

**NICOLE MILLETTE**

Woods Hole Oceanographic Institution  
Biology Department  
45 Water Street, Woods Hole, MA 02543

Phone: (218)-316-2945  
nmillette@whoi.edu

**EDUCATION**

Ph.D. University of Maryland Center of Environmental Sciences, Marine, Estuarine, and Environmental Sciences, 2016

B.S. University of Rhode Island, College of Environmental and Life Sciences, *cum laude*, 2011

**RESEARCH INTERESTS**

Investigating how variability in environmental conditions in aquatic environments effects plankton predator-prey interactions, analyzing phytoplankton to assess the water quality of systems, focusing on the mixotrophic plankton group, and understanding how phytoplankton blooms form and their ecological impact

**PROFESSIONAL EXPERIENCE**

Feb. 2020 Assistant Professor, Department of Biological Sciences, Virginia Institute of Marine Science

2018-2020 Woods Hole Sea Grant Postdoctoral Fellow in Marine Policy, Outreach, & Education, Woods Hole Oceanographic Institution, Woods Hole, MA  
*Project:* The phytoplankton community and mixotrophic grazing response to changes in anthropogenic nutrients  
*Advisor:* Dr. Rebecca Gast

2016-2018 Postdoctoral Researcher, Mississippi State University, Mississippi State, MS and NOAA Atlantic Oceanic and Meteorological Laboratory, Miami, FL  
*Work:* Analyze historical monitoring data in Biscayne Bay to identify potential sources of high nutrient input.  
*Advisor:* Dr. Anna Linhoss (MSU)

2011-2016 Graduate Research Assistant, Horn Point Laboratory, Cambridge, MD  
*Thesis title:* Ecosystem Impact of Winter Dinoflagellate blooms in the Choptank River, MD  
*Advisors:* Dr. James Pierson and Dr. Diane Stoecker

**PEER-REVIEWED PUBLICATIONS**

1. **Millette NC**, Kelble C, Linhoss A, and Ashby S (2019) Using spatial variability in the rate of change of chlorophyll *a* to improve water quality management in a subtropical oligotrophic estuary. *Estuaries and Coasts*. <https://doi.org/10.1007/s12237-019-00610-5>.

2. **Millette NC**, Grosse J, Johnson WM, Jungbluth MJ, Suter EA (2018) Hidden in plain sight: The importance of cryptic interactions in marine plankton. *Limnology and Oceanography Letters*. 3: 341-356. <https://doi.org/10.1002/lol2.10084>
3. **Millette NC**, Kelble C, Linhoss A, Ashby S, and Visser L (2017) Shift in baseline chlorophyll *a* concentrations following a three-year *Synechococcus* bloom in southeastern Florida. *Bulletin of Marine Science*. 94: 3-19. <https://doi.org/10.5343/bms.2017.1046>
4. Kelly PT, Bell T, Reisinger AJ, Spandbauer, TL, Bortolotti LE, Brentrup JA, ...**Millette NC** et al. (2017) Ecological Dissertations in Aquatic Science (Eco-DAS): An excellent networking opportunity for early career aquatic scientists. *Limnol. Oceanogr. Bulletin*. 26: 25-30. doi:10.1002/lob.10180
5. **Millette NC**, Aceves A\*, Pierson JJ, Stoecker DK (2017) Mixotrophy in *Heterocapsa rotundata*: a mechanism for dominating the winter phytoplankton community. *Limnology and Oceanography*. 62: 836-845. doi:10.1002/lno.10470
6. **Millette NC**, King G\*, Pierson JJ (2015) A note on the survival and feeding of copepod nauplii (*Eurytemora carolleeae*) on the dinoflagellate *Heterocapsa rotundata*. *Journal of Plankton Research*. doi: 10.1093/plankt/fbv090.
7. **Millette NC**, Stoecker DK, Pierson JJ (2015) Top-down control of micro- and mesozooplankton on winter dinoflagellate blooms of *Heterocapsa rotundata*. *Aquatic Microbial Ecology*. 76:15-25. doi:10.3354/ame01763.

\*REU students

#### **MANUSCRIPTS IN REVIEW**

1. **Millette NC**, Pierson JJ, North E (In revision) Can prediction of striped bass recruitment be improved with winter water temperatures and a copepod growth model? *ICES Journal of Marine Science*

#### **MANUSCRIPTS IN PREPARATION**

1. Stamieszkin K, Luo J, **Millette NC**, and Follett E (In prep) Conditions for mixotrophy in the North Atlantic Ocean.

#### **FUNDING ACQUISITION**

Woods Hole Sea Grant Postdoctoral Fellowship in Marine Policy, Outreach, & Education (2018-2019)

\$105,050

California Sea Grant Delta Science Fellowship (2017, awarded but declined)

\$163,737

Maryland Sea Grant Graduate Research Fellowship (2013-2015)

\$43,134

#### **AWARDS, HONORS, AND FELLOWSHIPS**

Izaak Walton League Scholarship (2013, 2016)

Horn Point Laboratory Graduate Research Assistantship (2011-2012, 2014-2015)

University of Rhode Island Coastal Fellowship (2010)

University of Rhode Island Academic scholarship (2007-2011)

## **TEACHING EXPERIENCE**

Undergraduate Seminar in Ocean Science (WH495), *Instructor*, (WHOI)

*Prepare syllabus, moderate class discussion, grading, maintaining class website*

Field Methods in Environmental Sciences (ENV311), *Guest Lecture*, (Washington College)

*Lecture and lead field trip on phytoplankton field methods*

Biological Oceanography (MEES621), *Teaching Assistant* (UMD)

*Grading, lecturing, organizing field trips, maintaining class website*

Quantitative Methods in Environmental Sciences (MEES607), *Teaching Assistant* (UMD)

*Grading homework, leading recitation, maintaining class website*

## **PUBLIC SERVICE WORK**

Plankton Count Volunteer Group (2018-present)

*Teach citizens scientists to identify and count estuarine plankton samples*

Horn Point Laboratory Tour Guide (2012-2016)

*Teaching the public and school groups about research at HPL*

Touch Tank Worker (2012-2015)

*Take touch tank to elementary schools and teach them about the Chesapeake Bay*

K-12 Career Days (2012-2016)

*Attend school career days and promote and advise careers in marine sciences*

High School STEM Research Projects (2013-2014)

*Teach high school students and teachers how to apply scientific method, mentor students on research project*

## **CONFERENCE PRESENTATIONS**

1. Conditions for Mixotrophy in the North Atlantic Ocean. ASLO/AGU Ocean Sciences Meeting. Portland, OR: 2018
2. Application of chlorophyll *a* as an indicator to analyze the current status of Biscayne Bay. CERF National Meeting. Providence, RI: 2017
3. Importance of including mixotrophs in models and studying mixotrophs as an assemblage. Eco-DAS Symposium XII. Honolulu, HI: 2016
4. Importance of copepod grazing on *Heterocapsa rotundata* in winter blooms. CERF National Meeting. San Diego, CA: 2013.
5. Linkages between microzooplankton grazing and winter dinoflagellate blooms in the Choptank River, Maryland. AERS Fall Meeting. Chincoteague, VA: 2012

## **SOCIETY MEMBERSHIPS**

Association for the Sciences of Limnology and Oceanography

Coastal and Estuarine Research Federation

## **STUDENTS MENTORED**

Leah Rechen, Chesapeake College, (Intern, 2013)

Alicia Klages, Chesapeake College, (Intern, 2014)

Gabrielle King, Waynesberg College, (Summer REU, 2014)

Greg Remesch, Chesapeake College, (Intern, 2015)

Alison Aceves, California State University, (Summer REU, 2015)

Maya Peterson, Falmouth Academy, (High School Intern, 2018-2019)

Marcella de Costa, St. Augustine's University, (Summer REU, 2019)

### **FIELD EXPERIENCE**

R/V Walton Smith (1/2017, 8/2017, and 1/2018 (chief scientist), 5 days)

*Survey of water quality and biological oceanography in south Florida's coastal waters*

R/V Sharp, Chesapeake Bay (9/2013, 5 days)

*Track the transport and abundance of copepods above and below the pycnocline in hypoxic conditions*

R/V Sharp, Chesapeake Bay (10/2011, 5 days)

*Locate and collect data on Mesodinium rubrum blooms*

R/V Endeavor, Georges Bank (4/2011, 7 days)

*Track the North Atlantic spring bloom formation*

### **REVIEWER ACTIVITIES**

Bulletin of Marine Science

Continental Shelf Research

Ecological Modeling

Estuaries and Coasts

Federation of European Microbiological Societies: Microbiological Ecology

Limnology and Oceanography

The International Society of Microbial Ecology Journal

NSF: Biological Oceanography

### **LEADERSHIP POSITIONS**

Biology Department Representative for the Postdoc Association, *Woods Hole Oceanographic Institution* (2018-Present)

MEES Colloquium Organizing Committee, *Horn Point Laboratory* (2013)

Graduate Student Organization Recreational Chair, *Horn Point Laboratory* (2012-2013)

Spat Dash Planning Committee, *Horn Point Laboratory* (2012-2015)

Student Entertainment Committee Business Manager, *University of Rhode Island* (2010-2011)

Resident Advisor, *University of Rhode Island* (2008-2011)

### **LICENSES AND CERTIFICATIONS**

Advanced Open Water SCUBA (2009)

Night Diver SCUBA (2009)