

Dr. Michelle D. Staudinger

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Lab website: <https://umaine.edu/staudingerlab/>

EDUCATION

- 2010 **Ph.D. Marine Science and Technology / Natural Resources Conservation**
University of Massachusetts Amherst, Amherst, MA.
Dissertation: *Vulnerability of longfin inshore squid (*Loligo pealeii*) to predation: The influence of relative prey size and behavior*
- 2004 **M.S. Marine and Atmospheric Science**
Stony Brook University, Stony Brook, NY.
Thesis: *The importance of squid to the diets of bluefish, goosefish, silver hake, and summer flounder in the Southern New England region.*
- 2000 **Certificate of Graduate Study in Conservation Biology**
Columbia University, New York, NY
- 1997 **B.S. Marine Biology / Environmental Science**
Boston University, Boston, MA

RESEARCH INTERESTS

- Trophic interactions
- Climate induced shifts in phenology and trophic mismatches
- Climate vulnerability assessments and adaptation strategies
- Ecosystem-based fisheries management

PROFESSIONAL EXPERIENCE

- 2023 – present **Associate Professor**, University of Maine, School of Marine Sciences, Darling Marine Center, Walpole, ME
- 2014 – present **Adjunct Faculty**, Department of Environmental Conservation, UMass Amherst, Amherst, MA
- 2014 – 2023 **Ecologist / Science Coordinator**, U.S. Geological Survey, DOI Northeast Climate Adaptation Science Center, UMass Amherst, Amherst, MA
- 2011 – 2020 **Adjunct Faculty**, Department of Biology and Marine Biology, University of North Carolina Wilmington, Wilmington, NC
- 2011 – 2013 **Postdoctoral Fellow**, USGS National Climate Change and Wildlife Science Center; University of Missouri Columbia; Missouri Cooperative Fish and Wildlife Research Unit. *Position was based in Reston, VA at USGS Headquarters*
- 2010 – 2011 **Visiting Research Assistant Professor**, Department of Biology and Marine Biology, University of North Carolina Wilmington, Wilmington, NC
- 2009 – 2013 **Consultant**, Laboratory of Dr. Roger Hanlon, Marine Biological Laboratory, Marine Resources Center, Woods Hole, MA
- 2005 – 2010 **Research Assistant**, University of Massachusetts School of Marine Sciences; Department of Natural Resources Conservation, University of Massachusetts Amherst, Amherst, MA

2004 – 2005	Research Assistant , New York Department of Environmental Conservation, East Setauket, NY
2002 – 2004	New York Sea Grant Scholar , New York Sea Grant, Stony Brook University, Stony Brook, NY
2002 – 2003	Survey Scientist , National Marine Fisheries Service, Woods Hole, MA
1999 – 2001	Environmental Consultant , Envirotron/Ecosave, New York City, NY

AWARDS

2023	Honorable Mention, 2023 Climate Adaptation Leadership Award in the “Federal Government” Category
2021	USGS Special Thanks for Achieving Results (STAR) Award
2017	National Fish Wildlife & Plants Climate Adaptation Strategy Working Group’s Climate Adaptation Leadership Award for Natural Resources in the Broad Partnerships Category for the Massachusetts Wildlife Climate Action Tool project.
2016	USGS STAR Award

RESEARCH GRANTS

- Staudinger, M.D.** *Assessing and adapting Maine’s marine resource programs to a changing climate.* Maine Department of Marine Resources. \$180K (2024-2026)
- Staudinger, M.D.** *Disentangling the effects of climate change and fishing pressure on sea urchin populations in the Gulf of Maine.* Maine Department of Marine Resources. \$73,250K (2024-2026)
- Staudinger, M.D.,** K. Terwilliger, A. Karmalkar, A. D’Amato, T.L. Morelli. *A regional synthesis of climate data to inform the 2025 State Wildlife Action Plans in the Northeast U.S.* Northeast Climate Adaptation Science Center (NE CASC). \$328K (2022-2023)
- Staudinger, M.D.,** M. Albert. *A novel monitoring framework to assess intertidal biodiversity in mixed coarse substrate habitats across the Boston Harbor Islands.* USGS-NPS Natural Resources Preservation Program (NRPP). \$300K: (2022-2024)
- Staudinger, M.D.,** A. Jordaan. *Increasing Tribal climate adaptive capacity for coastal resources in the Northeast.* (NE CASC) FY21: \$152K (2021-2023)
- Staudinger, M.D.,** A. Jordaan. *Seabird diets in a warming climate: An assessment of critical and emergent trophic relationships of terns (Sterna sp.) in their Northern breeding range.* National CASC FY21: \$35K (2021)
- Woodruff, J., K. Leonard, A. Ajmani, **M. Staudinger**, C. Thornbrugh, A.R Holland. *Indigenous Knowledge on Climate Adaptation Science Course and Tribal Residency.* Five College NAIS Mellon Mini-Grant: \$10K (2021)
- Staudinger, M.D.,** M. Albert. *A pilot biodiversity inventory and monitoring protocol in support of coastal adaptation projects in tidal and nearshore subtidal habitats of Boston Harbor Islands.* USGS-NPS NRPP: \$122,575 (2020-2021).

- Jordaan, A., A. Roy, **M.D. Staudinger**. *Closing the loop: characterizing habitat requirements, movements, and life stage linkages of river herring in Massachusetts watersheds*. Woods Hole Sea Grant Program 2019: \$170,647 (2020-2022).
- Davis, A., **M.D. Staudinger**. *Synthesizing climate change impacts and adaptation strategies in New England's Seafood industry*. GOM2050 Collaborative Action Grant: \$9K (2019-2020)
- Nolden, A., J. Fitzsimmons, A. Kinchla, K. Kahl, A. Davis, **M. Staudinger**, E. Markowitz, K. Wicks. *Consumer and fisherman attitudes towards sustainable local seafood*. NSF ADVANCE Collaborative Research Seed Grant 2019: \$15K (2019-2020).
- Nolden, A., **Staudinger, M.D.**, Davis, A., E. Markowitz, and A. Kinchla. *Testing the Potential of Sustainable Local Seafood Species for Innovative Value-Added Products in a Changing Climate*. Institute for Social Science Research (ISSR) Seed Grant: \$6K (2019).
- Pendleton, D., C. Sutherland, A. Jordaan, and **M.D. Staudinger**. *Marine risk mapping for endangered North Atlantic right whales in Massachusetts waters*. NE CASC: \$62K (2018-2020).
- Jordaan, A., **M.D. Staudinger**, and D. Pendleton. *How and why is the timing and occurrence of seasonal migrants in the Gulf of Maine changing due to climate?* NE CASC: \$175K (2016-2019)
- Logan, J., Wozniak, A., Robertson, A., Butler, C., Rooker, J., **Staudinger, M.**, Hoffmayer, E., and R. Allman. *Evaluation of natal origin and migratory pathways of Atlantic bluefin tuna (*Thunnus thynnus*) using chemical tracers*. Bluefin Tuna Research Program: \$123K (2016-2019)
- Staudinger, M.D.**, Yakola, K. and A. Jordaan. *Long-term changes in chick diet, growth and fledgling success of three *Sterna* spp. in response to changing climatic conditions in the Gulf of Maine*. NE CASC: \$88K (2016-2019)
- Jackson, S., **Staudinger, M.D.**, and S. DeStephano. *Promoting climate adaptation through the use of a web-based tool*. MA Division of Fisheries and Wildlife: \$406K (2015-2016)
- Staudinger, M.D.**, and E. Markowitz. *Early career climate communications and networking*. NE CASC: \$123K (2015-2018)
- Staudinger, M.D.**, and A. Jordaan. *Ecological and management implications of climate change induced shifts in phenology of coastal fish and wildlife species in the Northeast CSC region*. NE CASC: \$142K (2014-2016)
- Staudinger, M.D.**, and F. Scharf. *Understanding pelagic ecosystem structure: an evaluation of ecological processes to enable sustainable management of offshore fishery resources*. North Carolina Sea Grant: \$85K plus 2 years of support for a Masters student (2012-2014)

PEER-REVIEWED PUBLICATIONS *indicates students or **postdocs I have mentored or trained

1. Weiss, M., A.R. Holland, A.W. D'Amato, L.A. Deegan, W.H. Farmer, C. Hoving, A.V. Karmalkar, A. Latzka, M. Magee, P.B. McIntyre, T.L. Morelli, M. Notaro, N. Olmstead, R.N. Palmer, N. Pau, R. Renfrew, C.A. Ribic, J.J. Sheppard, **M.D. Staudinger**, B. Zuckerberg, B.A. Bradley. *In Review*. Relationship-centered engagement bridges the divide between science and management, and enhances climate adaptation. Submitted to *BioScience* February 2024.
2. Dimkovikj, V.H.*, **M.D. Staudinger**, H. Legett**, C.A.M. France, M. Vecchione. *In Review*. Using stable isotopes from museum specimens of *Illex illecebrosus* to infer trophic changes across pre-industrial to modern eras of New England fisheries. Resubmitted to *Marine Biology* January 2024.

3. Endyke, S.C.*, A. Putnam*, L. Lockwood*, M. Albert, **M.D. Staudinger**. *In Review*. Development and application of a novel framework for assessing coastal species conservation status and climate vulnerability. Submitted to *ICES Journal of Marine Science* October 2023.
4. Courtney, S., A. Bamzai-Dodson, H. Cashwell, M. Cucuzza, A. Hyman, L. Maudlin, K. McNeal, A. Meadow, **M.D. Staudinger**, M. Weiss, P. Armsworth. *In Review*. Evaluating science for society: lessons from the Climate Adaptation Science Centers. Submitted to *Frontiers in Ecology and the Environment* July 2023.
5. Mattocks, S.M.*, S. Bittner, V. Luzanau, H. Mohammadi, A.H. Roy, **M.D. Staudinger**, A. Jordaan. *In Review*. River herring effects on perch life history. Submitted to *Canadian Journal of Fisheries and Aquatic Sciences* June 2023.
6. Davis, A.*, **M.D. Staudinger**, K.E. Mills. 2023. Identifying New England's underutilized seafood species and evaluating their market potential in a changing climate. *Frontiers in Sustainable Food Systems, Section on Climate-Smart Food Systems*. 10: 1226219.
<https://doi.org/10.3389/fmars.2023.1226219>
7. Primack, R.B., A. Gallinat, E.R. Ellwood, A.J. Miller-Rushing, T. Crimmins, M.D. Schwartz, **M. D. Staudinger**. 2023. Ten best practices for effective phenological research. *International Journal of Biometeorology*. <https://doi.org/10.1007/s00484-023-02502-7>
8. Legett, H.***, J. Lucas, E. C. Craig, **M.D. Staudinger**. 2023. Variation in isotopic niche partitioning between adult Roseate and Common terns in the Northwest Atlantic. *Endangered Species Research*, 50:235-247. <https://doi.org/10.3354/esr01233>
9. Friedland, K.D., E. Adams, D.C. Brady, D. Crear, S. Gaichas, A. Gill, C. Goetsch, J. Gulka, M. C. McManus, E. Methratta, J.L. Morano, **M.D. Staudinger**. 2023. Forage fish species prefer habitat within designated offshore wind energy areas in the US Northeast Shelf ecosystem. *Marine and Coastal Fisheries, special issue on Offshore Wind Interactions with Fish and Fisheries*.
<http://doi.org/10.1002/mcf2.10230>
10. Montefiore, L.R.*, N.G. Nelson, **M.D. Staudinger**, and A. Terando. 2023. Vulnerability of Estuarine Systems to Water Quality Change Under Future and Climate Land-Use. *Earth's Future*, 11(3): e2022EF002884. <http://dx.doi.org/10.1029/2022EF002884>.
11. Yakola, K.*, A. Jordaan, S. Kress, P. Shannon, **M.D. Staudinger**. 2022. Interspecific and local variation in tern chick diets across nesting colonies in the Gulf of Maine. *Waterbirds*, 44(4): 397-414. <https://doi.org/10.1675/063.044.0402>
12. Pendleton, D.E., M.W. Tingley, L. G. Ganley**, K. Friedland, C. Mayo, M.W. Brown, B.E. McKenna, A. Jordaan, **M.D. Staudinger**. 2022. Decadal-scale phenology and seasonal climate drivers of large whale habitat use in a rapidly warming marine ecosystem. *Global Change Biology*.
<http://doi.org/10.1111/gcb.16225>
13. Dean, E.M., A.R. Cooper, L. Wang, W.D. Daniel, S. David, C. Ernzen, K. Gido, E. Hale, T. Haxton, W. Kelso, N. Leonard, C. Lido, J. Margraf, M. Porter, C. Pennock, D. Propst, J. Ross, **M. D. Staudinger**, G. Whelan, and D. Infante. 2022. The North American Freshwater Migratory Fish Database (NAFMFD): Characterizing the migratory life histories of freshwater fishes of Canada, the United States and Mexico. *Journal of Biogeography*. <http://doi.org/10.1111/jbi.14367>

14. Bratton, R. M.*, H. D. Legett*, P. Shannon, K. C. Yakola*, A. R. Gerson and **M. D. Staudinger**. 2022. Pre-breeding foraging ecology of three tern species nesting in the Gulf of Maine. *Avian Conservation and Ecology* 17 (1):19. <http://www.ace-eco.org/vol17/iss1/art19/>
15. Dalton, R.M*., J. J. Sheppard, J. T. Finn, A. Jordaan, **M. D. Staudinger**. 2022. Phenological variation in spring migration timing of adult alewife (*Alosa pseudoharengus*) in coastal Massachusetts. *Marine and Coastal Fisheries*, 14 (2): e10198. <http://dx.doi.org/10.1002/mcf2.10198>
16. Pershing, A.J., M.A. Alexander, D.C. Brady, D. Brickman, E.N. Curchitser, A.W. Diamond, L. McClenachan, K.E. Mills, O.C. Nichols, D.E. Pendleton, N.R. Record, J.D. Scott, **M.D. Staudinger**, Y. Wang. 2021. Climate impacts on the Gulf of Maine ecosystem: A review of observed and expected changes in 2050 from rising temperatures. *Elementa Science of the Anthropocene*, 9(1). <https://doi.org/10.1525/elementa.2020.00076>
17. ¹Legett, H.D.***, A. Jordaan, A. H. Roy, J. J. Sheppard, M. Somos-Valenzuela, **M.D. Staudinger**. 2021. Daily patterns of river herring (*Alosa* spp.) spawning migrations: environmental drivers and variation among coastal streams in Massachusetts. *Transactions of the American Fisheries Society*, 150(4): 501-513. <http://doi.org/10.1002/tafs.10301>
18. ²**Staudinger, M.D.**, A.J. Lynch, S. Gaichas, M. Fox, D. Gibson-Reinemer, J. Langan*, A. Teffer*, S.J. Thackeray, I.J. Winfield. 2021. How does climate change affect emergent properties of aquatic ecosystems? *Fisheries*, 46(9): 423-441. <https://doi.org/10.1002/fsh.10606>
19. Guckian, M.L.*, C. Tucker*, E. Kiekebusch*, T. Klemm*, E.M. Markowitz, L. Middleton*, A. Wootten*, **M.D. Staudinger**. 2021. Assessing the impact of an online climate science community The Early Career Climate Forum. *Weather, Climate and Society*. <https://doi.org/10.1175/WCAS-D-20-0150.1>
20. Weiskopf, S., M. Rubenstein, L. Crozier, S. Gaichas, R. Griffis, J. Halofsky, K. Hyde, T.L. Morelli, J. Morissette, R. Muñoz, A. Pershing, D. Peterson, R. Poudel, **M.D. Staudinger**, A. Sutton-Grier, L. Thompson, J. Vose, J.F. Weltzin, K. Powys Whyte. 2020. Climate change effects on biodiversity, ecosystems, ecosystem services, and natural resource management in the United States. *Science of the Total Environment*. <https://doi.org/10.1016/j.scitotenv.2020.137782>
21. ³**Staudinger, M. D.**, H. Goyert**, J. Suca, K. Coleman, L. Welch, J. Llopiz, I. Altman, D. Wiley, A. Appelgate, P. Auster, H. Baumann, J. Beaty, D. Boelke, L. Kaufman, P. Loring, J. Moxley, S. Paton, K. Powers, D. Richardson, J. Robbins, J. Runge, B. Smith, C. Spiegel, H. Steinmetz*. 2020. The role of sand lances (*Ammodytes* sp.) in the Northwest Atlantic Ecosystem: A synthesis of current knowledge with implications for conservation and management. *Fish and Fisheries*, 00:1–34 <https://doi.org/10.1111/faf.12445>
22. Polland, S.J.*, **Staudinger, M.D.**, F.S. Scharf. 2019. Foraging ecology of sympatric pelagic fish predators in the U.S. South Atlantic: interspecific differences in trophic niche within a shared prey community. *Marine Ecology Progress Series* 631:181-199. <https://doi.org/10.3354/meps13126>
23. **Staudinger, M.D.**, C. France, V. Hartigan*, E. Jorgensen, H. Judkins, A. Lindgren, E. K. Shea, M. Vecchione. 2019. Ecological roles and trophic diversity of the cephalopod assemblage near Bear

¹ Top cited paper 2021-2022, top downloaded paper in 2021 in TAFS

² Top cited paper 2021-2022, top downloaded paper in 2021 in Fisheries

³ Top downloaded paper in 2019-2020; Top cited paper in 2020-2021 in Fish & Fisheries

- Seamount in the Northwest Atlantic Ocean. *Marine Ecology-Progress Series*, 629: 67-86.
<https://doi.org/10.3354/meps13121>
24. ⁴**Staudinger, M.D.**, K. Mills, K. Stamieszkin, N. Record, C. Hudak, A. Allyn., A. Diamond, K. Friedland, W. Golet, M. Henderson, C. Hernandez, T. Huntington, R. Ji., C. Johnson, D. Johnson, A. Jordaan, J. Kocik, Y. Li, M. Liebman, O. Nichols, D. Pendleton, A. Richards, T. Robben, A. Thomas, H. Walsh, K. Yakola. 2019. It's about time: A synthesis of changing phenology in the Gulf of Maine Ecosystem. *Fisheries Oceanography*: 00:1–34. <https://doi.org/10.1111/fog.12429>
 25. Powell, E.* , M. C. Tyrell, A. Milliken, J.M. Tirpak, **M. D. Staudinger**. 2018. A review of coastal management approaches to support the integration of ecological and human community planning for climate change. *Journal of Coastal Conservation*, 1-18. <https://doi.org/10.1007/s11852-018-0632-y>
 26. Bird, C. C. Trueman, A. Veríssimo, S. Magozzi, K. Abrantes, A. Aguilar, H. Al-Reasi, A. Barnett, D. Bethea, G. Biais, A. Borrell, M. Bouchoucha, M. Boyle, J. Brunnschweiler, P. Bustamante, A. Carlisle, D. Catarino, S. Caut, Y. Cherel, T. Chouvelon, D. Churchill, J. Ciancio, J. Claes, A. Colaço, D. Courtney, P. Cresson, R. Daly, L. De Necker, T. Endo, I. Figueiredo, A. Frisch, J. Hansen, M. Heithaus, N. Hussey, J. Iitembu, F. Juanes, M. Kinney, J. Kiszka, D. Kopp, R. Leaf, Y. Li, S. Klarian, A. Lorrain, D. Madigan, A. Maljković, L. Malpica-Cruz, P. Matich, M. Meekan, F. Menard, G. Menezes, S. Munroe, M. Newman, Y. Papastamatiou, H. Pethybridge, J. Plumlee, C. Polo-silva, K. Quaeck, V. Raoult, J. Reum, Y. Eden Torres-Rojas, D. Shiffman, C. Speed, **M. Staudinger**, A. Teffer, A. Tilley, M. Valls, J. Vaudo, T. Wai, R. Wells, A. Wyatt. 2018. A global perspective on the trophic geography of sharks. *Nature Ecology & Evolution*, 2: 299-305.
<https://doi.org/10.1038/s41559-017-0432-z>
 27. Powell, E.* , M. C. Tyrell, A. Milliken, J.M. Tirpak, **M. D. Staudinger**. 2017. A synthesis of sea level rise and storm thresholds for 44 focal species along the U.S. Atlantic and Gulf coasts: A review of research and application. *Ocean and Coastal Management*, 148: 75-88.
<https://doi.org/10.1016/j.ocecoaman.2017.07.012>
 28. Duffy, L.M., P. Kuhnert, H.R. Pethybridge, J.W. Young, R.J. Olson, J.M. Logan, N. Goñi, E. Romanov, V. Allain, **M.D. Staudinger**, M. Abecassis, A. Choy, A.J. Hobday, M. Simier, F. Galván-Magaña, M. Potier, F. Ménard. 2017. Global trophic ecology of yellowfin, bigeye and albacore tunas: Understanding tuna predation on micronekton communities at ocean-basin scales. *Deep Sea Research II*, 140: 55-73. <https://doi.org/10.1016/j.dsr2.2017.03.003>
 29. Shea, E.K., H. Judkins, **M.D. Staudinger**, V. Hartigan*, A. Lindgren, M. Vecchione. 2017. Cephalopod biodiversity in the vicinity of Bear Seamount, western North Atlantic. *Marine Biodiversity*, DOI 10.1007/s12526-017-0633-3. <https://doi.org/10.1007/s12526-017-0633-3>
 30. Alexander, K.E., W.B. Leavenworth, C. Hall, S. Mattocks*, S.M. Bittner, E. Klein, **M.D. Staudinger**, A. Bryan, J. Rosset, T. Willis, B.H. Carr, A. Jordaan. 2017. Tambora and the mackerel year: Phenology and fisheries during an extreme climate event. *Science Advances*, 3: e1601635.
<https://doi.org/10.1126/sciadv.1601635>
 31. Beever, E.A., O'Leary, J., Mengelt, C., West, J., Julius, S., Green, N., Magness, D., Petes, L., Stein, B., Nicotra, A.B., Hellmann, J.J., Robertson, A.L., **Staudinger, M.D.**, Rosenberg, A.A., Babij, E., Brennan, J., Schuurman, G.W., G.E. Hofmann. 2016. Improving conservation outcomes with a new

⁴ Top downloaded paper in 2018-2019 and 2019-2020; Top cited paper 2019-2020 in *Fisheries Oceanography*

- paradigm for understanding species' fundamental and realized adaptive capacity. *Conservation Letters*, 9(2):131-137. <https://doi.org/10.1111/conl.12190>
32. Grimm, N.B., Groffman, P., **Staudinger, M.D.**, H. Tallis. 2016. Climate change impacts on ecosystems and ecosystem services in the United States: Process and prospects for sustained assessment. *Climatic Change*, 135: 97–109. <https://doi.org/10.1007/s10584-015-1547-3>
33. Teffer, A.K.*, **Staudinger, M.D.**, F. Juanes. 2015. Trophic niche overlap among dolphinfish (*Coryphaena hippurus*) and co-occurring tunas near the northern edge of their range in the western North Atlantic Ocean. *Marine Biology*, 162(9): 1823-1840. <https://doi.org/10.1007/s00227-015-2715-8>
34. Butler, C.M., Logan, J.M. Provaznik, J.M., Hoffmayer, E.R., **Staudinger, M.D.**, Quattro, J.M., Roberts, M.A., Ingram, G.W., Pollack, A.G., M.E. Lutcavage. 2015. Atlantic bluefin tuna (*Thunnus thynnus*) feeding ecology in the northern Gulf of Mexico: A preliminary description of diets from the western Atlantic spawning grounds. *Journal of Fish Biology*, 86: 365-374. <https://doi.org/10.1111/jfb.12556>
35. Teffer, A. K.*, **Staudinger, M.D.**, Taylor, D.L., F. Juanes. 2014. Trophic influences on mercury accumulation in top pelagic predators from offshore New England waters of the northwest Atlantic Ocean. *Marine Environmental Research*, 101: 124-134. <https://doi.org/10.1016/j.marenvres.2014.09.008>
36. **Staudinger, M.D.**, McAlarney, R.*, Pabst, A., W. McLellan. 2014. Foraging ecology and niche overlap in pygmy (*Kogia breviceps*) and dwarf (*Kogia sima*) sperm whales from waters of the U.S. mid-Atlantic coast. *Marine Mammal Science*, 30(2): 626-655. <https://doi.org/10.1111/mms.12064>
37. **Staudinger, M.D.**, Hanlon, R.T., Mathger, L., K. C. Buresch. 2013. Defensive responses of cuttlefish to different teleost predators. *Biological Bulletin*, 225: 161–174. <https://doi.org/10.1086/BBLv225n3p161>
38. **Staudinger, M.D.**, Carter, S., Cross, M., Dubois, N., Duffy, E., Enquist, C., Griffis, R., Hellmann, J., Lawler, J., Morrison, S., O'Leary, J., Stein, B., W. Turner. 2013. Biodiversity in a changing climate: A synthesis of current and projected trends in the United States. *Frontiers in Ecology and the Environment*, 11(9): 465-473. <https://doi.org/10.1890/120272>
39. Grimm, N., **Staudinger, M.D.**, Staudt, A., Carter, S., Chapin, F.S.III, Kareiva, P., Ruckelshaus, M., B. Stein. 2013. Climate-change impacts on ecological systems: Introduction to a US assessment. *Frontiers in Ecology and the Environment*, 11(9): 456-464. <https://doi.org/10.1890/120310>
40. **Staudinger, M.D.**, Juanes, F., Salmon, B.*, and A. K. Teffer*. 2013. The distribution, diversity, and importance of cephalopods in top predator diets from offshore habitats of the Northwest Atlantic Ocean. *Deep Sea Research II*, 95: 182–192. <https://doi.org/10.1016/j.dsr2.2012.06.004>
41. Hanlon, R. T., Buresch, K., Moustahfid, H. **Staudinger, M.D.** 2013. *Doryteuthis pealeii*, Longfin inshore squid. In: Rosa, R., Pierce, G., and R. O'Dor (eds) *Advances in Squid Biology, Ecology, and Fisheries*. Nova Science Publishers, Inc. Hauppauge, NY. (Book Chapter).
42. **Staudinger, M.D.** 2011. Species- and size-specific variability of mercury concentrations in four commercially important finfish and their prey from the northwest Atlantic. *Marine Pollution Bulletin*, 62: 734-740. <https://doi.org/10.1016/j.marpolbul.2011.01.017>

43. **Staudinger, M.D.**, Hanlon, R.T., F. Juanes. 2011. Primary and secondary defenses of squid to cruising and ambush fish predators: variable tactics and their survival value. *Animal Behaviour*, 81: 585-594. <https://doi.org/10.1016/j.anbehav.2010.12.002>
44. **Staudinger, M.D.**, F. Juanes. 2010. Size-dependent susceptibility of longfin inshore squid (*Loligo pealeii*) to attack and capture by two predators. *Journal of Experimental Marine Biology and Ecology*, 393: 106-113. <https://doi.org/10.1016/j.jembe.2010.07.005>
45. **Staudinger, M.D.**, F. Juanes. 2010. A size-based approach to quantifying predation on longfin inshore squid (*L. pealeii*) in the northwest Atlantic. *Marine Ecology-Progress Series*, 399: 225-241. <https://doi.org/10.3354/meps08339>
46. **Staudinger, M.D.**, F. Juanes. 2010. Feeding tactics of a behaviorally plastic predator, summer flounder (*Paralichthys dentatus*). *Journal of Sea Research*, 64 (1): 68-75. <https://doi.org/10.1016/j.seares.2009.08.002>
47. **Staudinger, M.D.**, Juanes, F., S. Carlson*. 2009. Reconstruction of original body size and estimation of allometric relationships for the longfin inshore squid (*L. pealeii*) and northern shortfin squid (*Illex illecebrosus*). *Fishery Bulletin*, 107: 101–105.
48. Moltschanivskyj, N.A., Hall, K., Lipinski, M. R., Marian, J.E.A.R., Nishiguchi, M., Sakai, M., Shulman, D.J., Sinclair, B., Sinn, D.L., **Staudinger, M.D.**, Van Gelderen, R., Villanueva, R., K. Warnke. 2007. Ethical and welfare considerations when using cephalopods as experimental animals. *Reviews in Fish Biology and Fisheries*, 17: 455-476. <https://doi.org/10.1007/s11160-007-9056-8>
49. **Staudinger, M.D.** 2006. Seasonal and size-based predation on two species of squid by four fish predators on the Northwest Atlantic continental shelf. *Fishery Bulletin*, 104 (4): 605-615.

MANUSCRIPTS IN PREPARATION *indicates students or **postdocs I have mentored or trained

1. **Staudinger, M.D.**, A. Karmalkar, K. Terwilliger, K. Burgio**, A. Lubeck*, H. Higgins*, T. Rice, T. Morelli, A. D'Amato. *In review*. A regional synthesis of climate data to inform the 2025 State Wildlife Action Plans in the Northeast U.S. DOI Northeast Climate Science Center Cooperator Report. Anticipated *USGS Cooperator Report* March 2024.
2. Putnam, A*. S. Endyke*, J. Taylor*, M. Albert, **M.D. Staudinger**. *In preparation*. A historical synthesis of biodiversity of the Boston Harbor Islands. Anticipated submission to *Marine Biodiversity* March 2024.
3. Yakola, K.*, **M.D. Staudinger**, C. Sutherland, S. Kress, P. Shannon, A. Jordaan. Long-term trends and within-season phenology of Common tern (*Sterna hirundo*) chick diet in the Gulf of Maine, USA. Anticipated submission to *PLOS ONE* September 2024.

SCIENTIFIC REPORTS

1. Borggaard, D. L., D. M. Dick, J. Star, B. Zoodsma, M. A. Alexander, M. J. Asaro. L. Barre, S. Bettridge, P. Burns, J. Crocker, Q. Dortch, L. Garrison, F. Gulland, B. Haskell, S. Hayes, A. Henry, K. Hyde, H. Milliken, J. Quinlan, T. Rowles, V. Saba, **M. Staudinger**, and H. Walsh. 2020. North Atlantic Right Whale (*Eubalaena glacialis*) Scenario Planning Summary Report. NOAA Tech. Memo. NMFS-OPR-68, 88 p. <https://www.fisheries.noaa.gov/resource/document/north-atlantic-right-whale-eubalaena-glacialis-scenario-planning-summary-report>

2. Borggaard, D., Dick, D. M., Star, J., Alexander, M., Bernier, M., Collins, M., Crocker, J., Damon-Randall, K., Dudley, R., Griffis, R., Hayes, S., Johnson, M., Kircheis, D., Kocik, J., Letcher, B., Mantua, N., Morrison, W., Nislow, K., Saba, V., Saunders, R., Sheehan, T., **M.D. Staudinger**. 2019. Atlantic Salmon (*Salmo salar*) Climate Scenario Planning Pilot Draft Workshop Summary. NOAA Fisheries Greater Atlantic Region Office. 89 p.
<https://www.greateratlantic.fisheries.noaa.gov/policyseries/index.php/GARPS/article/view/15/14>
3. USGCRP, 2019: Fish: A USGCRP Sustained Assessment Product [Lustig, A., M. Dzaugis, D.R. Reidmiller, C.W. Avery, A. Jay, K.Reeves, A. Crimmins, R. Griffis, R. Muñoz, J. Peterson, **M. Staudinger** (eds.)]. U.S. Global Change Research Program, Washington, DC, USA.
4. Lipton, D., M. A. Rubenstein, S.R. Weiskopf, S. Carter, J. Peterson, L. Crozier, M. Fogarty, S. Gaichas, K.J.W. Hyde, T.L. Morelli, J. Morissette, H. Moustahfid, R. Muñoz, R. Poudel, **M.D. Staudinger**, C. Stock, L. Thompson, R. Waples, J.F. Weltzin, 2018: Ecosystems, Ecosystem Services, and Biodiversity. *In* Impacts, Risks, and Adaptation in the United States: Fourth National Climate Assessment, Volume II [Reidmiller, D.R., C.W. Avery, D.R. Easterling, K.E. Kunkel, K.L.M. Lewis, T.K. Maycock, and B.C. Stewart (eds.)]. U.S. Global Change Research Program, Washington, DC, USA. <https://doi.org/10.7930/NCA4.2018.CH7>
5. Jones, K.*, **M.D. Staudinger**. 2018. A regional analysis of long-term gray and harbor seal stranding events. DOI Northeast Climate Adaptation Science Center Report. Amherst, MA.
<https://www.sciencebase.gov/catalog/item/5b632948e4b006a11f7179f5>
6. Calandrino G.*, D. Pendleton, and **M.D. Staudinger**. 2018. A review of literature for gray and harbor seals. DOI Northeast Climate Adaptation Science Center Report. Amherst, MA.
7. Thompson, L.M., **Staudinger, M.D.**, S.L. Carter. 2015. Summarizing components of U.S. Department of Interior vulnerability assessments for targeting climate change adaptation planning. U.S. Geological Survey Open-File Report 2015-1110. <https://doi.org/10.3133/ofr20151110>
8. **Staudinger, M.D.**, T.L. Morelli, A.M. Bryan**. 2015. Integrating Climate Change into Northeast and Midwest State Wildlife Action Plans. DOI Northeast Climate Science Center Report, Amherst, Massachusetts. 205 p. Available at: <http://necsc.umass.edu/>
9. **Staudinger, M.D.**, Grimm, N., Staudt, A., Carter, S., Chapin, F.S.III, Kareiva, P., Ruckelshaus, M., B. Stein. 2012. Impacts of Climate Change on Biodiversity, Ecosystems, and Ecosystem Services: Technical Input to the 2013 National Climate Assessment. Cooperative Report to the 2013 National Climate Assessment. 296 p. Available at: <http://assessment.globalchange.gov>
10. **Staudinger, M.D.**, Juanes, F., Link, J. 2007. Prey size-predator size relationships of squid and their predators in the Northwest Atlantic. *In*: R. J. Olson and J. W. Young (eds). 2007. The role of squid in open ocean ecosystems. Report of a GLOBEC-CLIOTOP/PFRP workshop, 16-17 November 2006, Honolulu, Hawaii, USA. GLOBEC Report 24: 94 p.

DATA RELEASES

1. **Staudinger, M.D.**, Legett, H.**. 2023. Regional patterns in isotopic niche overlap between adult Roseate and Common terns in the Northwest Atlantic. U.S. Geological Survey data release, <https://doi.org/10.5066/P9LVSGAM>
<https://www.sciencebase.gov/catalog/item/6108533dd34ef8d70565c070>

2. **Staudinger, M.D.**, Legett, H.***, Dalton, R.*, Davis, A.* 2023. Massachusetts River Herring Daily Counts and Environmental data. U.S. Geological Survey data release, <https://doi.org/10.5066/P9TBIQVH>
<https://www.sciencebase.gov/catalog/item/5433fe35e4b095098ca8562e>
3. Dean, E.M., Cooper, A.R., Wang, L., Daniel, W.M., David, S., Ernzen, C., Gido, K.B., Hale, E., Haxton, T.J., Kelso, W., Leonard, N., Lido, C., Margraf, J., Porter, M., Pennock, C., Propst, D., Ross, J., **Staudinger, M.D.**, Whelan, G., and Infante, D.M., 2021, The North American Freshwater Migratory Fish Database (NAFMFD): Characterizing the migratory life histories of freshwater fishes of Canada, the United States, and Mexico: U.S. Geological Survey data release, <https://doi.org/10.5066/P9WDLLP0>
<https://www.sciencebase.gov/catalog/item/619d2dbcd34eb622f6951e8a>
4. **Staudinger, M.D.**, Bratton, R*. Legett, H***. 2021, Pre-breeding foraging ecology of three tern species nesting in the Gulf of Maine. U.S. Geological Survey Data Release, <https://doi.org/10.21429/e0v1-7q58>
5. Legett, H***. **Staudinger, M.D.** 2021. Pairwise comparisons of river herring run dynamics and environmental regimes among Massachusetts streams. U.S. Geological Survey Data Release, <https://doi.org/10.21429/cr80-fy95>
6. **Staudinger, M.D.**, Jones, K.* 2021. A regional analysis of long-term gray and harbor seal stranding events and the seasonal migrants. U.S. Geological Survey Data Release, <https://doi.org/10.21429/cjsa-ac35>

INVITED SEMINARS & WEBINARS (2020-2023)⁵

- 2023 **Staudinger, M.D.**, K.R. Burgio, H. Higgins, A. Lubeck, T. Melvin, T Rice, K. Terwilliger. *A regional synthesis of climate change information and tools to support the 2025 revisions of the State Wildlife Action Plans*. 78th Annual Northeast Fish and Wildlife Conference, Hersey PA, Oral Presentation.
- 2022 **Staudinger, M.D.** *Informing multi-scale climate adaptation strategies to shifts in phenology in coastal ecosystems* in the Special Session *Approaches to Co-producing Science for Natural Resource Adaptation*. 2022 National Adaptation Forum.
- 2022 **Staudinger, M.D.** *Interactive effects of climate change and wind energy development on forage fish populations in the Northeast U.S.* New York State Environmental Technical Working Group, 2022 State of the Science Workshop.
- 2022 Putnam, A., **Staudinger, M.D.** *A novel monitoring framework to assess intertidal biodiversity in mixed coarse substrate habitats across the Boston Harbor Islands*. Boston Harbor Ecosystem Network (BHEN) spring meeting.
- 2022 **Staudinger, M.D.** *The ecological importance of sand lance (Ammodytes sp.) in the Northwest Atlantic Ocean*. Department of Fisheries and Oceans Canada Seminar Series.
- 2022 Putnam, A., **Staudinger, M.D.** *Marine Invasive Species: A Watch List for the Gulf of Maine*. Northeast Aquatic Nuisance Species Spring 2022 Meeting and Panel.

⁵ Full list of presentations from 2008-2019 are listed as an appendix

- 2022 **Staudinger, M.D.** *Shifting fish resources in the Gulf of Maine*. Friends of Maine Coastal Islands National Wildlife Refuge Webinar.
- 2022 **Staudinger, M.D.** *It's complicated: Shifting phenology in the Gulf of Maine ecosystem*, in the special session *Phenological plasticity: from molecular mechanisms to ecological and evolutionary implications*. Annual Meeting Society for Integrative and Comparative Biology.
- 2021 **Staudinger, M.D.** *Climate impacts in the Gulf of Maine ecosystem*. Antioch University New England, Environmental Studies Department Colloquium.
- 2021 **Staudinger, M.D.** *We're All in the Same Boat: Science, policy, and economic issues facing the Gulf of Maine and Scotian Shelf region*. Panelist and speaker for the NERACOOS and CIOOS webinar series.
- 2021 **Staudinger, M.D.** *Phenological diversity in the Gulf of Maine*. East Carolina University, Department of Biology Departmental Seminar.
- 2020 **Staudinger, M.D.** *How is changing seasonality impacting nesting seabirds in the Gulf of Maine?* Avian Offshore Wind Dream Team.
- 2020 **Staudinger, M.D.** *The parallels between climate change and COVID-19*. Western Massachusetts Climate Youth Summit. Hitchcock Center.
- 2020 **Staudinger, M.D.** *Biological thresholds to sea level rise and coastal storms*. Northeast Climate Adaptation Science Center Workshop.
- 2020 **Staudinger, M.D.** *Climate change impacts on the Gulf of Maine Ecosystem*. Shoals Marine Laboratory.
- 2020 **Staudinger, M.D.** *Shifting phenology in the Gulf of Maine: Implications and research opportunities for estuarine ecosystems*. New England Estuarine Research Society 50th Anniversary Meeting.
- 2020 **Staudinger, M.D.** *It's about time: A synthesis of changing phenology in the Gulf of Maine Ecosystem*. Cape Cod Natural History Conference.
- 2020 **Staudinger, M.D.** *Climate impacts on Roseate terns in the Northeast United States*. North Atlantic Roseate Tern Trans-Atlantic Web Seminar.
- 2020 **Staudinger, M.D.** *Timing is Everything: Shifting in Phenology in the Gulf of Maine*. UMass Amherst Environmental Conservation Departmental Seminar. Speed talk.

PRESENTATIONS (2020-2024)⁶ *indicates students or **postdocs I have mentored or trained

- 2024 Guitart, S*. **M.D. Staudinger**. GoPros, Trail Cameras, & Tern Chick Provisioning Monitoring. Pacific Seabird Group. Oral presentation.
- 2024 Volmar, E., A. Teffer, C. Lenord, **M.D. Staudinger**. The Life and Death of Staccato: An Art-Science Collaboration. 9th World Fisheries Congress. Oral presentation.
- 2023 Peck, E.***, J. Walker**, K. Ackerman, J. Carr, Z. Defne, N. Ganju, T. Cook, J. Woodruff, B. Yellen, M. Correll, M. Hartley, B. Wilson, A. Besterman, L. Deegan, R. Jakuba, **M.D. Staudinger**. An assessment of salt marsh vulnerability and restoration potential in the Northeastern United States using physical and ecological indicators. European Geosciences Union (EGU). Oral presentation.

⁶ Full list of presentations from 2008-2019 listed as an appendix

- 2023 Burgio, K.R.***, K. Cruz*, N. Jacques*, E. Murley*, H. Higgins*, A. Lubeck, T. Melvin, T. Rice, K. Terwilliger, **M.D. Staudinger**. *A Review of Biological Responses and Vulnerability of At-Risk Vernal Pool Species to Climate Change to Support the 2025 Revisions of the State Wildlife Action Plans*. 78th Annual Northeast Fish and Wildlife Conference, Hersey PA, Poster Presentation.
- 2023 **Staudinger, M.D.**, K.R. Burgio**, H. Higgins*, A. Lubeck, T. Melvin, T. Rice, K. Terwilliger. A review of biological responses of diadromous fishes to climate change to support the 2025 revisions of the State Wildlife Action Plans. 5th International Symposium on the Effects of Climate Change on the World's Ocean (ECCWO), Bergen Norway. Poster presentation.
- 2023 **Staudinger, M.D.**, M. Albert, J. Garner, L. Lockwood, A. Putnam. A novel approach for assessing intertidal biodiversity in anticipation of coastal adaptation projects and climate change impacts. ECCWO, Bergen Norway. Oral presentation.
- 2023 Burgio, K.R.***, K. Cruz*, N. Jacques*, E. Murley*, H. Higgins*, A. Lubeck, T. Melvin, T. Rice, K. Terwilliger, **M.D. Staudinger**. A review of biological responses of diadromous fishes to climate change to support the 2025 revisions of the State Wildlife Action Plans. SNEC-NED Joint meeting. Poster presentation.
- 2023 Burgoff, J., D. Bishop, A. Roy, **M.D. Staudinger**, A. Jordaan. Comparing Age and Growth of Juvenile River Herring in Freshwater and Estuarine Environments. SNEC-NED Joint meeting. Poster presentation.
- 2023 Garner, J.*, **M.D. Staudinger**, A. Jordaan, J. Sheppard, G. Hayes*, E. Kozol*. It's About Time: Seasonal eDNA Abundance Calibration for Three Diadromous Species. SNEC-NED Joint meeting. Poster presentation.
- 2023 Kozol, E.*, J. Garner*, **M.D. Staudinger**. Environmental DNA's Usage and Accessibility in Southeastern Massachusetts Monitoring Agencies. SNEC-NED Joint meeting. Poster presentation.
- 2023 Roy, A., M. Devine*, L. Guo*, M. Marjadi*, M.G. Slocombe, J. Benway, J. Davis, K. Job, A. Jordaan, S. McCormick, **M.D. Staudinger**, K. Sprinkle. Juvenile River Herring Habitat Use in the Connecticut River. SNEC-NED Joint meeting. Oral presentation.
- 2022 **Staudinger, M.D.**, D. Pendleton, K. Yakola*, A. Jordaan. Phenological variation in forage fishes and trophic consequences for top predators in the Gulf of Maine. ICES Small Pelagic Fish Symposium. Lisbon, Portugal. Oral presentation.
- 2022 Dias, B.***, L. Guo**, **M.D. Staudinger**. A keystone issue: managing forage fishes in a changing climate. ICES Small Pelagic Fish Symposium. Lisbon, Portugal. Poster presentation.
- 2022 Pendleton, D.E., M.W. Tingley, L. G. Ganley**, K. Friedland, C. Mayo, M.W. Brown, B.E. McKenna, A. Jordaan, **M.D. Staudinger**. Decadal-scale phenology and seasonal climate drivers of North Atlantic right and other baleen whales in a rapidly warming marine ecosystem. North Atlantic Right Whale Consortium (NARWC). Oral presentation.
- 2022 Putnam, A.*, S. Endyke*, L. Lockwood*, **M.D. Staudinger**. Sea squirts, shrimps, and seaweeds, oh my! Gulf of Maine invaders and who to watch out for. RISCC Symposium. Oral presentation.

- 2022 Montefiore, L.*, N.G. Nelson, **M.D. Staudinger**, A. Terando. Assessing Estuarine Vulnerability to Water Quality Change under Future Climate and Land-Use Conditions. Gulf of Mexico Conference (GOMCON). Oral presentation.
- 2022 Dimkovikj, V.H.*, **M.D. Staudinger**, C.A.M France, M. Vecchione. Using stable isotopes from museum specimens of *Illex illecebrosus* to infer trophic changes across pre-industrial to modern eras of New England fisheries. CIAC Tri-annual meeting. Oral presentation.
- 2021 **Staudinger, M.D.**, M. Rubega, L. Craig, G. Clucas, C. Mostello, J. Walsh, T. Wilson. Pilot Monitoring of Tern Foraging Ecology: Lessons learned from Summer 2021. Roseate Tern Recovery Joint Meeting with the Atlantic Marine Bird Cooperative. Oral presentation.
- 2021 Ajmani, A.M.*, Holland, A.R., **M.D. Staudinger**, J. Woodruff. Integrating tribal perspectives on climate change into mainstream climate science education. CERF annual Meeting. Oral presentation.
- 2021 **Staudinger, M.D.**, E. Crisfield, K. Terwilliger. How is climate change interacting with non-climate threats to exacerbate and complicate wildlife management in the Northeast region? Northeast Association of Fish & Wildlife Agencies annual meeting. Oral presentation.
- 2020 **Staudinger, M.D.** How does climate change affect emergent properties of coastal ecosystems? Roseate tern Recovery Working Group. Oral presentation.
- 2020 Legett, H.D.,** **M.D. Staudinger**. Pre-breeding foraging ecology of Common and Roseate terns across their Northern breeding range. Roseate tern Recovery Working Group. Oral presentation.
- 2020 Legett, H.D.***, D. Lyons, P. Shannon, L. Welch, K. Yakola, **M.D. Staudinger**. Shifts in diet impact the reproductive success of terns in the Gulf of Maine. RARGOM annual meeting. Speed talk.
- 2020 Lockwood, L*, A. Putnam*, J. Taylor*, M. Albert, **M.D. Staudinger**. A synthesis of intertidal and nearshore biodiversity in the Boston Harbor Islands National Recreation Area in support of coastal adaptation to sea level rise. Speed talk.
- 2020 Davis, A.* **M.D. Staudinger**. New England's Underutilized Seafood Species: Defining And Exploring Marketplace Potential In A Changing Climate. Oral presentation.
- 2020 **Staudinger, M.D.** The role of sand lances (*Ammodytes* sp.) in the Northwest Atlantic Ecosystem. AFS. Oral presentation.
- 2020 Davis, A.* , **M.D. Staudinger**, A. Nolden, E. Markowitz, K. Wicks. Assessing Consumer Access and Perceptions Towards Underutilized Fish Species: Key Ingredients for Cooking Up Future Sustainable Seafood A-fish-ionados. SNEC AFS. Oral presentation.
- 2020 **Staudinger, M.D.** The role of sand lances (*Ammodytes* sp.) in the Northwest Atlantic Ecosystem. SNEC AFS. Oral presentation.

TEACHING EXPERIENCE

- 2024 **Instructor**, University of Maine, Walpole ME
SMS 491(Undergraduate Semester-by-the-Sea program): *Coastal Marine Ecology*
- 2024 **Instructor**, University of Maine, Orono ME
SMS 598 (Graduate seminar): *Climate Change Impacts on Marine Resources*
- 2021 **Co-Instructor**, UMass Amherst, MA

- Geology 497K (Graduate, Undergraduate seminar): *Indigenous Knowledge and Climate Adaptation Science*
- 2016 **Co-Instructor**, UMass Amherst, MA
ECO 691 (Graduate, Undergraduate seminar): *Ecological Responses to Climate Change*
- 2013 **Instructor**, UNCW, Wilmington NC
BIO 585 (Graduate seminar): *Stable Isotopes in Ecology*
- 2013 **Climate Expert and Coach**, USF&WS National Conservation Training Center (NCTC), WV
ALC 3192 (Professional development): *Addressing Climate-related Uncertainty for Natural Resource Management*
- 2012 **Climate Expert**, USF&WS NCTC, WV
ALC 3196 (Professional development): *Decision Analysis for Climate Change*
- 2007 **Co-Instructor**, UMass Amherst, MA
BIOL 497 (Undergraduate course with field experience) *Tropical Field Biology*
- 2003 **Naturalist**, Ward Melville Heritage Organization, NY
Coastal Ecology Program at the Marine Conservation Center
- 2001 **Teaching Assistant**, Stony Brook University, NY
BIO 150 (Undergraduate course with laboratory): *Introduction to Biology*

GUEST LECTURES

- 2022 **Guest Lecturer**, UMass Amherst
ECO 697 (Undergraduate seminar): Human Dimensions of Natural Resources: *Natural Resources Management, Climate Science & Federal Collaborations*
- 2017 **Guest Lecturer**, UMass Amherst
ECO 697 (Undergraduate seminar): Human Dimensions of Natural Resources: *Natural Resources Management, Climate Science & Federal Collaborations*
- 2015 **Guest Lecturer**, Coast Guard Academy, New London, CT
CGA 5498 (Undergraduate seminar): Climate Change Science: *Climate change impacts on coastal and marine biodiversity*
- 2014 **Guest Lecturer**, UMass Amherst, MA
NRC 597 (Undergraduate seminar): Conservation and Animal Behavior: *The influence of size and behavior to predation*
- 2012 **Guest Lecturer**, Univ. of Missouri, MO
FW 8001 (Graduate seminar): Advanced Fisheries Science: *The impacts of climate change on fisheries: conservation and management implications*
- 2009 **Guest Lecturer**, UMass Amherst, MA
BIOL 542 (Graduate seminar): Ichthyology: *Quantifying trophic interactions among marine organisms*
- 2008 **Guest Lecturer**, UMass Amherst, MA
WFCON 470 (Graduate seminar): Ecology of Fish: *Climate change and the effects on fish populations*
- 2002 **Guest Lecturer**, Stony Brook University, NY
MAR 385 (Undergraduate seminar): Fish Ecology: *Indirect effects of fishing*

STUDENT MENTORING

Cooperating Faculty Member: National Science Foundation 3-D Ecosystem Science National Research Traineeship. <https://umaine.edu/ecosystem-science/> (2024-present)

Postdoctoral Mentor: Hsiao-Yun Chang (2024-present); Amy Teffer, UMass Amherst (2022-present); Henry Legett, USGS (2020); Holly Goyert, UMass Amherst (2017-2018); Emily Powell, NE CASC, North Atlantic LCC (2016-2018); Alex Bryan (2015-2017)

ORISE Fellowship Mentor: Kevin Burgio (post-doctoral, 2022-2024), Erin Peck ORISE (post-doctoral, 2022-2023), Julie Walker ORISE (post-doctoral, 2022-2023), Alice Lubeck (post-Masters, 2022-present), Hanusia Higgins (PhD, 2022-2024)

Science to Action Fellow Program Mentor: Host and project mentor to visiting PhD Student Lise Montefiore on *Mapping Estuarine Vulnerability to Water Quality Change Under Future Climate and Land Use Conditions* (2020-2021)

Northeast Climate Adaptation Science Center Diversity Equity and Inclusion Fellow Mentor: Sponsor and mentor to two of the first ever DEI fellows in this program, Asha Ajmani and Meghna Marjadi (2020-2021).

NE CASC Fellows Program Mentor: On average 20-25 students per year for bi-weekly meetings and professional development activities. <http://necsc.umass.edu/people/fellows> (2014-2023)

Steering Committee Member, Undergraduate Advisor, Summer Internship Host: Five College Coastal and Marine Science Program. www.fivecolleges.edu/marine (2016-present)

USGS-NSF INTERN and GRIP Program Mentor: Henry Legett, Purdue Univ. (2019); Rebecca Dalton, Duke Univ. (2018)

Doris Duke Mentor: Angel Checo Reynoso, Anne Pierre (2023)

Undergraduate Honors College Committee Chair:

Bolonga Travers. *Phenological variation in the foraging ecology of Roseate and Common terns in Buzzards Bay, MA*. UMass Amherst, 2022-2024

Anna Karapin-Sprngorum. *Evaluation of plastic in seabird nests and analysis of nest composition relative to the environment*. Mount Holyoke College, 2022-2023

Lindsay Yue. *Interspecific and intraspecific variation in the foraging ecology of terns and black guillemots in the Gulf of Maine*. Amherst College. 2019-2021

Halley Steinmetz. *Analyzing the effects of coccolithophore concentration on the relationship between vertical absorption coefficient and Secchi disk depth*. UMass Amherst. 2018-2019

Rachel Bratton. *Using stable isotope analysis of eggshell membrane to examine the foraging ecology of three tern species nesting in the Gulf of Maine*. UMass Amherst. 2017-2019

Gabrielle Calandrino. *Environmental and ecological factors affecting gray and harbor seal haul-out behavior on duck island, ME*. UMass Amherst. 2015-2017

Maria Bell. *Seasonal food habits of wahoo (Acanthocybium solandri) caught off the North and South Carolina coasts*. UNCW. 2010-2012

Natural History Research Experiences Mentor: Smithsonian Institution and Coastal Carolina Univ. Valerie Hartigan (2013-2014)

Graduate Committees:

- Jerelle Jesse, PhD Committee Member, UME. 2024-present
- Anne Hayden, PhD Committee Member, UME. 2024-present
- Julia Barron Luddy, MSc Committee Member, UME. 2024-present
- Kailee Berge, MSc Committee Member, UME. 2024-present
- Aly Putnam, PhD Chair, UMass Amherst. *Climate impacts and vulnerability of intertidal biodiversity in the Boston Harbor*. 2021-present
- James Garner, PhD Chair: *Using eDNA qPCR techniques to understand climate change and restoration impacts on diadromous fish populations on a watershed scale*. UMass Amherst. 2020-present
- Sarah Guitart, MSc Chair: *A novel trail camera diet monitoring protocol and its capacity to reflect Common and Roseate Tern chick provisioning*. 2022-present
- Maina Handmaker, PhD Committee Member, UMass Amherst. 2022-present
- Julian Garcia Walther, PhD Committee Member, UMass Amherst. *Regional effects of sea level rise on the future habitat availability of red knots (*Calidris canutus roselaari*) in NW Mexico*. 2022-present
- Lucy Lockwood, PhD Committee Member, UMass Boston. 2020-present
- Jordanna Barley, PhD Committee Member, UMass Amherst. *Climate change effects on marine species physiology and biogeography*. 2021-2023
- Meghna Marjadi, PhD Committee Member, *Timing is Everything: Climate change implications for phenological events and reproductive success in river herring*. UMass Amherst. 2019-2023
- Asha Ajmani, PhD Chair: *Climate impacts on diadromous fishes and their use as subsistence foods to Tribal Nations in the Northeast U.S.* UMass Amherst. 2020-2022
- Andrew Villeneuve, MSc Committee Member, UMass Amherst. 2018-2020
- Amanda Davis, MSc Chair: *New England's underutilized seafood species: defining and Exploring marketplace potential in a changing climate*. UMass Amherst. 2017-2020
- Rebecca Dalton, PhD Committee Member, *Climate change, phenological shifts, and species interactions: Case studies in subalpine plant and migratory fish populations*. Duke University. 2017-2019
- Keenan Yakola, MSc Chair, *An examination of tern diets in a changing Gulf of Maine*. UMass Amherst. 2016-2019
- Bia Dias, PhD Committee Member, *Temporal and spatial management tools for marine ecosystems: case studies from northern Brazil and Northeastern United States*. UMass Amherst. 2015-2019
- Ryan McAlarney, MSc Committee Member, UNCW. 2010-2015
- Steven Mattocks, MSc Committee Member, *Ecological consequences of lost anadromous forage fish in freshwater ecosystems*. UMass Amherst. 2015-2017
- Mariella Peschiera, MSc Committee Member, Michigan State Univ. 2012-2015
- Nick Sievert, MSc Committee Member, Univ. of Missouri Columbia. 2012-2014
- Steve Poland, MSc Committee Member, *trophic dynamics of large pelagic fish predators in the U.S. South Atlantic*. UNCW. 2012-2014
- Amy Teffer, MSc Committee Member, *Heavy metal food chain: Relating feeding ecology and mercury bioaccumulation of southern New England's top pelagic predators*. UMass Amherst. 2008-2012

SYNERGISTIC ACTIVITIES

Working groups

- *Scientific and Statistical Committee Member*, New England Fishery Management Council (2024-2026)
- *Maine Climate Council's Coastal and Marine Working Group*, Sub-Committee on Fisheries and Aquaculture: Develop new and revise past strategies for climate change mitigation and adaptation of Maine's clean energy economy and natural resources industries as well as the protection of Maine's environment and working lands and waters (2023-2024)
- *Cumulative Impacts on the Benthos Working Group*, as part of: Degraer, S., Z.L. Hutchison, C. LoBue, K.A. Williams, J. Gulka, and E. Jenkins. 2021. Benthos Workgroup Report for the State of the Science Workshop on Wildlife and Offshore Wind Energy 2020: Cumulative Impacts. Report to the New York State Energy Research and Development Authority (NYSERDA). Albany, NY. 45 pp. <http://www.nyetwg.com/2020-workgroups> (2020-2021)
- *Gulf of Maine 2050 Working Group*: Co-developed temperature and circulation scenarios for white paper and publication supporting the GOM2050 International Conference; working group speaker at GOM2050 conference (2019)
- *Atlantic Marine Bird Cooperative (AMBC) Forage Fish Working Group* (2019-present)
- *Northeast Climate Change Working Group* (2019-2023)
- *North American Freshwater Migratory Fish Database Working Group* (2019)
- *Salt Marsh Working Group*, Massachusetts Ecosystem Climate Adaptation Network (Mass ECAN) (2018-2023)
- *CASC Research Evaluation Working Group* (2018-2023)
- *Roseate Tern Recovery Working Group* (2015-present)

Invited Expert:

- **Participant**, *Advancing Fishing Community Resilience and Adaptation in a Changing Climate - East Coast Workshop*, NOAA (2024)
- **Participant**, *Great Gull Island Roseate Terns - Situation Model Workshop*, UConn and Mass Audubon (2022)
- **Panelist**, Science Café, hosted by the Northeastern Marine Science Center to speak on climate impacts on biodiversity in the Gulf of Maine (2020)
- **Reviewer**, *Stellwagen Bank National Marine Sanctuary Condition Report*, Office of National Marine Sanctuaries (ONMS) (2018)
- **Participant**, *Atlantic Salmon Climate Scenario Planning Pilot Workshop*, NOAA GARFO Portland, ME (2017)
- **Participant**, *North Atlantic Right Whale Climate Scenario Planning Workshop*, NOAA GARFO Gloucester, MA (2018)
- **Participant**, *Protected Species Climate Vulnerability Assessment Workshop* for marine mammals and sea turtles, NOAA Fisheries Office of Science and Technology and Office of Protected Resources, Silver Springs, MD (2015-2017)

Tribal Engagement

- *EPA Clean Water Act Section 106/319 Tribal Training*. Invited Presenter on climate smart culvert design and installation, aquatic connectivity and cold water resources (2022): <https://www.usgs.gov/centers/new-england-water-science-center/news/tribal-and-first-nation-partners-new-england-and-new>
- *USET Tribal Climate Resilience Camp*. Facilitator/Knowledge Sharer for Northeast Tribal Cohort (2021)
- *USET Virtual Tribal Climate Adaptation Plan Writing Retreat*. Led discussions on sea-level rise and coastal impacts and provided technical reviews of draft adaptation plans (2021)

Diversity, Equity, Inclusion and Environmental Justice

- **DEIC Committee**, School of Marine Sciences, University of Maine (2024-present)
- **Training**, *Collectors, Nightlights, and Allies, Oh My! Advice for Building Cross Racial Mentoring Relationships*, Mentoring Workshop, USGS Northeast Region (2023)
- **World Thinking Day**, *Women in Climate Science*, NY Girl Scouts Daisy/Brownie/Juniors session presentation and interactive youth discussion (2022)
- **Working Group Member**, *CASC BIPOC Mentoring* (2021-present)
- **Training**, *Equitable Negotiation on the Coast* Online Training, hosted by Chesapeake Bay National Estuarine Research Reserve, VA (2021)
- **Council Member**, *CASC Justice, Equity, Diversity, and Inclusion (JEDI)* (2020-2021), Subgroup member on Targeting Research and Funding (2020-present)
- **Mentor**, *NE CASC Diversity Equity and Inclusion Fellow*: Sponsor and mentor to two of the first ever DEI fellows in this program (2020-2021)

Symposium or Workshop Organizer:

- *Incorporating Climate Change into Northeastern State Wildlife Action Plans*. 79th Annual Northeast Fish & Wildlife Conference (2024)
- *Monitoring Changing Shores: Methods, Management, and Data for the Future*: Coastal & Estuarine Research Federation Conference (2021) <https://conference.cerf.science/2021-workshop--monitoring-changing-shores--methods--management--and-data-for-the-future>
- *Integrating Climate Information into Regional Fish & Wildlife Planning*. NE CASC Regional Science Meeting (2021)
- *Pressing Management Challenges in Climate Adaptation*. NE CASC Regional Science Meeting (2021)
- *Emerging Threats and Unintended Consequences: How Climate Change Exacerbates and Complicates Wildlife Management*. 76th Annual Northeast Fish & Wildlife Conference, (Rescheduled online for April 2021 due to COVID)
- *Tern Diet Studies*: Session at the Roseate Tern Recovery Working Group, Online (2020)
- *Biological Thresholds in the Context of Climate Change*, NE CASC Workshop (2020)
- *Forage Fish and Climate Adaptation: Updates on Science and Management*. 150th Annual Meeting of the American Fisheries Society (AFS), Columbus, OH (2020)

- *Addressing Threats from Climate Change and Other Stressors in the 2025 State Wildlife Action Plans*. Northeast Wildlife Action Plan Coordinators Meeting (2020)
- *Student-Professional Workshop*. Southern New England Chapter of the AFS Winter Meeting, Cambridge MA (2020)
- *From the Seas to the Mountains, Momentum is Building to Support Fish and Wildlife Adaptation to Climate Change*. 75th Annual Northeast Fish & Wildlife Conference, Groton CT (2019)
- *How are we Adapting to Coastal Threats? Emerging Management Approaches to Support Coastal Resilience*. National Adaptation Forum, Madison WI (2019)
- Tri-annual meeting of the Cephalopod International Advisory Council Conference, St. Petersburg, FL (2018)
- *Emergent Properties of Aquatic, Coastal, and Marine Ecosystems due to Climate Change*. AFS Annual Meeting, Atlantic City, NJ (2018)
- *Monsters of Climate Change Workshop*. AFS 2018 Annual Meeting, Atlantic City, NJ (2018)
- *Scientific Communication and Grant Writing Principles Workshop*. Southern New England Chapter of the AFS, Mystic, CT (2017)
- *Communicating Climate Science to Multiple Audiences: Why we do it, and how to plan for it*. National Climate Science Centers Student and Early Career Training. UMass Amherst (2016)
- *Regional Association for Research on the Gulf of Maine (RARGOM) Marine Phenology Working Group Workshop*. Gulf of Maine Research Institute, Portland ME (2016)
- *Documented and Documenting Effects of Climate Change on Inland Freshwater Fishes*. AFS Annual Meeting (2016)
- *Assessing Climate Change Impacts and Evaluating Responses Workshop*, Gordon and Betty Moore Foundation, Palo Alto, CA (2012)
- *Early Life History of Cephalopods*, 34th Annual Larval Fish Conference, Wilmington, NC (2011)

Outreach, Communication, and Training:

- **Panelist**, *Thanking the Oceans*, Science Café, Northeastern Marine Science Center (2020)
- **Panelist**, *Climate Change: Changing Species, Soils, and Seas*, Life Science Café (2019)
- **Panelist**, [Climate Change: What do Recent Dire Reports Mean for Maine?](#) NPR (2018)
- **Climate Action Tool Development Team**, The Massachusetts Wildlife Climate Action Tool climateactiontool.org (2015-2018)
- **Founder**, Editor in Chief, Early Career Climate Forum. eccforum.org (2012-2018)
- **Presenter**, *Adventures When Nothing Goes to Plan: A Story Slam from Wildlife Scientists*, Hitchcock Center for the Environment, Hadley, MA (2018)
- **Guest Lecture**, Holyoke High School, Holyoke, MA, AP Environmental Science (2014)
- **Workshop Presenter**, Massachusetts Envirothon Workshop on Climate Change Impacts on Biodiversity, UMass Amherst (2014)
- **Guest Scientist**, “The Scientist is in” program, Sant Ocean Hall, Smithsonian’s National Museum of Natural History, Washington DC (2013)
- **Invited Guest Post**, Deep Sea News.com’s [“Direct from the bench and the trench”](#) series (2012)

- **Guest Speaker**, SC Dept of Natural Resource's "Life's better outdoors" radio program (2011)

Service:

- **Graduate Admission Committee**, University of Maine, School of Marine Sciences, (2024-present)
- **Semester-by-the-Sea Planning Committee**, University of Maine, School of Marine Sciences, (2024-present)
- **Reviewer**, AFS Marine Fisheries Section Student Travel Award applications (2017-2018)
- **Student Presentation Judge**, SNEC AFS Bi-annual Meetings (2014, 2017, 2018, 2023)
- **Ad Hoc Reviewer on publications and RFPs**: Biology Open; Bulletin of Marine Science; Convention on Biological Diversity; Deep Sea Research II; Ecological Applications; Ecology; Ethology Ecology & Evolution; Fishery Bulletin; Hydrobiology; Marine Biodiversity; Marine Biology; Marine Ecology-Progress Series; Marine Environmental Research; Marine Mammal Science; Marine Pollution Bulletin; Monterey Bay Aquarium Seafood Watch; North American Journal of Fisheries Management; Northeastern Naturalist; USDA Forest Service Northern Institute of Applied Climate Science (NIACS); PLoS One; USGS FSP
- **RFP reviewer**: Alaska and New Jersey Sea Grant; NOAA Saltonstall-Kennedy; Northeast, Southeast and Pacific Island Climate Adaptation Science Centers

TRAININGS

- 2019 *National Research Mentoring Network Training*, UMass Amherst, Amherst MA
- 2014 *Spatial Statistical Network Models Workshop*, AFS Idaho Chapter
- 2012 *Northwest Climate Science Center Bootcamp*, Continuing Education, Oregon State University's H.J. Andrews Forest (HJA), Blue River, OR
- 2012 *Basic/Intermediate GIS for Fisheries Biologists*, Continuing Education, AFS Annual Meeting, Minneapolis-St Paul, MN
- 2012 *Climate Change Vulnerability Assessments*, U.S. Fish and Wildlife Service National Conservation Training Center, Shepherdstown, WV

APPENDIX

INVITED PRESENTATIONS 2008-2019

- 2019 **Staudinger, M.D.**, Pershing, A.J., M. Alexander, D. Brickman, J. Scott, E. Curchitser, D. Brady, T. Diamond, L. McClenachan, K. Mills, O. Nichols, D. Pendleton, N. Record, Y. Wang. *Temperature and Circulation Conditions in the Gulf of Maine in 2050 and their Expected Impacts*. GOM2050 Meeting.
- 2019 **Staudinger, M.D.**, C. Hudak, O. Nichols. *It's about time: A synthesis of changing phenology in the Gulf of Maine Ecosystem*. State of Wellfleet Harbor Conference.
- 2019 **Staudinger, M.D.** *Shifts in timing of the spring spawning run: Implications of climate change and population recovery*. River Herring Network Annual Meeting.
- 2019 **Staudinger, M.D.** *Climate change in the Northeast*. Northeast Fish and Wildlife Diversity Technical Committee Annual Meeting.
- 2019 **Staudinger, M.D.**, R. Bratton, H. Legett. *Understanding the pre-breeding foraging ecology of seabirds along the U.S. Atlantic coast using stable isotopes as ecological tracers*. Coastal Waterbird Cooperators Annual Meeting.
- 2019 Sheppard, J., R. Dalton, **M.D. Staudinger**. *Shifts in phenology of the spring spawning of adult alewife (*Alosa pseudoharengus*): Impacts of climate and population recovery*. Symposium: If the Time is Right: Phenology Match and Mismatches Across Ecosystems. AFS Annual Meeting.
- 2019 **Staudinger, M.D.** *Climate-induced shifts in phenology in the Gulf of Maine: Implications and potential adaptation strategies*. Acadia National Park Staff Seminar.
- 2019 **Staudinger, M.D.** *Timing is everything: how fish and wildlife are responding to climate change through shifts in phenology in the Gulf of Maine*. Schoodic Institute at Acadia National Park public seminar.
- 2019 **Staudinger, M.D.** *Climate Adaptation Science for Coastal Habitats, Species, and Ecosystems*. NE CASC Seminar Series.
- 2018 **Staudinger, M.D.** *Climate-induced shifts in phenology: Case studies of fish, whales, and seabirds in the Gulf of Maine*. School of Marine Science and Technology, UMass Dartmouth, Departmental Seminar.
- 2018 **Staudinger, M.D.** *Time is of the Essence: Climate-Induced Shifts in Phenology*. Monsters of Climate Science Workshop, AFS Annual Meeting.
- 2018 **Staudinger, M.D.** *How is the Northeast climate changing?* Cape Ann Innovators Collaborative, Gloucester MA.
- 2018 **Staudinger, M.D.** *Integrating climate science into State conservation planning and actions: opportunities and challenges for the coming decade*. American Association of the Advancement of Science (AAAS) Annual Meeting.
- 2017 **Staudinger, M.D.** *The ecological role of sand lance in the Gulf of Maine through a climate change lens*. Sand lance in the Northeast Workshop, Parker River National Wildlife Refuge.
- 2017 **Staudinger, M.D.** *Evaluating shifts in phenology in river herring in New England Watersheds*. River Herring Technical Expert Working Group (TEWG).

- 2016 **Staudinger, M.D.** *How vulnerable are river herring to climate change?* River Herring Network Annual Meeting.
- 2016 **Staudinger, M.D.**, and A. Jordaan. *The times they are a changing: Shifting phenology in Northeast coastal ecosystems.* NE CASC Seminar Series.
- 2016 Rustad, L., K. Nislow, C. Neill, T.L. Morelli, and **M.D. Staudinger**. *The risk of aquatic and terrestrial ecosystems to ecological drought.* Ecological Drought – Impacts, Resistance and Recovery. NE CSC Ecological Drought Workshop.
- 2016 Markowitz, E. and **M.D. Staudinger**. *Leveraging web-based platforms to support and enhance climate change communication.* NE CSC Seminar Series.
- 2015 Jackson S., **M.D. Staudinger**, and J. O’Leary. *Massachusetts Wildlife Climate Action Tool: inspiring local action and on-the-ground adaptation.* NE CSC Seminar Series.
- 2015 **Staudinger, M.D.**, T.L. Morelli, and A. Bryan. *Integrating Climate Change into the State Wildlife Action Plans.* NE CSC Seminar Series.
- 2015 **Staudinger, M.D.** *Climate change impacts on coastal and marine ecosystems in the Northeast United States.* Environmental Defense Fund, Northeast Coastal Ecosystem Stressors and Climate Science Expert Workshop.
- 2014 **Staudinger, M.D.** *Climate change impacts in the Northeast and Midwestern United States.* Shifting Seasons: Building Tribal Capacity for Climate Change Adaptation.
- 2014 **Staudinger, M.D.** *Climate impacts on ecological systems in the Northeastern United States.* Massachusetts Division of Fisheries and Wildlife.
- 2013 Burkett, V. and **M.D. Staudinger**. *Overview of the 2013 National Climate Assessment.* National Conservation Training Center’s Safeguarding Wildlife from Climate Change Webinar Series.
- 2012 **Staudinger, M.D.** *Climate change impacts on biodiversity, ecosystems, and ecosystem services.* Developing a federal response to the President's Council of Advisors on Science and Technology Report on Sustaining Environmental Capital, Inter-Federal Agency Workshop.
- 2012 **Staudinger, M.D.** *Impacts of global change on biodiversity, ecosystem processes, and ecosystem services in the United States.* University of Missouri, Department of Fisheries and Wildlife Sciences.
- 2010 **Staudinger, M.D.** *Vulnerability of longfin inshore squid (Loligo pealeii) to predation: the influence of relative prey size and behavior.* UNCW American Fisheries Society Student Subunit.
- 2008 **Staudinger, M.D.** *Competition for forage between predators and fisheries: A case study.* Marine Fish Conservation Network, Mid-Atlantic Forage Fish Workshop.

PRESENTATIONS 2002-2019

- 2019 Pendleton, D.E., **M.D. Staudinger, M.** Tingley, R.D. Kenney, L. Ganley*, C.A. Mayo, A. Jordaan. *Changing phenology of large whales in Cape Cod Bay and its implications for management.* GOM2050 Conference. Poster presentation.
- 2019 Davis, A.*, **M.D. Staudinger**, A. Nolden, E. Markowitz, K. Wicks. *Identifying New England’s “Underutilized Species” with a Quantitative Approach and Assessing Availability to Consumers in a Changing Climate.* GOM2050 Conference. Poster presentation.

- 2019 **Staudinger, M.D.**, Pendleton, D.E., L. Ganley, C. Sutherland, J. Adams, A. Jordaan, C. Mayo. Assessing vessel traffic threats to right whales in the Gulf of Maine: A framework for assessing risk given anthropogenic and climatic factors. GOM2050 Conference. Poster presentation.
- 2019 **Staudinger, M.D.**, R. Bratton*, H. Legett*. Understanding the pre-breeding foraging ecology of seabirds along the U.S. Atlantic coast using stable isotopes as ecological tracers. Gulf of Maine Seabird Working Group. Oral presentation.
- 2019 Pendleton, D.E., M.D. **Staudinger, M.** Tingley, R.D. Kenney, L. Ganley*, C.A. Mayo, A. Jordaan. Changing phenology of large whales in Cape Cod Bay and its implications for management. 75th Annual Northeast Fish & Wildlife Conference, Groton CT. Oral presentation.
- 2019 **Staudinger, M.D.**, E. Powell**. Critical thresholds, management approaches, and ecosystem services in support of socio-ecological adaptation in the coastal zone. 75th Annual Northeast Fish & Wildlife Conference, Groton CT. Oral presentation.
- 2019 Yakola, K. A.* Jordaan, P. Shannon, S. Kress, **M.D. Staudinger**. Long-term Trends and Potential Drivers of Dietary Variability in Tern Diet in the Gulf of Maine, USA. Pacific Seabird Working Group Meeting. Oral presentation.
- 2018 **Staudinger, M.D.**, H. Goyert, L. Welch. The role of sand lance in the Northwest Atlantic ecosystem. Annual meeting of the Roseate tern Working Group. Oral presentation.
- 2018 **Staudinger, M.D.**, R. Bratton, K. Yakola. Using stable isotopes to assess the pre-breeding foraging ecology of seabirds along the US Atlantic coast. Annual meeting of the Roseate tern Working Group. Oral presentation.
- 2018 **Staudinger, M.D.**, S. Jackson, K. Nislow, J. Read, J. Sheppard. Improving fisheries science and management in a warming world: Examples from the Climate Adaptation Science Centers. AFS Annual Meeting. Oral presentation.
- 2018 **Staudinger, M.D.**, S. Gaichas. Emergent properties of aquatic and marine ecosystems due to climate change: An overview of the current state of knowledge. AFS Annual Meeting. Oral presentation.
- 2018 **Staudinger, M.D.**, D. Pendleton, A. Jordaan. Climate-induced shifts in phenology: Case studies of fish, whales, and seabirds in the Gulf of Maine. PICES 4th International Symposium on The effects of climate change on the world's oceans. Oral presentation.
- 2018 Amanda Davis*, D. Remar, **M.D. Staudinger**. Can Underappreciated Species be Part of New England's Restaurant Markets? Southern New England Chapter of the AFS. Poster.
- 2017 Bratton, R.*, A. Gerson, K. Yakola*, and **M. Staudinger**. Stable isotope analysis of seabird eggshells in the Gulf of Maine. Roseate Tern Recovery Working Group (ROST WG) meeting, Westborough MA. Oral presentation.
- 2017 Yakola, K.*, **M. Staudinger**, A. Jordaan, S. Kress, and P. Shannon. Preliminary exploration of long-term trends in *Sterna* sp. chick diet in the Gulf of Maine. ROST WG. Oral presentation.
- 2017 Jones, K.*, D. Pendleton, F. Bowlick, M. Garron, **M.D. Staudinger**. A regional analysis of long-term gray and harbor seal stranding events. Greater Atlantic Regional Stranding Conference. Oral presentation.
- 2017 **Staudinger, M.D.**, A. Davis*, E. Powell*, S. Mattocks*, M. Ocana, S. Jackson. The Massachusetts Climate Action Tool. American Fisheries Society (AFS) Annual Meeting. Poster.

- 2017 **Staudinger, M.D.**, A. Davis, M. Devine, L. Deegan, and A. Jordaan. Climate change induced shifts in migration timing of adult alewife (*Alosa pseudoharengus*) in Massachusetts natal streams. AFS Annual Meeting. Oral presentation.
- 2017 **Staudinger, M.D.**, E. Varela Minder, E. Crisfield, K. Terwilliger, and S.A. Sims. Integrating and implementing climate change into State Wildlife Action Plans. National Adaptation Forum. Oral presentation.
- 2017 A. Davis*, **Staudinger, M.D.**, E. Powell*, S. Mattocks*, M. Ocana, S. Jackson. The Massachusetts Climate Action Tool. Southern New England Chapter of the AFS. Poster.
- 2017 **Staudinger, M.D.**, K. Mills, A. Jordaan, K. Friedland, J. Rubao, N. Rebuck, D. Pendleton, C. Hudak, K. Stamieszkin, A. Allyn., Z. Feng, C. Feurt, W. Golet, H. Walsh, M. Henderson, C. Hernandex, C. Johnson, D. Johnson, Y. Li, M. Liebman, I. Misna, N. Rrecord, T. Robben, J. Seavey, J. Sun, A. Thomas, K. Yakola*. It's about time: A synthesis of changing phenology in the Gulf of Maine Ecosystem. Southern New England Chapter of the AFS. Oral presentation.
- 2016 **Staudinger, M.D.**, and A. Jordaan. Ecological and management implications of climate change induced shifts in phenology of coastal fish and wildlife species in the NE CSC region. Roseate Tern Recovery Working Group. Oral presentation.
- 2016 **Staudinger, M.D.**, *et al.* It's about time? A synthesis of changing phenology in the Gulf of Maine Ecosystem. Regional Association for Research on the Gulf of Maine. Oral presentation.
- 2016 Yakola, K., **Staudinger, M.**, Jordaan, A., Kress, S., & Shannon, P. Long-term changes in the Chick Diet, Growth and Fledgling Success of Three *Sterna* spp. in Response to Changing Climatic Conditions in the Gulf of Maine. Regional Association for Research on the Gulf of Maine. Poster.
- 2016 Jordaan, A., K. Yakola*, and **M.D. Staudinger**. Migrations and phenology in a changing climate from the perspective of forage fish. Gulf of Maine Seabird Working Group 2016 summer meeting. Oral presentation.
- 2016 Settiner, S.*, **M.D., Staudinger**, A. Jordaan, and J. Sheppard. Climate change induced shifts in the timing of migration of alewife (*Alosa pseudoharengus*) in Massachusetts natal streams. Fish Passage 2016. Poster.
- 2016 Settiner, S.*, **M.D., Staudinger**, and A. Jordaan. Ecological and management implications of climate change induced shifts in phenology of alewife. Southern New England Chapter of the AFS. Poster.
- 2016 Calandrino, M.*, **M.D., Staudinger**, and A. Jordaan. A synthesis of climate change-induced shifts in phenology of marine mammals in the Northwest Atlantic Ocean. Southern New England Chapter of the AFS. Poster.
- 2015 **Staudinger, M.D.**, and A. Jordaan. Shifts in phenology: Case studies from the Gulf of Maine. Regional Association for Research on the Gulf of Maine. Oral Presentation.
- 2015 **Staudinger, M.D.**, J. Logan, C. Butler, and E. Hoffmayer. Predicting temporal and spatial shifts in bluefin tuna (*Thunnus thynnus*) diets in the Atlantic Ocean using a bagged classification tree approach. AFS Annual Meeting. Poster.

- 2015 **Staudinger, M.D.**, K. Alexander, and A. Jordaan. Ecological and management implications of climate change induced shifts in phenology of coastal fish and wildlife species in the Northeast region. AFS Annual Meeting. Poster.
- 2015 **Staudinger, M.D.** Adapting to climate change impacts across the Northeast and Midwestern United States: Case studies from the Northeast Climate Science Center. National Adaptation Forum. Poster
- 2015 **Staudinger, M.D.**, K. Alexander, and A. Jordaan. Ecological and management implications of climate change induced shifts in phenology of coastal fish and wildlife species in the Northeast region. Southern New England Chapter of the AFS. Poster.
- 2014 Ratnaswamy, M.J., **M. D. Staudinger**, T.L. Morelli, G. McMahon, F. Johnson, A. R. Holland, R. N. Palmer, L. Deegan, C. Neill, R. Horton, M. Eaton, A. Terando, D. Salvesen, and D. Case. Responding to sea level rise and extreme events through climate change adaptation strategies: A case study using the network of Atlantic National Wildlife Refuges. Ecological Society of America Annual meeting. Oral presentation.
- 2014 **Staudinger, M.D.**, E. Grant, B. Irwin, R. Kraus, D. Krueger, and J. Stewart. Climate impacts on fish and fish habitats: Case studies from the Northeast Climate Science Center. AFS Annual Meeting. Poster.
- 2014 **Staudinger, M.D.**, C.M. Butler, S. Polland, and A.K. Teffer. Using fish as biological samplers to gain new insights into the distribution, diversity, and abundance of prey resources in open ocean environments. AFS Annual Meeting. Oral presentation.
- 2014 **Staudinger, M.D.** Is fishing for squid, fishing down the food web? AFS Annual Meeting. Oral presentation.
- 2014 **Staudinger, M.D.**, Ratnaswamy, M., Palmer, R., Morelli, T.L., Holland, A.R. The Northeast Climate Science Center: Improving the way climate science informs resource management. Local Solutions: Northeast Climate Change Preparedness Conference. Poster.
- 2014 **Staudinger, M.D.**, Ratnaswamy, M., Palmer, R., Morelli, T.L., Holland, A.R. The Northeast Climate Science Center. Southern New England Chapter of the AFS. Poster.
- 2013 **Staudinger, M.D.**, Carter, S., Cross, M., Dubois, N., Duffy, E., Enquist, C., Griffis, R., Hellmann, J., Lawler, J., Morrison, S., O'Leary, J., Stein, B., and W. Turner. Biodiversity in a changing climate: A synthesis of current and projected trends in the United States. Tidewater Chapter of the AFS. Poster.
- 2012 **Staudinger, M.D.**, Juanes, F., Salmon, B.*, and A.K. Teffer*. The distribution, diversity, and importance of cephalopods in top predator diets from offshore habitats of the Northwest Atlantic Ocean. Cephalopod International Advisory Council Symposium. Florianópolis, Brazil. Oral presentation.
- 2012 **Staudinger, M.D.** Impacts of Climate Change on Marine and Aquatic Biodiversity in the United States. AFS Annual Meeting. Oral presentation.
- 2012 **Staudinger, M.D.** Size-based predation on shortfin squid (*Illex illecebrosus*) in the Northwest Atlantic Ocean. American Malacological Society. Oral presentation.

- 2011 **Staudinger, M.D.**, Teffer, A. K.*, Salmon, B.*, Bell, M.*, Juanes, F., and F. S. Scharf. Trophic ecology of apex predators in pelagic food-webs determined from food habits and stable isotope analyses. AFS Annual Meeting. Oral presentation.
- 2011 **Staudinger, M.D.** Predation on early juvenile fishes and cephalopods by large pelagic predators. Annual Larval Fish Conference. Oral presentation.
- 2011 **Staudinger, M.D.** Challenges to collecting diet data from fish landed at recreational fishing tournaments. Tuna Conference. Oral presentation.
- 2011 **Staudinger, M.D.**, McAlarney, R.*, Pabst, A. D., and W. A. McLellan. The feeding ecology of the pygmy sperm whale (*Kogia sp.*) inferred from diet and stable isotope analyses. Southeast and Mid-Atlantic Marine Mammal Symposium. Poster.
- 2011 **Staudinger, M.D.**, Teffer, A. K.*, F. Juanes, and F. Scharf. Trophic ecology of pelagic predators in the South Atlantic Bight determined from stable isotope analysis. Tidewater Chapter of the AFS. Oral presentation.
- 2010 **Staudinger, M.D.**, Teffer, A. K.*, Juanes, F., and F. S. Scharf. Foraging ecology of large pelagic predators in the northwest Atlantic. Tidewater Chapter of the AFS. Poster.
- 2009 **Staudinger, M.D.**, and F. Juanes. Size-dependent vulnerability of longfin squid (*Loligo pealeii*) to predation: a comparison of selective behaviors between a demersal and pelagic predator. Cephalopod International Advisory Council Symposium. Vigo, Spain. Oral presentation.
- 2009 **Staudinger, M.D.**, and F. Juanes. Predator-size prey-size relationships with squid as prey. Cephalopod International Advisory Council Symposium. Oral presentation.
- 2009 **Staudinger, M.D.**, and F. Juanes. Behavioral interactions between summer flounder (*Paralichthys dentatus*) and longfin squid (*Loligo pealeii*): the influence of relative prey size on predatory behavior and selectivity. Southern New England Chapter of the AFS. Oral presentation.
- 2008 **Staudinger, M.D.**, and F. Juanes. Behavioral interactions between summer flounder (*Paralichthys dentatus*) and longfin squid (*Loligo pealeii*): the influence of relative prey size on predatory behavior and selectivity. 11th Flatfish Biology Conference. Oral presentation.
- 2008 **Staudinger, M.D.**, and F. Juanes. Behavioral interactions between summer flounder (*Paralichthys dentatus*) and longfin squid (*Loligo pealeii*): the influence of relative prey size on predatory behavior and selectivity. 7th International Flatfish Symposium. Sesimbra, Portugal. Oral presentation.
- 2007 **Staudinger, M.D.**, Juanes, F., Hanlon, R., and S. Carlson*. Susceptibility of the longfin inshore squid (*Loligo pealeii*) to predation: effects of relative prey size and behavior on predator attack and capture success. Marine Biological Laboratory Young Scientist Symposium. Woods Hole, Massachusetts. Oral presentation.
- 2006 Staudinger, M.D., **Juanes, F.**, and J. Link. Prey size-predator size relationships of squid and their predators in the Northwest Atlantic. PFRP Principal Investigators Workshop GLOBEC-CLIoTOP WG3. *The Role of Squid in Pelagic Marine Ecosystems*. Oral presentation
- 2006 **Staudinger, M.D.**, Juanes, F., and J. Link. Predator-prey interactions between summer flounder (*Paralichthys dentatus*) and longfin squid (*Loligo pealeii*) in the Northwest Atlantic ecosystem. 10th Flatfish Biology Conference. Oral presentation

- 2006 **Staudinger, M.D.**, Juanes, F., and J. Link. Prey size-predator size relationships of squid and their predators in the Northwest Atlantic. AFS Annual Meeting. Oral presentation.
- 2006 **Staudinger, M.D.**, Juanes, F., and J. Link. Prey size-predator size relationships of squid and their predators in the Northwest Atlantic. Cephalopod International Advisory Council Symposium. Hobart, Tasmania. Oral presentation.
- 2004 **Staudinger, M.D.**, and T. E. Essington. The importance of squid to the diets of bluefish, goosefish, silver hake, and summer flounder in the southern New England region. AFS Annual Meeting. Oral presentation.
- 2003 **Staudinger, M.D.**, Hunsicker, M. E., and T. E. Essington. Evaluating the predatory demand and impact of stock rebuilding on squid populations by four species of fish in the southern New England Ecosystem. AFS Annual Meeting. Oral presentation.
- 2002 **Staudinger, M.D.**, Hunsicker, M. E., and T. E. Essington. Multi-species fisheries in an ecosystem context: Evaluating the ecological effects and trade-offs of cephalopod fisheries. Fourth William R. and Lenore Mote International Symposium. Poster.