flounder (*Pseudopleuronectes americanus*) in Narragansett Bay RI/MA. 12th Flatfish Biology Conference, December 1-2, 2010. *Northeast Fisheries Science Center Reference Document 10-21*, Abstract
- Payne, EJ* and **DL Taylor** (2010) Effects of diet composition and trophic structure on mercury bioaccumulation in temperate flatfishes. *Archives of Environmental Contamination and Toxicology*. 58:431-443
- Piraino, MP* and **DL Taylor** (2009) Bioaccumulation and trophic transfer of mercury in striped bass (*Morone saxatilis*) and tautog (*Tautoga onitis*) in the Narragansett Bay (Rhode Island, USA). *Marine Environmental Research*. 67:117-128
- Evers, DC, RP Mason, NC Kamman, CY Chen, AL Bogomolni, **DL Taylor**, CR Hammerschmidt, SH Jones, NM Burgess, K Munney, and K Parsons (2008) An integrated mercury monitoring program for temperate estuarine and marine ecosystems on the North American Atlantic coast. *EcoHealth*. 5:426-441
- Chen, C, A Amirbahman, N Fisher, G Harding, C Lamborg, D Nacci, and **DL Taylor** (2008) Marine ecosystems: Spatial patterns and processes of production, bioaccumulation, and biomagnification. *EcoHealth*. 5:399-408

- Payne, EJ* and **DL Taylor** (2008) Mercury biomagnification and trophic transfer in temperate flatfishes. 11th Flatfish Biology Conference, December 3-4, 2008. *Northeast Fisheries Science Center Reference Document 08-19*, Abstract
- Meng, L, **DL Taylor**, J Serbst, and JC Powell (2008) Assessing habitat quality of Mount Hope Bay using growth, RNA:DNA, and feeding of caged juvenile winter flounder (*Pseudopleuronectes americanus*). *Northeastern Naturalist*. 15:35-56
- Taylor, DL**, RS Nichols, and KW Able (2007) Habitat selection and quality for multiple cohorts of young-of-the-year bluefish (*Pomatomus saltatrix*): Comparisons between estuaries and ocean beaches in southern New Jersey. *Estuarine, Coastal and Shelf Science*. 73:667-679
- Meng, L and **DL Taylor** (2006) Assessing habitat suitability of Mount Hope Bay using growth, RNA:DNA, and feeding of caged juvenile winter flounder. 10th Flatfish Biology Conference, November 29-30. *Northeast Fisheries Science Center Reference Document 06-23*, Abstract
- Taylor, DL**, PM Rowe, and KW Able (2006) Habitat use of different ontogenetic stages of summer-spawned bluefish (*Pomatomus saltatrix*) in coastal regions of southern New Jersey. *Fishery Bulletin*. 104:593-604
- Taylor, DL** and KW Able (2006) Cohort dynamics of summer-spawned bluefish as determined by length-frequency and otolith microstructure analysis. *Transactions of the American Fisheries Society*. 135:955-969
- Taylor, DL** (2005) Predatory impact of the green crab (*Carcinus maenas*) on post-settlement winter flounder (*Pseudopleuronectes americanus*) as revealed by immunological dietary analysis. *Journal of Experimental Marine Biology and Ecology*. 324:112-126
- Taylor, DL** and D Danila (2005) Predation on winter flounder (*Pseudopleuronectes americanus*) eggs by the sand shrimp (*Crangon septemspinosa*). *Canadian Journal of Fisheries and Aquatic Sciences*. 62:1611-1625
- Taylor, DL** (2005) Predation on post-settlement winter flounder *Pseudopleuronectes americanus* by sand shrimp *Crangon septemspinosa* in 3 NW Atlantic estuaries. *Marine Ecology Progress Series*. 289:245-262
- Taylor, DL** and MA Peck (2004) Daily energy requirements and trophic positioning of the sand shrimp *Crangon septemspinosa*. *Marine Biology*. 145:167-177
- Taylor, DL** (2004) Immunological detection of winter flounder (*Pseudopleuronectes americanus*) eggs and juveniles in the stomach contents of crustacean predators. *Journal of Experimental Marine Biology and Ecology*. 301:55-73
- Meng, L, **DL Taylor**, J Serbst, and JC Powell (2004) Assessing habitat suitability of Mount Hope Bay using caged juvenile winter flounder. *EPA Report*. U.S. Environmental Protection Agency, Office of Research and Development, National Health and Environmental Effects Laboratory, Atlantic Ecology Division, Narragansett, RI
- Taylor, DL** (2004) Predatory impact of the green crab (*Carcinus maenas*) on post-settlement winter flounder (*Pseudopleuronectes americanus*) as revealed by immunological dietary analysis. 9th Flatfish Biology Conference, December 1-2, 2004. *Northeast Fisheries Science Center Reference Document 04-13*, Abstract
- Taylor, DL** (2003) Size-dependent predation on post-settlement winter flounder *Pseudopleuronectes americanus* by sand shrimp *Crangon septemspinosa*. *Marine Ecology Progress Series*. 263:197-215

Taylor, DL and JS Collie (2003) Effect of temperature on the functional response and foraging behavior of the sand shrimp *Crangon septemspinosa* preying on juvenile winter flounder *Pseudopleuronectes americanus*. *Marine Ecology Progress Series*. 263:217-234

Taylor, DL and JS Collie (2003) A temperature and size-dependent model of sand shrimp (*Crangon septemspinosa*) predation on juvenile winter flounder (*Pseudopleuronectes americanus*). *Canadian Journal of Fisheries and Aquatic Sciences*. 60:1133-1148

Taylor, DL (2002) Sand shrimp, *Crangon septemspinosa*, predation on juvenile winter flounder: Effect of temperature on predator functional response and foraging behavior. 8th Flatfish Biology Conference, December 10-11, 2002. *Northeast Fisheries Science Center Reference Document 08-05h*, Abstract

Taylor, DL and JS Collie (2001) Sampling the Bay over the long-term. *Maritimes*. 7-9

Taylor, DL and DB Eggleston (2000) Effects of hypoxia on an estuarine predator-prey interaction: Foraging behavior and mutual interference in blue crab, *Callinectes sapidus*, and the infaunal clam prey, *Mya arenaria*. *Marine Ecology Progress Series*. 196:221-237

Morlock, S, **D Taylor**, A Giblin, C Hopkinson, and J Tucker (1997) The effects of salinity on the fate of inorganic nitrogen in sediments of the Parker River Estuary, Massachusetts. *Biological Bulletin*. 193:290-292

Dissertation & Theses

Taylor, DL (2003) Predation on the early life history stages of winter flounder (*Pseudopleuronectes americanus*) by the sand shrimp (*Crangon septemspinosa*). *Ph.D. Dissertation*, University of Rhode Island, Graduate School of Oceanography, 376 pp

Taylor, DL (1999) Effects of hypoxia on an estuarine predator-prey interaction: Foraging behavior and mutual interference in blue crab, *Callinectes sapidus*, and the infaunal clam prey, *Mya arenaria*. *M.S. Thesis*, North Carolina State University, 53 pp

Taylor, DL (1997) Establishing the protocol for rearing the marine polychaete, *Chaetopterus*, under laboratory conditions: A study and discussion of larval development and possible inducers to settlement and metamorphosis. *Honors Thesis for B.A. with Honors in Biology*, Bucknell University, 38 pp

Professional Presentations

Society of Environmental Toxicology and Chemistry North American 42nd Annual Meeting, Virtual Meeting (Nov 2021)

- PFAS in archived samples and contemporary marine biota from Rhode Island, USA (M.L. Hedgespeth presenter)

Northeast Algal Society 58th Annual Symposium, Salem, MA (Apr 2019)

- Assessing changes in coastal ecosystem engineers and associated communities in Narragansett Bay (L. Green-Gavrielidis presenter)

Coastal and Estuarine Research Federation 24th Biennial Conference, Providence, RI (Nov 2017)

- Mercury bioaccumulation in estuarine food webs with different nitrogen loads (J. Fleming presenter)

Flatfish Biology Conference, Westbrook, CT (Dec 2014)

- Biotic interactions between age-0 summer and winter flounder in New England tidal rivers

Society of Environmental Toxicology and Chemistry 32nd Annual Meeting, Boston, MA (Nov 2011)

- Mercury and selenium relationships in local fisheries

Society of Environmental Toxicology and Chemistry 32nd Annual Meeting, Boston, MA (Nov 2011)

- Habitat effects on mercury bioaccumulation in black sea bass (*Centropristis striata*)

- Northeast Regional Meeting of IDeA Networks of Biomedical Research Excellence and Centers for Biomedical Research Excellence**, Newport, RI (Aug 2011)
- Mercury in the sediments of the Narragansett Bay estuary (Rhode Island, USA): Contamination from a historical and spatial perspective
- Northeast Regional Meeting of IDeA Networks of Biomedical Research Excellence and Centers for Biomedical Research Excellence**, Newport, RI (Aug 2011)
- Mercury bioaccumulation in elasmobranchs
- Joint Meeting of Ichthyologists and Herpetologists**, Providence, RI (Jul 2010)
- Ontogenetic patterns in bluefish *Pomatomus saltatrix* feeding ecology and the effect on mercury biomagnification
- Southern New England Chapter of the American Fisheries Society Meeting**, Kingston, RI (Jan 2009)
- Ontogenetic patterns in bluefish *Pomatomus saltatrix* feeding ecology and the effect on mercury Biomagnification
- NIH/NCRR 3rd Biennial National IDeA Symposium of Biomedical Research Excellence**, Washington DC (Jun 2010)
- Indicators of environmental and biological mercury contamination in the Narragansett Bay (Rhode Island, USA)
 - *“Highlighted Poster” during the Environmental Sciences & Public Health Scientific Session*
- North Atlantic Chapter of the Society of Environmental Toxicology and Chemistry Annual Meeting**, Narragansett, RI (Jun 2010)
- Indicators of environmental and biological mercury contamination in the Narragansett Bay (Rhode Island, USA)
- Southern New England Chapter of the American Fisheries Society Meeting**, Bristol, RI (Jan 2009)
- Mercury exposure for Rhode Island residents consuming local fishery resources
- Flatfish Biology Conference**, Westbrook, CT (Nov 2008)
- Mercury biomagnification and trophic transfer in temperate flatfishes
- NIH/NCRR 2nd Biennial National IDeA Symposium of Biomedical Research Excellence**, Washington DC (Aug 2008)
- Mercury exposure for Rhode Island residents consuming local fishery resources
 - *“Highlighted Poster” during the Community Based Research Scientific Session*
- NIH/NCRR 2nd Biennial National IDeA Symposium of Biomedical Research Excellence**, Washington DC (Aug 2008)
- Mercury bioaccumulation and trophic transfer in estuarine fish of Narragansett Bay (Rhode Island, USA)
- Southern New England Chapter of the American Fisheries Society Meeting**, Storrs, CT (Jun 2008)
- Mercury bioaccumulation in benthic and pelagic estuarine fishes relative to their nitrogen and carbon isotope signatures
- Society of Environmental Toxicology and Chemistry Annual Meeting**, Bar Harbor, ME (Jun 2008)
- Stable isotope analysis reveals differences in mercury bioaccumulation rates in benthic versus pelagic estuarine food webs
- Marine Benthic Ecology Meeting**, Providence, RI (Apr 2008)
- Trophic transfer of mercury in a benthic versus pelagic food web as revealed by stable isotope analysis

- Biology New England South Undergraduate Research Meeting**, Bristol, RI (Nov 2007)
- Bioaccumulation and trophic transfer of mercury in bluefish (*Pomatomus saltatrix*) from Narragansett Bay, Rhode Island
- Estuarine Research Federation**, Providence, RI (Nov 2007)
- Bioaccumulation and trophic transfer of mercury in bluefish (*Pomatomus saltatrix*) from Narragansett Bay, Rhode Island
- Northeast Regional Meeting of IDeA Networks of Biomedical Research Excellence and Centers for Biomedical Research Excellence**, Burlington, VT (Aug 2007)
- Bioaccumulation and trophic transfer of mercury in bluefish (*Pomatomus saltatrix*) from Narragansett Bay, Rhode Island
- Rhode Island Network for Molecular Toxicology 2007 Annual Summer Retreat**, Kingston, RI (Aug 2007)
- Bioaccumulation and trophic transfer of mercury in bluefish (*Pomatomus saltatrix*) from Narragansett Bay, Rhode Island
- Southern New England Chapter of the American Fisheries Society Meeting**, Kingston, RI (Jun 2007)
- Bioaccumulation of total mercury in bluefish (*Pomatomus saltatrix*) from Narragansett Bay, Rhode Island
- Society of Environmental Toxicology and Chemistry Annual Meeting**, Bristol, RI (Jun 2007)
- Bioaccumulation of total mercury in bluefish (*Pomatomus saltatrix*) from Narragansett Bay, Rhode Island
- Rhode Island Centers of Biomedical Research Excellence & IDeA Network of Biomedical Research Excellence Symposium**, Providence, RI (May 2007)
- Bioaccumulation of total mercury in bluefish (*Pomatomus saltatrix*) from Narragansett Bay, Rhode Island
- Rhode Island Network for Molecular Toxicology 2007 Annual Winter Retreat**, Newport, RI (Jan 2007)
- Mercury concentrations in striped bass (*Morone saxatilis*) from Narragansett Bay, Rhode Island
- Flatfish Biology Conference**, Westbrook, CT (Nov 2006)
- Assessing habitat suitability of Mount Hope Bay using growth, RNA:DNA, and feeding of caged juvenile winter flounder
- American Fisheries Society, 136th Annual Meeting**, Lake Placid, NY (Sep 2006)
- Cohort dynamics of summer-spawned bluefish as determined by length-frequency and otolith microstructure analyses
- Southern New England Chapter of the American Fisheries Society Meeting**, Fall River, MA (Jun 2006)
- Cohort dynamics of summer-spawned bluefish as determined by length-frequency and otolith microstructure analyses
- Flatfish Biology Conference**, Westbrook, CT (Dec 2004)
- Predatory impact of the green crab (*Carcinus maenas*) on post-settlement winter flounder (*Pseudopleuronectes americanus*) as revealed by immunological dietary analysis
- American Fisheries Society, 133rd Annual Meeting**, Quebec City, Quebec, Canada (Aug 2003)
- Predation of winter flounder eggs by the sand shrimp *Crangon septemspinosa*
- New England Estuarine Research Society/Southern New England Chapter of the American Fisheries Society Joint Meeting**, Fairhaven, MA (May 2003)
- Predation of winter flounder eggs by the sand shrimp *Crangon septemspinosa* in Mt. Hope Bay

Marine Benthic Ecology Meeting, Groton, CT (Mar 2003)

- Predation of winter flounder eggs by the sand shrimp *Crangon septemspinosa*

Southern New England Chapter of the American Fisheries Society Meeting, Auburn, MA (Jan 2003)

- Sand shrimp *Crangon septemspinosa* size-selective predation on post-settled winter flounder

Flatfish Biology Conference, Westbrook, CT (Dec 2002)

- Sand shrimp *Crangon septemspinosa* predation on juvenile winter flounder: Effect of temperature on predator functional response and foraging behavior

Fifth International Symposium on Flatfish Ecology, Isle of Man, United Kingdom (Nov 2002)

- Evidence of sand shrimp predation on juvenile winter flounder from three northwestern Atlantic estuaries

New England Estuarine Research Society Meeting, Groton, CT (Oct 2002)

- Sand shrimp predation on juvenile winter flounder across a latitudinal gradient

American Fisheries Society, 132nd Annual Meeting, Baltimore, MD (Aug 2002)

- Detecting juvenile winter flounder in the stomachs of invertebrate predators with the Öuchterlony double-diffusion immunoassay
- *Winner of Outstanding Student Paper*

Southern New England Chapter of the American Fisheries Society Meeting, Bristol, RI (Jun 2002)

- Evidence of sand shrimp predation on juvenile winter flounder from three northwestern Atlantic estuaries
- *Winner of Saul B. Saila Best Student Paper Award*

New England Estuarine Research Society Meeting, Bar Harbor, ME (May 2002)

- Detecting juvenile winter flounder in the stomachs of invertebrate predators with the Öuchterlony immunoassay
- *Winner of Bostwick H. Ketchum Best Graduate Student Paper Award*

Society of Environmental Toxicology and Chemistry Annual Meeting, Portland, ME (Apr 2002)

- Detecting juvenile winter flounder in the stomachs of invertebrate predators with the Öuchterlony immunoassay
- *Winner of Best Student Paper Award*

Southern New England Chapter of the American Fisheries Society Meeting, Groton, CT (Jan 2002)

- Detecting juvenile winter flounder in the stomachs of invertebrate predators with the Öuchterlony double-diffusion immunoassay
- *Winner of Saul B. Saila Best Student Paper Award*

New England Estuarine Research Society Meeting, Block Island, RI (Nov 2000)

- Effects of increased water temperature on sand shrimp predation on young-of-the-year winter flounder prey: A proposal

New England Estuarine Research Society Meeting, Portland, ME (May 2000)

- Effects of hypoxia on an estuarine predator-prey interaction

Atlantic Estuarine Research Society Meeting, Gloucester Point, VA (Apr 1999)

- Effects of hypoxia on an estuarine predator-prey interaction

Marine Benthic Ecology Meeting, Baton Rouge, LA (Mar 1999)

- Effects of hypoxia on an estuarine predator-prey interaction

Atlantic Estuarine Research Society Meeting, Beaufort, NC (Mar 1998)

- The effects of salinity on the fate of inorganic nitrogen in sediments of the Parker River Estuary, Massachusetts

Marine Biological Laboratory Scientific Meeting, Woods Hole, MA (Aug 1997)

- The effects of salinity on the fate of inorganic nitrogen in sediments of the Parker River Estuary, Massachusetts