MATTHEW STEPHEN WOODSTOCK, MSC

DEPARTMENT OF BIOLOGICAL SCIENCES,
FLORIDA INTERNATIONAL UNIVERSITY
3000 NE 151ST STREET, NORTH MIAMI, FL 33181

(612) 810-1215 | MWOOD078@FIU.EDU | RESEARCHGATE | TWITTER | GITHUB | LAB WEBSITE

EDUCATION

In Progress	Ph.D.	Biology	Florida International University
2018	M.Sc.	Marine Biology	Nova Southeastern University
2015	B.S.	Biology	Beloit College

PROFESSIONAL EXPERIENCE

2020 – Pres	Research Assistant, Fisheries and Ecosystem Assessment Lab, Florida International
	University, North Miami, FL
2019	Research Exchange Scholar, Dalhousie University, Halifax, Nova Scotia, Canada
2018 - 2020	Teaching Assistant, Florida International University, North Miami, FL
2017 - 2018	STEM Educator, Museum of Discovery and Science, Fort Lauderdale, FL
2017	Teaching Assistant, Nova Southeastern University, Dania Beach, FL
2016 - 2018	Sea Turtle Specialist, Broward County Sea Turtle Conservation Program
2015	Nature Educator, Barbara C. Harris Summer Camp, Greenfield, NH
2014	Chief Scientist, Coastal Marine Education and Research Academy, Clearwater, FL

PEER-REVIEWED PUBLICATIONS

- 1. Woodstock, M.S., T.T. Sutton, T. Frank, Y. Zhang. (2021). An early warning sign: trophic structure changes in the oceanic Gulf of Mexico from 2011–2018. Ecological Modelling. 445: 109509. https://doi.org/10.1016/j.ecolmodel.2021.109509
- 2. **Woodstock, M.S.**, C.A. Blanar, T.T. Sutton. (2020). Diet and parasites of a mesopelagic fish assemblage in the Gulf of Mexico. Marine Biology. 167:1–9. https://doi.org/10.1007/s00227-020-03796-6
- 3. Beck, H.N., Cohen, A., McKenzie, T., Weisend, R., Wikins, K.W., **Woodstock, M.S.** (2019). Broadening Horizons: Graduate Students Participating in International Collaborations Through the Limnology and Oceanography Research Exchange (LOREX) Program. Limnology and Oceanography Bulletin. 28(3): 85–89. https://doi.org/10.1002/lob.10339
- 4. Woodstock, M.S., C. Golightly, D. Fenolio, and J.A. Moore. (2019). *Larsonia pterophylla* (Cnidaria, Pandeidae) Parasitic on Two Anguilliformes: *Paraconger* sp. (Congridae) and *Callenchelyini* sp. (Ophichthidae) in the Gulf of Mexico. Gulf and Caribbean Research. 30:SC7–10. https://doi.org/10.18785/gcr.3001.05

PUBLISHED REPORTS

1. Chua, E.J., H.N. Beck, A.B. Cohen, C.L. Hintz, E.R. Knotts, M. Lauck, T. McKenzie, A.R. Marín, K.W. Wilkins, M.S. Woodstock. (2020). Handbook for International Research Collaborations. Association

- for the Sciences of Limnology and Oceanography. [Online] Available: www.aslo.org/wp-content/uploads/Living-Handbook-International-Collaborations.pdf
- 2. Sutton, T., K. Boswell, A. Cook, S. deRada, D. English, R. Eytan, D. Fenolio, T. Frank, C. Hu, M. Johnston, H. Judkins, G. Lawson, J. Lopez, R. Milligan, J. Moore, B. Penta, N. Pruzinsky, T. Richards, G. Rieucau, T. Rivenbark, L. Timm, M. Vecchione, M. Weber, and M. Woodstock. Cruise Report R/V *Point Sur* cruise DP05, 01-12 May 2017.

MANUSCRIPTS IN REVIEW AND PREPARATION

- 1. **Woodstock, M.S.**, C.A. Blanar, T.T. Sutton. (in review). Parasites of mesopelagic fishes in the Gulf of Mexico. Comparative Parasitology.
- 2. **Woodstock, M.S.**, J.J. Kiszka, P.G.H. Evans, J.J. Waggitt, Y. Zhang. (in prep.). Debunking misconceptions: rising marine mammal abundances have little impact on fisheries in the southern North Sea.
- 3. **Woodstock, M.S.**, T.T. Sutton, Y. Zhang. (in prep.) A trait-based carbon export model for mesopelagic fishes in the Gulf of Mexico with consideration to asynchronous vertical migration, flux boundaries, and feeding guilds.

AWARDS AND RECOGNITION (CUMULATIVE FUNDING: \$31,300)

2021 FIU Biosymposium Best Oral Presentation: 2nd Place

2020 American Fisheries Society Florida Chapter Student Subunit Travel Award (\$100)

2019 FIU CASE Travel Award (\$300)

2019 FIU GPSC Professional Development Grant (\$300)

2019 Limnology and Oceanography Research Exchange (LOREX) Student

2018 Halmos College of Natural Sciences and Oceanography Student of the Year

2017 PAN Student Government Association Professional Development Grant (\$600)

2016 Nova Southeastern University Oceanographic Center Fishing Tournament Scholarship (\$30,000)

2015 Midwest Conference Academic All-Conference Baseball Team

ORAL PRESENTATIONS

- 1. **Woodstock, M.S.** (2021). SciComm beyond LOREX: How an international research program inspired future science communication efforts. ASLO Aquatic Sciences Meeting. Online Presentation.
- 2. **Woodstock, M.S.**, T.T. Sutton, T. Frank, Y. Zhang. (2021). Assessing trophic structure dynamics in ecosystem models using the offshore Gulf of Mexico as an example. ASLO Aquatic Sciences Meeting. Online Presentation.
- 3. **Woodstock, M.S.**, J.J. Kiszka, P.G.H. Evans, J.J. Waggitt, Y. Zhang. (2021). Debunking Misconceptions: Marine mammals and seabirds have limited impacts on fisheries catches in the North Sea. Florida International University Biosymposium. Online Presentation.
- 4. **Woodstock, M.S.**, T.T. Sutton, T. Frank, Y. Zhang. (2020). Assessing trophic structure dynamics in ecosystem models using the offshore Gulf of Mexico as an example. American Fisheries Society Annual Meeting. Online Presentation.

- 5. **Woodstock, M.S.**, T.T. Sutton, T. Frank, Y. Zhang. (2020). An early warning sign: trophic structure changes in the oceanic Gulf of Mexico from 2011–2018. Deep Sea Biology Society Meeting. Online Presentation.
- 6. Chua, E., E. Knotts, K. Wilkins, **M.S. Woodstock**, A.R. Marín. (2020). Limnology and Oceanography Research Exchange (LOREX). European Geosciences Union Meeting. Online Presentation.
- 7. **Woodstock, M.S.** (2020). Take a hike: creating a positive work-life balance through excursions. Ocean Sciences Meeting. San Diego, CA.
- 8. Woodstock, M.S., B. Wang, K. Fennel, T.T. Sutton, Y. Zhang. (2020). Ecological importance of mesopelagic fishes in the oceanic Gulf of Mexico. Florida International University Biosymposium. North Miami, FL.
- 9. Quiquempois, V., **M.S. Woodstock**, Y. Zhang, M. Heithaus, J. Kiszka. (2019). The top-down effects of cetaceans in the Gulf of Mexico: Who are the key players? World Marine Mammal Conference. Barcelona, Spain.
- 10. **Woodstock, M.S.** (2019). Food web model of the oceanic Gulf of Mexico. Florida International University Biosymposium. North Miami, FL.
- 11. **Woodstock, M.S.**, C.A. Blanar, T.T. Sutton. (2018). Trophic ecology and parasitism of a mesopelagic fish assemblage. Nova Southeastern University Biosymposium. Dania Beach, FL.
- 12. **Woodstock, M.S.**, C.A. Blanar, T.T. Sutton. (2017). An examination of the parasites and trophic ecology of mesopelagic fishes. American Fisheries Society Annual Meeting. Tampa, FL.
- 13. **Woodstock, M.S.**, C.A. Blanar, T.T. Sutton (2017). An examination of the parasites and trophic ecology of mesopelagic fishes. American Society of Ichthyologists and Herpetologists Annual Meeting. Austin, TX.

POSTER PRESENTATIONS

- 1. Woodstock, M.S., B. Wang, K. Fennel, T.T. Sutton, Y. Zhang (2020). A comparison of two ecosystem models of the oceanic Gulf of Mexico. Ocean Sciences Meeting. San Diego, CA.
- 2. **Woodstock, M.S.**, C.A. Blanar, T.T. Sutton. (2018). On parasitism in mesopelagic fishes as a function of trophic ecology and vertical distribution. Deep Sea Biological Society Meeting. Monterey Bay, CA.
- 3. **Woodstock, M.S.**, T.T. Sutton, C.A. Blanar. (2018). Trophic ecology and parasitism of a deeppelagic fish assemblage. American Society of Parasitologists Annual Meeting. Cancun, Mexico.
- 4. Woodstock, M.S., C.A. Blanar, T.T. Sutton. (2017). Variations in the parasite fauna and gut contents of vertically migrating and non-migrating mesopelagic fishes of the northern Gulf of Mexico. Gulf of Mexico Oil Spill and Ecosystem Science Conference. New Orleans, LA.

TEACHING AND CURRICULUM DEVELOPMENT EXPERIENCE

2019 – 2020	Human Biology Lab –	Teaching Assistant
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Online laboratory course where students conduct lab experiments at home (generally kitchen based) and receive instructor feedback on written assessments with the intent of resubmission.

2019 General Biology 2 Lab –Development of New Curriculum

Developed three hands-on laboratory experiments focused on comparative anatomy and systematics of all metazoans. Each three-hour experiment was designed with six rotational components divided by phyla and important concepts (e.g., symmetry).

2018 – 2019 General Biology 1 Lab – Teaching Assistant

In-class laboratory course designed to teach early biology majors and non-biology majors basic laboratory techniques and safety while reinforcing key concepts learned

in lecture through hands-on exercises.

2017 Ichthyology – Teaching Assistant

Graduate-level course focused on the systematics and taxonomy of living marine fishes. This class included both a lecture and laboratory component where students learned to identify key characteristics that separate fish clades.

COMMUNITY ENGAGEMENT

2017 – 2018 STEM Educator – Museum of Discovery and Science

Participated in grant-funded programs to provide educational outreach to underprivileged elementary/middle schools in Broward County, Florida. Events included hands-on lessons in biology, physics, geology, chemistry, and astronomy to supplement regular, in-class curricula and appearances to public events (e.g., after school programs, community events). Also gave interactive science shows to museum visitors.

2016 – 2018 Sea Turtle Specialist – Broward County Sea Turtle Conservation Program

Led hatchling releases to the general public as a fundraiser for the organization. Events included a 45-minute general sea turtle conservation presentation followed by a controlled hatchling release where participants could observe sea turtle hatchings

being released into the wild.

2015 – 2018 Graduate Student – DEEPEND Consortium/NSU Oceanic Ecology Lab Member

Conducted lab tours to distinguished guests of the university and visiting school groups. Discussed deep-sea sampling techniques and showed off organisms in collection. Wrote blog posts about ongoing research for a general audience.

LEADERSHIP EXPERIENCE AND ACADEMIC SERVICE

2021	American Fisheries Society Hutton Scholarship Program Application Committee
2021	ComSciCon Miami Organizing Committee
2021	FIU Biosymposium Organizing Committee
2020 – Pres	Deep-Ocean Stewardship Initiative Fisheries Working Group Member
2020 – Pres	Florida International University Biology Graduate Student Committee Officer
2020 - 2021	American Fisheries Society Florida Student Subunit Chapter Secretary
2020 – Pres	Beloiters Helping Beloiters – Alumni network for guiding recent graduates
2019	Florida International University Marine Science Seminar Series Committee
2016 – 2017	Nova Southeastern University Department of Marine Sciences Graduate Student
	Mentor
2012 – Pres	Alpha Zeta Chapter of Sigma Chi (Beloit College)
2012 – 2015	Beloit College Baseball Team

CRUISE EXPERIENCE (CUMULATIVE DAYS AT SEA: 37)

May 2021 **DEEPEND-RESTORE – PI: Tracey Sutton**

Two-week research cruise in the Gulf of Mexico sampling the mesopelagic and upper

bathypelagic ecosystem. Main responsibilities included monitoring acoustic

equipment, MOCNESS deployments, and running CTD deployments.

April 2019 Ichthyology Workshop – PI: Joel Trexler

Four-day research cruise near the Dry Tortugas with a focus on sampling fishes using various methods. Responsible for mesopelagic fish identification and Tucker trawl

deployments.

May 2017 **DEEPEND Consortium – PI: Tracey Sutton**

Three-week research cruise in the oceanic Gulf of Mexico with the intent on sampling the biota and abiotic components from the surface – 1500 m depth. Aided in sample processing and other ship duties (MOCNESS deployments, CTD deployments, glider

retrieval)

PROJECTS AS LEADER

2019 – Pres Impacts of increasing marine mammal populations on fisheries in the southern North

Sea and eastern English Channel.

Collaborators: Yuying Zhang, Jeremy Kiszka, Peter Evans, James Waggitt

2018 – Pres Dissertation: Multi-species modeling of the oceanic Gulf of Mexico.

Committee: Yuying Zhang, Kevin Boswell, Jeremy Kiszka, Jennifer Rehage, Tracey Sutton

Collaborators: Bin Wang, Katja Fennel

2016 – 2018 Thesis: Trophic ecology and parasites of a mesopelagic fish assemblage.

Committee: Tracey Sutton, Christopher Blanar, Tamara Frank.

PROJECTS AS COLLABORATOR

2015 – Pres DEEPEND: Deep Pelagic Nekton Dynamics of the Gulf of Mexico

Project Leader: Tracey Sutton

Role: Dissect mesopelagic fishes and identify gut contents and parasites, develop multi-

species models to assess the trophic structure and nutrient movement within the

ecosystem, contribute to sample processing in research cruises

SERVICE AS A REVIEWER (# REVIEWS)

Ecological Modelling (1)

PROFESSIONAL AFFILIATIONS (PAST AND PRESENT)

Association for the Sciences of Limnology and Oceanography American Fisheries Society – Florida Section Subunit American Institute for Fisheries and Research Biologists American Society of Ichthyologists and Herpetologists Deep Sea Biological Society