

# JONATHAN S. LEFCHECK

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## EDUCATION

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- 2015 **Ph.D., Marine Science**  
School of Marine Science, Virginia Institute of Marine Science,  
The College of William & Mary, Gloucester Point, VA
- 2009 **B.A., Biology**  
Colby College, Waterville, ME

## EXPERIENCE

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- 2023- **Research Scientist**  
University of Maryland Center for Environmental Science, Cambridge, MD
- 2018- **Tennenbaum Coordinating Scientist**  
2023 MarineGEO Network, Smithsonian Institution, Edgewater, MD
- 2017- **Post-doctoral Researcher**  
2018 Bigelow Laboratory for Ocean Sciences, East Boothbay, ME
- 2015- **Post-doctoral Researcher**  
2017 Virginia Institute of Marine Science,  
The College of William & Mary, Gloucester Point, VA

## PUBLICATIONS

\*Graduate student †Undergraduate student

### 2023

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75. C. Xu, B. Silliman, J. Chen, X. Li, M.S. Thomsen, Q. Zhang, J. Lee, **J.S. Lefcheck**, P. Daleo, B.B. Hughes, H.P. Jones, R. Wang, S. Wang, C. Smith, X. Xi, A.H. Altieri, J. van de Koppel, T.M. Palmer, L. Lui, J. Wu, Q. He. Herbivory limits success of vegetation restoration globally. *Science* 382(6670): 589-594. [PDF](#)
74. M. Stankovic, A.K. Mishra, Y.P. Rahayu\*, **J.S. Lefcheck**, D. Murdiyarto, D.A. Friess, M. Corkalo, T. Vukovic, M.A. Vanderklift, S.H. Farooq, J.D. Gaitin-Espitia, A. Prathep. Blue carbon assessments of seagrass and mangrove ecosystems in South and Southeast Asia: Current progress and knowledge gaps. (2023) *Science of the Total Environment* 904: 166618. [PDF](#)
73. X. Li, H. Wang, D.J. McCauley, A.H. Altieri, B.R. Silliman, **J.S. Lefcheck**, J. Wu, B. Li, Q. He. A wide knowledge gap megafauna undermines China's expanding coastal ecosystem conservation. (2023) *Science Advances* 9: eadg3800. [PDF](#) | [Nature News](#)
72. E. Woodworth†, A. Tian, K. Blaire, J. Pullen, **J.S. Lefcheck**, J.D. Parker. Media myopia distorts public interest in US invasive plants. (2023) *Biological Invasions* 25: 3193-3205. [PDF](#)
71. M.J.S. Hensel, C.J. Patrick, R.J. Orth, D.J. Wilcox, W.C. Dennison, C. Gurbisz, M. Hannam, J.B. Landry, K. Moore, R.R. Murphy, J. Testa, D.E. Weller, **J.S. Lefcheck**. (2023) Rise of *Ruppia* in Chesapeake Bay: Climate change driven turnover of foundation species creates new threats and management opportunities. (2023) *Proceedings of the National Academy of Sciences* 120(23): e2220678120. [PDF](#)

70. J.O. Olson, **J.S. Lefcheck**, M. Goodison, A. Lienesch, M. Ogburn. Fish size-spectra from imaging sonar reveal variation in habitat use across nearshore coastal ecosystems. (2023) *Marine Ecology Progress Series* 75:95-108. [PDF](#)
69. M.E. Malerba, M.D. Costa, D.A. Friess, L. Schuster, M.A. Young, D. Lagomasino, O. Serrano, S.M. Hickey, P.H. York, M. Rasheed, **J.S. Lefcheck**, B. Radford, T.B. Atwood, D. Ierodiaconou, P. Macreadie. Remote sensing for cost-effective blue carbon accounting. (2023) *Earth-Science Reviews* 238:104337. [PDF](#)
68. H.K. Morrissette, S.K. Baez, L. Beers, ..., **J.S. Lefcheck**, ..., S.W.J. Canty (and 35 others). Belize Blue Carbon: establishing a national carbon stock estimate for mangrove ecosystems. (2023) *Science of the Total Environment* 870: 161829. [PDF](#)
67. S.J. Brandl, **J.S. Lefcheck**, A.E. Bates, D.B. Rasher, T. Norin. A metabolic framework to examine the assembly and functioning of animal communities. (2023) *Biological Reviews* 98(1): 1-18. [PDF](#)

## 2022

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66. L.M. Harper, **J.S. Lefcheck**, R. Whippo\*, M.S. Jones, Z. Foltz, J.E. Duffy. Blinded by the bright: how species-poor habitats contribute to regional biodiversity across a tropical seascape. (2022) *Diversity and Distributions* 28(11): 2272-2285. Editor's Choice. [PDF](#)
65. R.J. Orth, W.C. Dennison, D.J. Wilcox, R.A. Batiuk, J.B. Landry, C. Gurbisz, J. Keisman, M. Hannam, **J.S. Lefcheck**, R.R. Murphy, K.A. Moore, C.J. Patrick, J. Testa, D.E. Weller, M.F. Merritt. Data synthesis for environmental management: A case study of Chesapeake Bay. (2022) *Journal of Environmental Management* 321: 115901. [PDF](#)
64. J.E. Duffy, J.J. Stachowicz, P.L. Reynolds, ..., **J.S. Lefcheck**, ..., J.L. Olsen (and 36 others). A Pleistocene legacy structures variation in modern eelgrass ecosystems. (2022) *Proceedings of the National Academy of Sciences* 119(32): e2121425119. [PDF](#)
63. J.P. Quimbayo, F.C. Silva, C.R. Barreto, C.B. Pavone, **J.S. Lefcheck**, K. Leite, A.C. Figueiroa, E.C. Correia, A.A.V. Flores. (2022) The COVID-19 pandemic alters illegal fishing activities inside and outside a marine protected area. *Current Biology* 32(14): R765-R766. [PDF](#)
62. R.J. Orth, W.C. Dennison, C. Gurbisz, M. Hannam, J. Keisman, J.B. Landry, **J.S. Lefcheck**, K. Moore, R.R. Murphy, C.J. Patrick, J. Testa, D. Weller, D. Wilcox, R. Batiuk. (2022) Long-term annual aerial surveys of submersed aquatic vegetation (SAV) support science, management, and restoration. *Estuaries & Coasts* 45:1012–1027. [PDF](#)
61. A.P. Ramus\*, J.S. Lefcheck, Z.T. Long. (2022) Foundational biodiversity effects propagate through coastal food webs via multiple pathways. *Ecology* 103(11): e3796. [PDF](#)
60. R.S.C. Cooke, W. Gearty, A.S.A. Chapman\*, J. Dunic\*, G.J. Edgar, **J.S. Lefcheck**, G. Rilov, C.R. McClain, R.D. Stuart-Smith, S.K. Lyons, A.E. Bates. (2022) Humans are disrupting a longstanding trophic-size structure in vertebrates. *Nature Ecology and Evolution* 6: 684-692. [PDF](#)
59. K.J. Haynes, A.M. Liebhold, **J.S. Lefcheck**, R.S. Morin, G. Wang. (2022) Climate affects the outbreaks of a forest defoliator indirectly through its tree hosts. *Oecologia* 198: 407-418. [PDF](#)
58. C.P. Gross\*, J.E. Duffy, K.A. Hovel, ..., **J.S. Lefcheck**, ..., J.J. Stachowicz (and 35 others). (2022) The biogeography of community assembly: latitude and predation drive variation in community trait distribution in a guild of epifaunal crustaceans. *Proceedings of the Royal Society B* 289: 20211762. [PDF](#)
57. J. Grinstead, P. Ortiz-Ramírez, X. Carreto-Guadarrama, A. Arrieta-Zamudi, A. Pratt, M. Cantú-Sánchez, **J. Lefcheck**, D. Melamed (2022). Piecewise Structural Equation Modeling of the Quantity Implicature in Child Language. *Language and Speech* 00238309211066086. [PDF](#)

56. Y.S. Esmaili\*, G.N. Corte, H.H. Checon, C.G. Bilatto, **J.S. Lefcheck**, A.C.Z. Amaral, A. Turra. (2022) Revealing the drivers of taxonomic and functional diversity of nearshore fish assemblages: implications for conservation priorities. *Diversity and Distributions* 28(8): 1597-1609. [PDF](#)

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## 2021

55. **J.S. Lefcheck**, G.J. Edgar, R.D. Stuart-Smith, A.E. Bates, C. Waldock, S.J. Brandl, S. Kinonmonth, S.D. Ling, J.E. Duffy, D.B. Rasher, A.A. Agrawal. (2021) Species richness and identity are key determinants of the biomass of global reef fish communities. *Nature Communications* 12: 6875. [PDF](#) | \*\*Secretary's Research Prize, Smithsonian Institution
54. E. Montes, **J.S. Lefcheck**, E.G. Castro, E. Klein, A.C. Mazzuco, G. Bigatti, C. Cordeiro, N. Simoes, E. Macaya, N. Moity, E. Londoño-Cruz, B. Helmuth, E. Soto, B.D. Best, P. Miloslavich, F.E. Muller-Karger. (2021) Optimizing large-scale biodiversity sampling effort: towards an unbalanced survey design. *Oceanography* 34(2). [PDF](#)
53. C.J. Ritter, L.M. Harper, **J.S. Lefcheck**, V.J. Paul, R. Whippo, S. Jones, M.B. Ogburn, J.E. Duffy. (2021) Patterns of consumption across a Caribbean seascape: Roles of habitat and consumer species composition through time. *Frontiers in Marine Science* 8: 742907. [PDF](#)
52. L. de Pablo<sup>†</sup>, **J.S. Lefcheck**, L. Harper, V. Paul, S. Jones, R. Whippo, J. Seeman, D. Kline, J.E. Duffy. (2021) A doubling of coral cover on Carrie Bow Cay, Belize from 2014-2019. *Scientific Reports* 11: 19185. [PDF](#)
51. Y.S. Esmaili\*, G.N. Corte, H.H. Checon, T.R.C. Gomes, **J.S. Lefcheck**, A. Turra, A.C.Z. Amaral. (2021) Comprehensive estimation of surf zone fish biodiversity requires traditional and newly-developed sampling methods. *Marine Ecology Progress Series* 667: 131-144. [PDF](#)
50. G.N. Corte, H.H. Checon, Y.S. Esmaili, **J.S. Lefcheck**, A.C.Z. Amaral. (2021) Mangrove fragments as key coastal reservoirs of taxonomic and functional biodiversity. *Biodiversity and Conservation* 30: 1573-1593. [PDF](#)
49. I. Cano\*, R.I. Sellares, **J.S. Lefcheck**, M. Villalpando, A. Croquer. (2021) Effects of herbivory by the urchin *Diadema antillarum* on the early restoration success of the coral *Acropora cervicornis* in the central Caribbean. *Journal of Experimental Marine Biology and Ecology* 539: 151541. [PDF](#)
48. J.G. Monteiro, J.L. Jiménez, F. Gizzi, P. Přikryl, **J.S. Lefcheck**, R.S. Santos, J. Canning-Clode. (2021) Novel approach to enhance coastal habitat and biotope mapping with drone aerial imagery analysis. *Scientific Reports* 11: 574. [PDF](#)
47. C.E. Murphy<sup>†</sup>, R.J. Orth, **J.S. Lefcheck**. (2021) Habitat and distance structure seagrass epifaunal communities: A regional scale assessment in Chesapeake Bay. *Estuaries and Coasts* 44(2): 442–452. [PDF](#)
46. **J.S. Lefcheck**, B.W. Pfirmann, F.J. Fodrie, J.H. Grabowski, A.R. Hughes, A.R. Smyth. (2021) Consumption rates vary based on the presence and type of oyster structure: a seasonal and latitudinal comparison. *Journal of Experimental Marine Biology and Ecology* 536: 151501. [PDF](#)
45. A.J. Pinsonneault, P.J. Neale, M. Tzortziou, E.A. Canuel, C.R. Pondell, H. Morrisette, **J.S. Lefcheck**, J.P. Megonigal. (2021) Dissolved organic carbon sorption dynamics in tidal marsh soils. *Limnology and Oceanography* 66(1): 214-225. [PDF](#)

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## 2020

44. K.M. Fraser\*, **J.S. Lefcheck**, S.D. Ling, C. Mellin, R.D. Stuart-Smith, G.J. Edgar. (2020) Production of mobile invertebrate communities on shallow reefs from temperate to tropical seas. *Proceedings of the Royal Society B* 287: 20201798. [PDF](#)

43. G.J. Edgar, A. Cooper, S.C. Baker, ..., **J.S. Lefcheck**, ...R.D. Stuart-Smith (and 35 others). (2020) Reef Life Survey: Establishing the ecological basis for conservation of shallow marine life. *Biological Conservation* 252: 108855. [PDF](#)
42. M.A. Whalen, R. Whippo, J.J. Stachowicz, ..., **J.S. Lefcheck**, ...J.E. Duffy (and 61 others). (2020). Climate drives the geography of marine consumption by changing predator communities. *PNAS* 117 (45): 28160-28166. [PDF](#)
41. Y. Hautier, P. Zhang, M. Loreau, ... **J.S. Lefcheck**, ... S. Wang (and 44 others). (2020) General destabilizing effects of eutrophication on grassland productivity at multiple spatial scales. *Nature Communications* 11: 5375. [PDF](#)
40. R.J. Orth, **J.S. Lefcheck**, K.S. McGlathery, L. Aoki, M.L. Luckenbach, K.A. Moore, M.P.J. Oreska, R. Snyder, D.J. Wilcox, B. Lusk. (2020) Restoration of seagrass habitat leads to rapid recovery of coastal ecosystem services. *Science Advances* 6(41): eabc6434. [PDF](#) | [\\*Science Highlight](#) | [The Conversation](#) | [Le Monde](#) | [Smithsonian Magazine](#) | [Hakai Magazine](#)
39. D.B. Rasher, R.S. Steneck, J. Halfar, K.J. Kroeker, J.B. Ries, M.T. Tinker, P.T.W. Chan, J. Fietzke, N.A. Kamenos, B.H. Konar, **J.S. Lefcheck**, C.J.D. Norley, B.P. Weitzman, I.T. Westfield, J.A. Estes. (2020) Keystone predators govern the pathway and pace of climate impacts in a subarctic marine ecosystem. *Science* 369(6509): 1351-1354. [PDF](#)
38. C. Pimiento, F. Leprieur, D. Silvestro, **J.S. Lefcheck**, C. Albuoy, D.B. Rasher, M. Davis, J.-C. Svenning, J.N. Griffin. (2020) Functional diversity and the fate of marine megafauna in the Anthropocene. *Science Advances* 6(16): eaay7650. [PDF](#)
37. N.M. McLean, H.P. van der Jeugd, C.A.M. Van Turnhout, J.S. Lefcheck, M. van de Pol. (2020) Reduced avian body condition due to global warming has little reproductive or population consequences. *Oikos* 129(5): 714-730. [PDF](#)

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## 2019

36. A.E. Bates, R.S.C. Cooke, M.I. Duncan, G.J. Edgar, J. Bruno, L. Benedetti-Cecchi, I.M. Côté, **J.S. Lefcheck**, M.J. Costello, N. Barrett, T.J. Bird, P.B. Fenberg, R.D. Stuart-Smith. (2019) Climate resilience in marine protected areas and the 'Protection Paradox.' *Biological Conservation* 236: 305-314. [PDF](#)
35. S.J Brandl, D.B. Rasher, I. Côté, J. Casey, E. Darling, **J.S. Lefcheck**, J.E. Duffy. (2019) Functioning coral reefs for the future: eight core processes and the influence of biodiversity. *Frontiers in Ecology and the Environment* 17(80): 445-454. [PDF](#)
34. **J.S. Lefcheck**, B.B. Hughes, A.J. Johnson, B. Pfirrmann, D.B. Rasher, A.R. Smyth, B.L. Williams, M.W. Beck, R.J. Orth. (2019) Are coastal habitats important nurseries? A meta-analysis. *Conservation Letters* 12(4): e12645. [PDF](#) | [Press release](#)
33. **J.S. Lefcheck**, A.A. Innes-Gold<sup>†</sup>, S.J. Brandl, R.S. Steneck, R. Torres, D.B. Rasher. (2019) Tropical fish diversity enhances coral reef functioning across multiple scales. *Science Advances* 5(3): eaav6420. [PDF](#)
32. B. Gauzens, A. Barnes, D. Giling, J. Hines, M. Jochum, **J.S. Lefcheck**, B. Rosenbaum, S. Wang, U. Brose. (2019) *fluxweb*: A R package to easily estimate energy fluxes in foodwebs. *Methods in Ecology and Evolution* 10(2): 270-279. [PDF](#)

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## 2018

31. J.P. Richardson, **J.S. Lefcheck**, R.J. Orth. (2018) Warming temperatures alter the relative abundance and distribution of two co-occurring foundational seagrasses in Chesapeake Bay, USA. *Marine Ecology Progress Series* 599: 65-74. [PDF](#)
30. J.B. Grace, D.J. Johnson, **J.S. Lefcheck**, J.E. Byrnes. (2018) Standardized effects in ecological models containing binary outcomes. *Ecosphere* 9(6): e02283. [PDF](#)

29. S. Bornbusch<sup>†</sup>, **J.S. Lefcheck**, J.E. Duffy. (2018) Allometry of individual reproduction and defense in eusocial colonies: A comparative approach to trade-offs in social sponge-dwelling *Synalpheus* shrimps. *PLoS ONE* 13(3): e0193305. [PDF](#) | [National Geographic](#)
28. M. Dornelas, L.H. Antão, F. Moyes, ..., **J.S. Lefcheck**, ..., K. Zawada (and 248 others). (2017) BioTIME: A database of biodiversity time series for the Anthropocene. *Global Ecology and Biogeography* 27:760-786. [PDF](#)
27. **J.S. Lefcheck**, R.J. Orth, W.C. Dennison, D.J. Wilcox, R.R. Murphy, J. Keisman, C. Gurbisz, M. Hannam, J.B. Landry, K. A. Moore, C.J. Patrick, J. Testa, D.E. Weller, R.A. Batuik. (2018) Long-term nutrient reductions lead to the unprecedented recovery of a temperate coastal region. *PNAS* (115)14: 3658-3662. [PDF](#) | [\\*\\*Cozzarelli Prize](#) | [Washington Post 1, 2](#) | [NPR](#) | [PNAS Commentary](#)
26. A.D. Barnes, M. Jochum, **J.S. Lefcheck**, N. Eisenhauer, C. Scherber, M.I. O'Connor, P. de Ruiter, U. Brose. (2018) Energy flux: the link between multitrophic biodiversity and ecosystem functioning. *Trends in Ecology and Evolution*. 33(3): 186-197 [PDF](#)

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## 2017

25. G.J. Edgar, T.J. Alexander, **J.S. Lefcheck**, A.E. Bates, S.J. Kininmonth, R.J. Thomson, J.E. Duffy, M.J. Costello, R.D. Stuart-Smith. (2017) Abundance and local-scale processes contribute to multi-phyla global marine diversity gradients. *Science Advances* 3(10): e1700419. [PDF](#) | [Press release](#)
24. R.J. Orth, W.C. Dennison, **J.S. Lefcheck**, C. Gurbisz, M. Hannam, J. Keisman, J.B. Landry, K.A. Moore, R.R. Murphy, C.J. Patrick, J. Testa, D.E. Weller, D.J. Wilcox. (2017) Submersed aquatic vegetation in Chesapeake Bay: sentinel species in a changing world. *BioScience* 67(8): 698-712. [PDF](#)
23. R.J. Orth, **J.S. Lefcheck**, D.J. Wilcox. (2017) Boat propeller scarring of seagrass beds in lower Chesapeake Bay, USA: Patterns, causes, recovery, and management. *Estuaries & Coasts* 40(6): 1666-1676. [PDF](#) | [AFS Research Brief](#) | [CESN Newsletter](#)
22. **J.S. Lefcheck**, D.J. Wilcox, R.M. Murphy, S.R. Marion, R.J. Orth. (2017) Multiple stressors threaten a critical foundational habitat, *Zostera marina*, in Chesapeake Bay, USA. *Global Change Biology* 23(9): 3474-3483. [PDF](#) | [Press release](#) | [New York Times](#) | [Chesapeake Bay Journal](#)
21. R.D. Stuart-Smith, G.J. Edgar, N.S. Barrett, ..., **J.S. Lefcheck**, ..., R. Thomson (and 18 others). (2017) Assessing National Biodiversity Trends for Rocky and Coral Reefs through the Integration of Citizen Science and Scientific Monitoring Programs. *BioScience* 67(2): 134-146. \*Editor's Choice. [PDF](#)
20. **J.S. Lefcheck**, S.R. Marion, R.J. Orth. (2017) Restored eelgrass (*Zostera marina* L.) as a refuge for epifaunal biodiversity in mid-Western Atlantic coastal bays. *Estuaries & Coasts* 40(1): 200. [PDF](#) | [CESN Newsletter](#)

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## 2016

19. **J.S. Lefcheck**, S.R. Marion, A.V. Lombana, R.J. Orth. (2016) Faunal communities are invariant to fragmentation in experimental seagrass landscapes. *PLoS ONE*. 11(5): e0156550. [PDF](#)
18. J.E. Duffy, **J.S. Lefcheck**, R.D. Stuart-Smith, S.A. Navarette, G.J. Edgar. (2016) Biodiversity enhances reef fish biomass and resistance to climate change. *PNAS*. 113(22): 6230–6235. [PDF](#) | [Press release](#)
17. E. Schmitt, M.W. Luckenbach, **J.S. Lefcheck**, R.J. Orth. (2016) Predator-prey interactions in a restored eelgrass ecosystem: Strategies for maximizing success of a reintroduced species, *Argopecten irradians*. *Restoration Ecology* 24(4): 558-565. [PDF](#)
16. **J.S. Lefcheck**, S.J. Brandl, P.L. Reynolds, A.R. Smyth, S.T. Meyer. (2016) Extending rapid ecosystem function assessments to marine systems. *TRENDS in Ecology and Evolution* 31(4): 251-253. [PDF](#)

15. **J.S. Lefcheck.** (2016) piecewiseSEM: Piecewise structural equation modeling in R for ecology, evolution, and systematics. *Methods in Ecology & Evolution*. 7(5): 573-579. [PDF](#) | [Highly commended, British Ecological Society](#)

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## 2015

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14. J.E. Duffy, S.L. Ziegler, J.E. Campbell, P. Bippus<sup>†</sup>, **J.S. Lefcheck.** (2015) Squidpops: A simple tool to crowdsource a global map of marine predation intensity. *PLoS ONE* 10(11): e0142994. [PDF](#)
13. **J.S. Lefcheck,** J.E. Duffy. (2015) Multitrophic functional diversity predicts ecosystem functioning in experimental assemblages of estuarine consumers. *Ecology* 96(11): 2973-2983. [PDF](#)
12. J.E. Duffy, P.L. Reynolds, C. Boström, J.A. Coyer, M. Cusson, S. Donadi, J.G. Douglass, J. Eklöf, A. Engelen, B.K. Eriksson, S. Fredriksen, L. Gamfeldt, C. Gustafsson, G. Hoarau, M. Hori, K. Hovel, K. Iken, **J.S. Lefcheck,** P. Moksnes, M. Nakaoka, M.I. O'Connor, J.L. Olsen, J.P. Richardson, J.L. Ruesink, E.E. Sotka, J. Thormar, M.A. Whalen, J.J. Stachowicz. (2015) Biodiversity mediates top-down control in eelgrass ecosystems: A global comparative experiment. *Ecology Letters* 18(7): 696-705. [PDF](#) | [Press release](#)
11. **J.S. Lefcheck,** J.E.K. Byrnes, F. Isbell, L. Gamfeldt, J.H. Griffin, N. Eisenhauer, M.J.H. Hensel, A. Hector, B.J. Cardinale, J.E. Duffy. (2015) Biodiversity enhances ecosystem multifunctionality across trophic levels and habitats. *Nature Communications* 6: 6936. [PDF](#) | [Press release](#)
10. L. Gamfeldt, J.S. Lefcheck, J.E.K. Byrnes, J.E. Duffy, B.J. Cardinale, J.N. Griffin. (2015) Marine biodiversity and ecosystem functioning: what's known and what's next. *Oikos* 124(3): 252-265. \*Editor's Choice. [PDF](#) | [Oikos Blog](#)
9. R. Stuart-Smith, A.E. Bates, J.S. Lefcheck, J.E. Duffy, S.C. Baker, R.J. Thomson, J.F. Stuart-Smith, N.A. Hill, S.J. Kininmonth, L. Airoidi, M.A. Becerro, S.J. Campbell, T.P. Dawson, S.A. Navarette, G.A. Soler, E.M.A. Strain, T.J. Willis, G.J. Edgar. (2015) The potential of trait-based approaches to contribute to marine conservation. *Marine Policy* 51: 148-150. [PDF](#)
8. **J.S. Lefcheck,** V.A.G. Bastazini, J.N. Griffin. (2015) Choosing and using traits in functional diversity research. *Environmental Conservation* 42(2): 104-107. \*Invited contribution. \*\*Paper of the month. [PDF](#) | [Cambridge Blogs](#)

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## 2014

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7. J.E.K. Byrnes, **J.S. Lefcheck,** L. Gamfeldt, J.N. Griffin, F.I. Isbell., A. Hector. (2014) Multifunctionality does not imply that all functions are positively correlated. *PNAS*. 111(51): E5490. [PDF](#)
6. T.J. Bird, A.E. Bates, **J.S. Lefcheck,** N.A. Hill, S. Wotherspoon, M. Krkosek, R. Stuart-Smith, J. Stuart-Smith, G. Pecl, G.J. Edgar, R.J. Thomson, N. Barrett, S. Frusher. (2014) Statistical solutions for error and bias in global citizen science datasets. *Biological Conservation* 173: 144-154. \*Invited contribution. [PDF](#)
5. **J.S. Lefcheck,** J. van Montfrans, R.J. Orth, E.L. Schmitt, J.E. Duffy, M. Luckenbach. (2014) Epifaunal invertebrates as predators of juvenile bay scallops (*Argopectin irradians*). *Journal of Experimental Marine Biology and Ecology* 454: 18-25. [PDF](#)
4. J.E.K. Byrnes, L. Gamfeldt, F. Isbell, J.E. Duffy, **J.S. Lefcheck,** J.N. Griffin, A. Hector, B.J. Cardinale, D.U. Hooper, L.E. Dee. (2014) Investigating the relationship between biodiversity and ecosystem multifunctionality: Challenges and solutions. *Methods in Ecology and Evolution* 5(2): 111-124. [PDF](#)
3. **J.S. Lefcheck,** A. Buchheister, K.M. Laumann, M. Stratton, K. Sobocinski, S. Chak, T.R. Clardy, P.L. Reynolds, R.J. Latour, J.E. Duffy. (2014) Dimensions of biodiversity in Chesapeake Bay demersal fishes: Patterns and drivers through space and time. *Ecosphere* 5(2): art14. [PDF](#)

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## 2013

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2. R. Stuart-Smith, A.E. Bates, **J.S. Lefcheck**, J.E. Duffy, S.C. Baker, R.J. Thomson, J.F. Stuart-Smith, N.A. Hill, S.J. Kininmonth, L. Airoidi, M.A. Becerro, S.J. Campbell, T.P. Dawson, S.A. Navarette, G.A. Soler, E.M.A. Strain, T.J. Willis, G.J. Edgar. (2013) Integrating abundance and functional traits reveals new global hotspots of fish diversity. *Nature* 501(7468): 539-542. [PDF](#) | [Press release](#)
1. **J.S. Lefcheck**, M.A. Whalen, T.M. Davenport, J.P. Stone, J.E. Duffy. (2013) Physiological effects of dietary mixing on consumer fitness: A meta-analysis. *Ecology* 94(3): 565-527. [PDF](#) | [Press release](#)

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## IN REVISION

(PDFs available upon request)

D. Cottrell\*, **J.S. Lefcheck**, B.J. Peterson. Herbivory-induced facilitation increases from low to high stress: an observational and experimental test in seagrass.

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## IN REVIEW

(PDFs available upon request)

H. Wang\*, A.H. Altieri, **J.S. Lefcheck**, S.R. Valdez, R.J. Orth, J.E. Duffy, B.B. Hughes, B.R. Silliman, Q. He. Building hope for seagrass ecosystem conservation in the Anthropocene.

B.L.H. Jones\*, **J.S. Lefcheck**, S. Skoglund, V. Thunell, S. Bandeira, N.S. Jiddawi, J. Uku, M. Gullström, J.S. Eklöf. Seagrass meadows as previously unrecognized reservoirs of micronutrients for human health.

A.E. Bates, M.A. Davies, R.D. Stuart-Smith, ..., **J.S. Lefcheck**, ..., S.C. Baker (and 29 others). Overcome imposter syndrome: contribute to working groups and build strong networks.

[Google Scholar](#) Citations: 9038, h-index: 33, i10-index: 51

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## GRANTS & CONTRACTS

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| 2023-2024 | <i>Developing a seagrass strategy for the Peconic Estuary.</i> Peconic Estuary Partnership, National Estuaries Program. Total awarded: \$179,505                                  |
| 2022-2023 | <i>Investigation of temperature as a driver of stony coral tissue loss disease dynamics: Part II.</i> Florida Department of Environmental Protection. Total subcontract: \$11,231 |
| 2021-2022 | <i>Modelling climate change impacts on Chesapeake Bay SAV.</i> Chesapeake Bay Trust. Co-lead. Total subcontract: \$11,231   |
| 2021-2022 | <i>Mangrove and seagrass carbon storage estimates for Belize.</i> Pew Charitable Trusts. Co-Principal Investigator. Total award: \$226,490  |
| 2021-2022 | <i>Investigation of temperature as a driver of stony coral tissue loss disease dynamics.</i> Florida Department of Environmental Protection. Total subcontract: \$11,231          |

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## OUTREACH

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| 2022 | Contributor, Consonance Collective: "The Ocean's Cry." <a href="https://www.youtube.com/watch?v=CgmRhferOcq">https://www.youtube.com/watch?v=CgmRhferOcq</a>  |
| 2021 | Consultant, KQED Deep Look: "Skeleton Shrimp Use 18 Appendages to Feed, Fight and...Frolic." <a href="https://www.youtube.com/watch?v=IQtU5Cu7GDw">https://www.youtube.com/watch?v=IQtU5Cu7GDw</a>  |
| 2021 | Interview, Hakai Magazine: "The Grass Is Greener in Virginia." <a href="https://hakaimagazine.com/news/the-grass-is-greener-in-virginia/">https://hakaimagazine.com/news/the-grass-is-greener-in-virginia/</a>  |
| 2021 | Interview, Chesapeake Bay Journal: "Last stand for eelgrass?" <a href="https://www.bayjournal.com/news/climate_change/last-stand-for-eelgrass/article_36fe872c-5caf-11eb-99cf-57100b01a061.html">https://www.bayjournal.com/news/climate_change/last-stand-for-eelgrass/article_36fe872c-5caf-11eb-99cf-57100b01a061.html</a> |
| 2021 | Co-author, Eastern Shellfish Growers Association Newsletter: "Does oyster aquaculture support coastal food webs?" Feb 2021: <a href="https://ecsga.org/newsletter-archives/">https://ecsga.org/newsletter-archives/</a>   |

- 2021 Co-author, Coastal Estuarine Research Federation Newsletter: “Seagrasses: A half century of progress and a look to the future.” <https://cerf.memberclicks.net/assets/bulletin/2021/CERF%2047-1.pdf>
- 2021 Interview, Earth Optimism x This Study Shows Podcast: <https://podfollow.com/1479545097/episode/d6f50d7d485b1461bcb55d5d7f90e6ff921d8fd8/view>
- 2020 Interview, Smithsonian Magazine: “Prairies of the Sea.” <https://www.smithsonianmag.com/science-nature/seagrass-ocean-secret-weapon-climate-change-180976235/>
- 2020 Co-author, The Conversation: “Restoring seagrasses can bring coastal bays back to life.” <https://www.dailypress.com/news/dp-xpm-20130926-2013-09-26-dp-nws-vims-fish-biodiversity-20130926-story.html>
- 2020 Interview, Hakai Magazine: “Do Fish Tummy Bugs Dictate Their Diets?” <https://hakaimagazine.com/news/do-fish-tummy-bugs-dictate-their-diets/>
- 2020 Interview, National Geographic Magazine: “In the Chesapeake Bay, saving seagrasses can fight ocean acidification.” <https://www.nationalgeographic.com/science/article/chesapeake-seagrasses-fight-ocean-acidification>
- 2019 Interview, Session Sessions (PNAS Podcast).
- 2018 Interview, Washington Post: “The Chesapeake’s ‘secret garden’ is thriving again, but Trump could end that.” <https://www.washingtonpost.com/news/energy-environment/wp/2018/03/05/the-chesapeakes-secret-garden-is-thriving-again-but-trump-could-end-that/>
- 2018 Interview, Washington Post: “Why the Chesapeake Bay is the best in the world.” [https://www.washingtonpost.com/opinions/why-the-chesapeake-bay-is-best-in-the-world/2018/03/07/345dc8be-217c-11e8-badd-7c9f29a55815\\_story.html](https://www.washingtonpost.com/opinions/why-the-chesapeake-bay-is-best-in-the-world/2018/03/07/345dc8be-217c-11e8-badd-7c9f29a55815_story.html)
- 2015 Interview, Daily Press: “VIMS ecologist finds biodiversity more important than ever.” <https://www.dailypress.com/tidewater-review/dp-nws-biodiversity-vims-20150427-story.html>
- 2013 Interview, Daily Press: “Study offers fresh approach to marine biodiversity.” <https://www.dailypress.com/news/dp-xpm-20130926-2013-09-26-dp-nws-vims-fish-biodiversity-20130926-story.html>

## TEACHING

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| Instructor |  |
|------------|--|
| 2023       | Co-Instructor, Structural Equation Modeling, PR Statistics, Virtual.   |
| 2021       | Co-Instructor, Structural Equation Modeling, PR Statistics, Virtual.   |
| 2019       | Instructor, Structural Equation Modeling, Stockholm University, Stockholm, Sweden.   |
| 2018       | Instructor, Structural Equation Modeling, PR Statistics, Glasgow, UK.  |
| 2017       | Co-instructor, Structural Equation Modeling, PR Statistics, Port Talbot, UK.   |
| 2017       | Instructor, Meta-analysis in Ecology (MSCI 698, Spring). Virginia Institute of Marine Science, The College of William & Mary       |
| 2017       | Instructor, Structural Equation Modeling, Southampton University, UK.  |
| 2016       | Instructor, Structural Equation Modeling. University of Göttingen, Germany.  |
| 2016       | Instructor, Contemporary Topics in Ecology (MSCI 698, Spring). Virginia Institute of Marine Science, The College of William & Mary |
| 2015       | Instructor, Undergraduate Research (MSCI 490, Fall, Spring). The College of William & Mary   |



- 2014 Co-instructor, Seagrass Ecosystem Ecology (MSCI 398, Spring), The College & William & Mary. Part of networked class with two other universities. [Press release](#)
- 2012 Co-instructor, Dimensions of Biodiversity Distributed Graduate Seminar (MSCI 698). Virginia Institute of Marine Science. Part of networked class with 13 other universities

## PROFESSIONAL MENTORSHIP

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- Post-doc Juan Pablo Quimbayo (2021-2022, Post-doctoral Fellow); Guilherme Corte (2021-2022, Visiting Post-doctoral Fellow)
- PhD Yasmina Esmaeili (2021-2022, PhD Fellow)
- Under-grad Paola Granados (2021-2022, NSF REU), Kirsten Johnston (2020-2021), Luis de Pablo (2019-2020, NSF REU), Claire Murphy (2016-2020), Annie Innes-Gold (2017, NSF REU), Nina Lesser (2016-2017), Teddy Noll (2016-2017), Rachael Caron (2016-2017), Casey Maclean (2016-2017), Lauren Herbine (2014-2017, W&M Monroe Scholar), Rachel Wimmer (2014-2016), Paige Bippus (2014, NSF REU), David Godschalk (2014), Danielle Hall (2012-2014), Kyle Belfort (2012-2014), Sally Bornbusch (2012-2013), Katelyn Jenkins (2012-2013)

## ORAL PRESENTATIONS

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*\*Presenting author*

- 2023 “From theory to the dinner plate: how seagrass ecosystems are progressing ecology and saving humanity.” **J.S. Lefcheck.** (2023). [Invited seminar](#). University of Maryland Center For Environmental Science, Horn Point, Maryland.
- 2023 “One fish, two fish, warm fish, cool fish: new insights and tools to detect how climate change is reshuffling marine communities.” **J.S. Lefcheck.** (2023). [Invited seminar](#). University of Virginia, Charlottesville, Virginia.
- 2023 “From theory to the dinner plate: how seagrasses are progressing ecology and saving the planet.” **J.S. Lefcheck.** (2023). [Invited seminar](#). Rutgers University, New Brunswick, New Jersey.
- 2023 “Climate on the move: How coastal ecosystems are shifting in response to a warming planet.” **J.S. Lefcheck.** (2023). [Invited seminar](#). Stony Brook University, Stony Brook, New York.
- 2023 “From theory to the dinner plate: how coastal ecosystems are progressing ecology and saving the planet.” **J.S. Lefcheck.** (2023). [Invited seminar](#). University of Maryland College Park, Maryland.
- 2022 “Piecewise structural equation modeling for natural systems.” **J.S. Lefcheck.** (2022). [Invited seminar](#). Ecological Forecasting Initiative/Ecological Society of America (Virtual).
- 2022 “From theory to the dinner plate: how seagrasses are progressing ecology and saving the planet.” **J.S. Lefcheck.** (2022). [Invited Seminar](#). University of São Paulo (Virtual).
- 2022 “The green and the blue: how coastal ecosystems are advancing ecology, helping society, and saving the planet.” **J.S. Lefcheck.** (2022). [Invited Seminar](#). University of Virginia, Boyce, Virginia.
- 2022 “Coastal Connections.” **J.S. Lefcheck.** (2022) [Invited Panelist](#). Smithsonian Earth Optimism x Folklife Festival, Washington, D.C.
- 2022 “Advances in piecewise estimation of path models.” J.C. Douma, **J.S. Lefcheck.** International Statistical Ecology Conference, Cape Town, South Africa.
- 2022 “The green and the blue: how coastal ecosystems are advancing ecology, helping society, and saving the planet.” **J.S. Lefcheck.** (2022). [Invited Seminar](#). Gothenburg University, Gothenberg, Sweden.
- 2022 “Biodiversity enhances reef fish biomass with increasing spatial scale.” **J.S. Lefcheck,** R. Stuart-Smith, G.J. Edgar, D.B. Rasher, J.E. Duffy, L. Gamfeldt. (2022) 50<sup>th</sup> Annual Benthic Ecology Meeting, Portsmouth, NH.

- 2022 "Seeding Hope: Seagrass Restoration on Virginia's Eastern Shore." (2022) Invited Speaker. Zosterapalooza XXXI (Virtual).
- 2022 "The Green In The Blue: The Comeback Of The Chesapeake's Underwater Grasses And What It Means For The Bay." **J.S. Lefcheck**. (2022) Invited Seminar. Smithsonian Environmental Research Center (virtual).
- 2021 "The green in the blue: how coastal ecosystems are advancing ecology and saving the planet." **J.S. Lefcheck**. (2021) Invited Seminar. Brown University, Providence, RI.
- 2021 "Towards a global seagrass observing community for conservation and synthesis." **J.S. Lefcheck**, M. Portouroglou, L. Weatherdon, S. Pruckner, A. Kornbluth, J.E. Duffy. (2021) CERF 26<sup>th</sup> Biennial Conference (Virtual).
- 2021 "Marine Science and you can too! The power of global collaborations." **J.S. Lefcheck**. (2021) Invited lecturer. University of New Hampshire (Virtual).
- 2021 "Towards a Global Seagrass Monitoring Network: The past, present, and future of collaboration." **J.S. Lefcheck**. (2021) Invited Seminar. International Seagrass Biology Workshop Pre-event Seminar Series (Virtual).
- 2020 "To what extent do seagrass ecosystems support marine food webs? Maldives meadows within a global context." P. Roe\*, **J.S. Lefcheck**, K. Mohamen, H. Nihad. (2020) Third Maldives Marine Science Symposium.
- 2020 "Global trajectories of seagrass ecosystems into the 21<sup>st</sup> Century" **J.S. Lefcheck**. (2020) Organized session. National Coastal and Estuarine Summit (Virtual).
- 2020 "From sea to sky: What cross-scale observations tell us about the human impacts on underwater grasses." **J.S. Lefcheck**. (2020) Invited seminar. University of Western Australia, Perth, Australia.
- 2019 "How to design a biodiversity-ecosystem functioning experiment in 2019." **J.S. Lefcheck**. (2019) Invited lecturer. Brown University, Providence, RI.
- 2019 "Tropicalization of mid-western Atlantic coastal bays by pinfish: a combined ecological and oceanographic perspective." **J.S. Lefcheck**, F.J. Fodrie, D. Gong, M. Faulkner, R.J. Orth. (2019) CERF 25<sup>th</sup> Biennial Conference, Mobile, AL.
- 2019 "From micro to macro: the functional role of biodiversity across scales." **J.S. Lefcheck**. (2019) Invited seminar. Stockholm University, Stockholm, Sweden.
- 2018 "Status and Trends of Submersed Aquatic Vegetation (SAV) in Chesapeake Bay: A Synthesis" W.C. Dennison, **J.S. Lefcheck**, C. Gurbisz, R.J. Orth. (2018) Invited panelist. Chesapeake Research and Modeling Symposium, Annapolis, MD.
- 2018 "Scaling up and digging deep: What new ideas about biodiversity can tell us about the functioning of natural systems." **J.S. Lefcheck**. (2018) Invited Seminar, Smithsonian Environmental Research Center, Edgewater, MD.
- 2018 "High species richness enhances cover of a critical coastal habitat: Insight and mechanisms from 30 years of monitoring in Chesapeake Bay." **J.S. Lefcheck**, C.J. Patrick, D.J. Wilcox, R.R. Murphy, J. Keisman, D.E. Weller, W.C. Dennison, R.J. Orth. (2018) World Conference on Marine Biodiversity, Montreal, Canada.
- 2018 "Scaling up and digging deep: What new ideas about biodiversity can tell us about the functioning of ecosystems." **J.S. Lefcheck**. (2018) Invited Seminar, Duke University, Beaufort, NC.
- 2017 "From the land to the sea: how human activities affect submersed aquatic vegetation in Chesapeake Bay." **J.S. Lefcheck**. (2017) Invited seminar, NOAA, Silver Spring, MD.

- 2017 “Scaling up and digging deep: What new ideas about biodiversity can tell us about the functioning of ecosystems.” **J.S. Lefcheck**. (2017) Invited seminar, Wood’s Hole Oceanographic Institute, Falmouth, MA.
- 2017 “Nutrient reductions promote Submersed Aquatic Vegetation: Thirty years of change in Chesapeake Bay.” **J.S. Lefcheck**, C.J. Patrick\*, R.J. Orth, W.C. Dennison, D.J. Wilcox, R.R. Murphy, J. Keisman, C. Gurbisz, M. Hannam, J.B. Landry, K. A. Moore, C.J. Patrick, J. Testa, D.E. Weller, R.A. Batuik. (2017) 24<sup>th</sup> Coastal and Estuarine Research Federation Biennial Meeting, Providence, RI.
- 2017 “Pinfish incursion: ecosystem consequences for mid-Atlantic seagrass meadows.” J.P. Richardson\*, R.J. Orth, **J.S. Lefcheck**. (2017) 24<sup>th</sup> Coastal and Estuarine Research Federation Biennial Meeting, Providence, RI.
- 2017 “Biodiversity in a changing world: from Amphipods to *Zostera*, and everything in between.” **J.S. Lefcheck**. (2017) Invited seminar, University of Connecticut, Avery Point, CT.
- 2017 “Reinventing biodiversity: From the very small to the very large.” **J.S. Lefcheck**. (2017) Invited seminar, University of North Carolina, Chapel Hill, NC.
- 2017 “Frontiers in biodiversity: New paradigms, challenges, and solutions.” **J.S. Lefcheck**. (2017) Invited seminar, University of Virginia, Charlottesville, VA.
- 2016 “Clearing the air about ‘multifunctionality’: what is it and what does it mean for ecosystem ecology?” **J.S. Lefcheck**. (2016) Invited seminar. University of Lund, Sweden.
- 2016 “Frontiers in biodiversity: From buckets to the biosphere.” **J.S. Lefcheck**. (2016) Invited seminar, University of Göttingen, Germany.
- 2015 “The bugs are back in town!” R.J. Orth\*, S.R. Marion, **J.S. Lefcheck**. (2015) CERF 23<sup>rd</sup> Biennial Conference, Portland, OR.
- 2015 “Functional recovery of an epifaunal invertebrate community associated with a restored eelgrass bed.” **J.S. Lefcheck**, S.R. Marion, R.J. Orth. (2015) 100<sup>th</sup> Ecological Society of America Meeting, Baltimore, MD.
- 2015 “Top-down versus bottom-up control of a temperate eelgrass system: insights from a 15-year ecological survey.” **J.S. Lefcheck**, J.P. Richardson, J.E. Duffy. (2015) 45<sup>th</sup> Benthic Ecology Meeting, Quebec, Canada.
- 2014 “The ‘new’ diversity: global insights into the functional importance of biodiversity.” **J.S. Lefcheck**. (2014) Invited seminar, Colby College, Waterville, ME.
- 2014 “Biodiversity drives ecosystem multifunctionality: a meta-analysis.” **J.S. Lefcheck**, J.E.K. Byrnes, F. Isbell, L. Gamfeldt, J.N. Griffin, M. Hensel, B.J. Cardinale, D.U. Hooper, J.E. Duffy. (2014) 99<sup>th</sup> Ecological Society of America Meeting, Sacramento, CA.
- 2014 “Size structure drivers of crustacean grazer epifauna in a Chesapeake Bay *Zostera marina* bed.” Richardson, J. P. \*, **J. S. Lefcheck**, S. L. Ziegler, J. E. Duffy. (2014) 43<sup>rd</sup> Benthic Ecology Meeting, Jacksonville, FL.
- 2013 “Functional diversity and richness drive ecosystem functioning in experimental estuarine communities.” **J.S. Lefcheck**, & J.E. Duffy. (2013) 42<sup>nd</sup> Benthic Ecology Meeting, Savannah, GA.
- 2013 “Bay scallop restoration and micropredators.” **J.S. Lefcheck**, J. van Montfrans, E. Schmitt, R.J. Orth, J.E. Duffy, M. Luckenbach. (2013) Virginia SeaGrant Symposium, Richmond, VA.
- 2012 “Components of biodiversity in a Chesapeake Bay groundfish assemblage: A high-resolution analysis of patterns and drivers.” **J.S. Lefcheck**, A. Buchheister, S. Chak, T. Clardy, K.M. Laumann, P. Reynolds, K. Sobocinski, M. Stratton, J.E. Duffy. (2012) 97<sup>th</sup> Ecological Society of America Meeting, Portland, OR.

- 2012 “Biodiversity effects on provision of multiple ecosystem functions in marine systems: A meta-analysis.” **J.S. Lefcheck**, L. Gamfeldt, J.E.K. Byrnes, J.N. Griffin, M. O’Connor, B.J. Cardinale, J.E. Duffy. (2012) 41<sup>st</sup> Benthic Ecology Meeting, Norfolk, VA.

## POSTER PRESENTATIONS

\*Presenting author † Undergraduate co-author

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- 2019 “Drivers of regional-scale patterns of seagrass epifaunal invertebrates in the Chesapeake Bay, USA.” C. Murphy\*†, **J.S. Lefcheck**, R.J. Orth. CERF 25<sup>th</sup> Biennial Conference, Mobile, AL.
- 2015 “Factors affecting trophic control of community structure and ecosystem functioning in experimental seagrass (*Zostera marina* L.) mesocosms.” D.R. Godschalk\*†, **J.S. Lefcheck**, J.E. Duffy. (2015) 45<sup>th</sup> Benthic Ecology Meeting, Quebec, Canada.
- 2015 “Changes in faunal community structure after heat induced die-offs in a Chesapeake Bay eelgrass bed (*Zostera marina* L.)” D.K. Hall\*†, J.P. Richardson, J.E. Duffy, **J.S. Lefcheck**. (2015) 45<sup>th</sup> Benthic Ecology Meeting, Quebec, Canada.
- 2014 “Shifts in mesograzers community structure following two major eelgrass die-offs in the Chesapeake Bay.” Ziegler S. L. \*, **J. S. Lefcheck**, J. P. Richardson and J. E. Duffy. (2014) 43<sup>rd</sup> Benthic Ecology Meeting, Jacksonville, FL.
- 2013 “BioDiverse Perspectives: blogging to foster communication among graduate students.” **J.S. Lefcheck**, V. Bastazini, F. Halliday\*, H. Burgess, C. Robinson, R. Sewell-Nesteruk, C. Maranto, J. Parrish. (2013) 98<sup>th</sup> Ecological Society of America Meeting, Minneapolis, MN.
- 2013 “Eelgrass and bay scallop restoration in Virginia’s coastal bays.” E.L. Schmitt\*, R.J. Orth, M. Luckenbach, K.A. Moore, S.R. Marion, D.J. Wilcox, **J.S. Lefcheck**, J.E. Duffy, D.B. Parrish, S. Bonniwell, A. Curry, S. Fate, P. Smith, J. van Montfrans. (2013) 42<sup>nd</sup> Benthic Ecology Meeting, Savannah, GA.
- 2008 “Factors affecting trophic control of community structure and ecosystem functioning in experimental seagrass mesocosms.” **J.S. Lefcheck**, J.E. Duffy, J.P. Richardson. (2008) 41<sup>st</sup> American Geophysical Union Fall Meeting, San Francisco, CA.

## AWARDS & HONORS

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- 2022 Secretary’s Research Prize, Smithsonian Institution.
- 2019 Cozzarelli Prize for Scientific Excellence and Originality. Editorial Board of the *Proceedings of National Academy of Sciences*. [Press release](#)
- 2015 Thatcher Prize for Excellence in Graduate and Professional Study. The College of William & Mary. [Press release](#)
- 2013 Matthew Fontaine Maury Fellowship Award. Virginia Institute of Marine Science. Recognizes interdisciplinary achievements in marine and environmental scholarship.
- 2012 VIMS Dean’s Fellowship Award. Virginia Institute of Marine Science. Recognizes excellence in research.
- 2011 VIMS Council Fellowship Award. Virginia Institute of Marine Science. Recognizes excellence in research.
- 2010 Kelly Watson Fellowship Award. Virginia Institute of Marine Science. Tuition and stipend awarded for excellent performance in the first year of graduate school. [Press release](#)

## SERVICE & MEMBERSHIPS

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Reviewer: *Advances in Ecology*, *African Journal of Marine Science*, *American Naturalist*, *Aquatic Ecology*, *Biological Conservation*, *BioScience*, *Botanica Marina*, *Conservation Biology*, *Ecological Applications*, *Ecology*, *Ecology Letters*, *Environmental Conservation*, *Estuaries and Coasts*, *Frontiers in Plant Science*, *Functional Ecology*, *Global Ecology and Biogeography*, *Ideas in Ecology and Evolution*,

*Journal of Experimental Marine Biology and Ecology, Journal of Ecology, Journal of Plant Ecology, Marine Ecology Progress Series, Methods in Ecology & Evolution, Nature, Nature Climate Change, Nature Communications, Nature Ecology & Evolution, Nature Scientific Reports, Oecologia, Oikos, Proceedings of the National Academy of Sciences, Proceedings of the Royal Society B, Science, Science Advances* | [Publons Profile](#)

## WORKING GROUPS

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- 2022 Assisted Evolution of Eelgrass to Mitigate Climate Impacts. The Nature Conservancy. Virtual.
- 2022 Incorporating Underwater Grasses into the Greenhouse Gas Inventory for North Carolina. Pew Charitable Trusts. Virtual.
- 2021 Submersed Aquatic Vegetation Synthesis Group (SAVSyn 2.0). Chesapeake Bay Program (EPA) and Virginia Institute of Marine Science, Gloucester Point, VA.
- 2020- C-GRASS: Coordinated Global Research Assessment of Seagrass Systems. Scientific Committee on Ocean Research, co-lead for Data Synthesis Group. Virtual.
- 2020- Steering Committee, National Alliance for Submersed Aquatic Vegetation (A-SAVE). Pew Charitable Trusts. Virtual.
- 2017- sFDvent - A functional trait perspective on the global biodiversity of hydrothermal vent communities. 2018 German Center for Integrative Biodiversity Research (iDiv). Halle-Jena-Leipzig, Germany.
- 2016- Submersed Aquatic Vegetation Synthesis Group (SAVSyn), Chesapeake Bay Program (EPA) and 2017 University of Maryland Center for Environmental Science. Annapolis, Maryland.
- 2013 Summer Institute, National Center for Ecological Analysis and Synthesis (NCEAS). University of California, Santa Barbara.
- 2011 Partner, Zostera Experimental Network (ZEN, [www.zenscience.org](http://www.zenscience.org)). Gloucester Point, Virginia.
- 2010- Biodiversity and the functioning of ecosystems: Translating results from model experiments into 2011 functional reality, National Center for Ecological Analysis and Synthesis (NCEAS). University of California, Santa Barbara.