MATTHEW P. STEFANAK

Phone: (410) 404-5713
mstefanak@umces.edu

146 Williams St.
Solomons, MD 20688

EDUCATION

University of Maryland, College Park, MD 2021-current
- *Ph.D.* (in-progress), Marine, Estuarine, & Environmental Science
  Focus: Ecological Systems
- Advisor: Dr. Ryan Woodland, Chesapeake Biological Laboratory

Woods Hole Oceanographic Institute, Woods Hole, MA (*coursework)* 2018
- Fall 2018 Semester at Woods Hole (SAW) Program
  Focus: Biological Oceanography

Middlebury College, Middlebury, VT 2019
- *B.A.*, Biology & Environmental Studies (magna cum laude)

RESEARCH EXPERIENCE

Chesapeake Biological Laboratory, Solomons, MD Aug. 2021-current
Graduate Research Assistant, Woodland Lab

Hawai'i Institute of Marine Biology, Kāne'ohe, HI Dec. 2019-Jul. 2021
Technician, Coral Reef Ecology Lab

Woods Hole Oceanographic Institute, Woods Hole, MA Sep. 2018-Jul. 2019
Student Researcher, Larval Fish Ecology Lab

Middlebury College, Middlebury, VT Feb.-May 2018
Student Researcher, Eggleston Lab

Dartmouth College, Hanover, NH Jun.-Aug. 2017
Research Intern, Lutz Lab

Towson University, Towson, MD May-Aug. 2016
Research Intern, Salice Lab

PEER-REVIEWED PUBLICATIONS[1]

*Santos NR, ***Stefanak MP**, Reyes-Delgado A, O'Brien M, Woodland RJ. (2024). Seascape connectivity of juvenile fishes between Mid-Atlantic coastal lagoons and the inner continental shelf (working title). *Estuarine, Coastal and Shelf Science*, in-preparation.

[1] *co-first authorship, † corresponding authorship

Tsang AO, Graham A, Han JJ, **Stefanak MP**, Stender YO, Rodgers KS. (2024). Evaluating the efficacy of novel Community-Based Subsistence Fishing Area in Hā‘ena, Kaua‘i (working title). *Ecology & Society*, in-preparation.

Han JJ, **Stefanak MP**, and Rodgers KS. (2022). Low-level nutrient enrichment during thermal stress delays bleaching and ameliorates calcification in three Hawaiian reef coral species. *PeerJ* 10(1): e13707. doi: 10.7717/peerj.13707.

Bates AE, *et al.* (**Stefanak MP** one of 345 co-authors). (2021). Global COVID-19 lockdown highlights humans as both threats and custodians of the environment. *Biological Conservation* 263: 109175. doi: 10.1016/j.biocon.2021.109175.

Rodgers KS, †**Stefanak MP**, Tsang AO, Han JJ, Graham A, and Stender YO. (2021). Impact to the coral reef community at Hā‘ena and Pila‘a, Kaua‘i following a record 2018 freshwater flood event. *Diversity* 13(2), 66. doi: 10.3390/d13020066.

Alkhouri NB, Mutka MC, †**Stefanak MP**, and Bearer CF. (2021). The impact of COVID-19 on manuscript submissions to Pediatric Research. *Pediatric Research* 90: 6-7. doi: 10.1038/s41390-020-01220-9.

Stefanak MP, Al-Mudares F, El-Metwally D, Jones J, Kane M and Bearer CF. (2020). High concentrations of urinary ethanol metabolites in Neonatal Intensive Care Unit infants. *Pediatric Research* 88: 865-870. doi: 10.1038/s41390-020-1020-5.

El-Metwally D, Chain K, Mallya K, **Stefanak MP**, Alwis U, Blount B, LaKind J and Bearer CF. (2018). Infant exposure to volatile organic compounds in the Neonatal Intensive Care Unit. *Pediatric Research* 83(6): 1158-1164. doi: 10.1038/pr.2018.52.

TECHNICAL REPORTS

Fantauzzi IAM, Woodland RJ, and **Stefanak MP**. (2022). Effects of the Chesapeake Bay plume on benthic biodiversity and biomass in the shallow coastal zone. Prepared for Maryland Sea Grant, NSF/Research Experience for Undergraduates Program. College Park, MD. pp 18.

Rodgers KS, Graham A, Han JH, Stender Y, Tsang A, and **Stefanak MP**. (2022). 2016-2020 five-year recovery assessment and long-term monitoring of reef coral communities at Pila‘a Reef, Kaua‘i. Prepared for State of Hawai‘i, Department of Land and Natural Resources, Division of Aquatic Resources. Honolulu, HI. pp 149.

Severino S, Rodgers KS, Graham A, Tsang A, Stender Y, and **Stefanak MP.** (2021). Hanauma Bay biological carrying capacity survey 2020/21 annual report. Prepared for City and County of Honolulu: Parks and Recreation, Hawai’i Board of Land and Natural Resources. Honolulu, HI. pp 340. https://www.honolulu.gov/rep/site/dpr/hanaumabay_docs/Hanauma_Bay_Carrying_Capacity_Study_Year_3_2020_to_2021-compressed.pdf.

Rodgers KS, Graham A, Han JH, **Stefanak MP**, Stender Y, Tsang A, Weible R, and Stamoulis K. (2021). 2016-2020 five year efficacy study of the management regulations within the Community Based Subsistence Fishing area of Hā‘ena, Kaua‘i. Prepared for State of Hawai‘i, Department of Land and Natural Resources, Division of Aquatic Resources. Honolulu, HI. pp 81.

Severino S, Rodgers KS, **Stefanak MP**, and Stender Y. (2020). Hanauma bay biological carrying capacity survey 2019-20 2nd annual report. Prepared for City and County of Honolulu Parks and Recreation, Hawai’i Board of Land and Natural Resources. Honolulu, HI. pp 59. http://www.honolulu.gov/rep/site/dpr/hanaumabay_docs/Hanauma_Bay_Carrying_Capacity_Report_August_2020.pdf.

Rodgers KS, Graham A, Han JH, **Stefanak MP**, Stender YO, and Tsang AO. (2020). 2019 long-term monitoring and assessment of the Hā‘ena, Kaua‘i Community Based Subsistence Fishing Area year 4 CBSFA efficacy study. Prepared for State of Hawai‘i, Department of Land and Natural Resources, Division of Aquatic Resources. Honolulu, HI. pp 63. https://dlnr.hawaii.gov/dar/files/2020/07/2019_Final_Haena_report.pdf.

POSTERS & PRESENTATIONS

Stefanak MP, Murphy T, and Woodland RJ. How does the Chesapeake Bay plume affect juvenile fish? *Marine, Estuarine, & Environmental Science Program Colloquium.* Grasonville, MD. March 2024. (Poster).

Stefanak MP, Murphy T, and Woodland RJ. Evaluating the trophic resources supporting benthic and bottom-associated consumers within the Chesapeake Bay plume. *American Fisheries Society: Tidewater Chapter*. Hampton, VA. February 2024. (Poster).

Stefanak MP, Hodgkins C, Li M, Murphy T, Testa J, and Woodland RJ. Influence of the Chesapeake Bay plume on coastal benthic communities. *Coastal and Estuarine Research Federation.* Portland, OR. November 2023. (Poster).

Santos N, Murphy T, Reyes-Delgado A, **Stefanak MP**, O’Brien MH, Secor DH, and Woodland RJ. Individual fish use connected inner shelf and lagoon ecosystems as networked nurseries. *Coastal and Estuarine Research Federation*. Portland, OR. November 2023. (Poster).

Santos N, Murphy T, Reyes-Delgado A, **Stefanak MP**, O’Brien MH, Secor DH, and Woodland RJ. Assessing the prevalence and ecological consequences of habitat connectivity between Maryland’s coastal lagoons and coastal ocean for juvenile fish. *American Fisheries Society: Tidewater Chapter*. Solomons, MD. March 2023. (Poster).

FUNDING & FELLOWSHIPS

Debbie Morrin-Nordlund Memorial Travel Award 2023
Conference Travel Award ($1,616)

Washington Biologists' Field Club Research Award 2023-2024
The Chesapeake Bay plume as a trophic subsidizer of coastal juvenile fish production ($3,300)

MD Sea Grant Competitive Graduate Research Fellowship 2022-2023
Elucidating dietary source and structure of three important juvenile fishery species across the Chesapeake Bay mouth plume using bulk stable isotope analyses (approx. $45,000)

University of Maryland Flagship Fellowship 2021-2026
Graduate Enhancement Funding ($60,000)

Middlebury College Department of Biology 2019
Small-scale variation in larval reef fish settlement in St. John, USVI ($390)

Woods Hole Oceanographic Institute 2018
Semester at Woods (SAW) Academic Scholarship ($7,500)

Middlebury College Department of Biology 2018
Use of C. sphaerospermum *&* T. versicolor *in degradation of polystyrene (#6 plastic)* ($609)

NON-FUNDING AWARDS & CERTIFICATIONS

Middlebury College Graduation Honors 2019
Magna Cum Laude

Dean's List 2015-2019
Fall 2015, Fall 2016, Spring 2017, Spring 2018, Fall 2018, and Spring 2019

PADI Divemaster 2019
EFR & EOA certified, Pro #446107

PROFESSIONAL SOCIETIES

American Fisheries Society (2021-present)
Association for the Sciences of Limnology and Oceanography (2022-present)
Coastal & Estuarine Research Federation (2023-present)

GRADUATE STUDENT ORGANIZATIONS & VOLUNTEERING

University of Maryland: American Fisheries Society Student Subunit
- 2021-2022: Treasurer
- 2022-2023: President
- 2023-2024: Treasurer

Chesapeake Biological Laboratory: Diversity, Equity, and Inclusion Committee
- 2022-2023: Student Representative

2023-2024: Student Representative
Chesapeake Biological Laboratory: New Student Welcome Committee
2022-2023: Student Representative
2023-2024: Student Representative

OTHER PROFESSIONAL EXPERIENCE

Dive Oahu, Honolulu, HI July 2019 – Mar. 2020
Boat Crew & Dive Shop Staff

Phillips & Paolicelli LLP, New York, NY May-Aug. 2016
Medical & Environmental Law Intern

COMPUTER SKILLS

R
Advanced biometry techniques and data management

ArcGIS
Experience through coursework with raster and vector data, novice cartographic skills

Google Earth Engine
Moderate applied experience using remote sensing imagery

Microsoft Excel
Data management and manipulation, simple parametric statistics

ONLINE MEDIA

Stefanak, M. Failure is an Option: The Rewards and Challenges of Fieldwork. (2023). Blog Post *in* Maryland Sea Grant "Fellowship Experiences". https://www.mdsg.umd.edu/fellowship-experiences/failure-option-rewards-and-challenges-fieldwork

NEWS

2022
https://www.nytimes.com/2022/07/16/science/pandemic-nature-anthropause.html

2020
https://www.staradvertiser.com/2020/04/29/hawaii-news/silver-linings-at-hanauma-bay/

2019
https://www.whoi.edu/multimedia/holed-up/