

Jeanette D. Wheeler

Massachusetts Institute of Technology
Woods Hole Oceanographic Institution (WHOI)

Department of Biology
Redfield 120, MS#34
Woods Hole, MA 02543
jwheeler@whoi.edu

Education

Massachusetts Institute of Technology/Woods Hole Oceanographic Institution Aug 2010-present

- PhD Candidate in Biological Oceanography
- Thesis: *Behavioural responses of competent larval oysters (Crassostrea virginica) to turbulence and conspecific chemical cues*
- Supervised by Dr. Lauren Mullineaux (Biology) and Dr. Karl Helfrich (Physical Oceanography)

University of Alberta Sept 2008-Aug 2010

- MSc in Applied Mathematics, with a focus in Mathematical Ecology
- Thesis: *Temperature-dependent growth and population dynamics in an alpine butterfly*
- Supervised by Dr. Mark Lewis (Math/Biology)

Memorial University of Newfoundland Sept 2003-Apr 2008

- BSc in Applied Mathematics (Honours)
- Honours Thesis: *Survivorship in age-0 Atlantic cod (Gadus morhua) with respect to settlement habitat complexity: A deterministic model*
- Supervised by Dr. Andrew Foster
- B.A. in German Language

Publications

Wheeler, JD, KR Helfrich, EJ Anderson, B McGann, P Staats, AE Wargula, K Wilt, LS Mullineaux (2013). Upward swimming of competent oyster larvae (*Crassostrea virginica*) persists in highly turbulent flow as detected by PIV flow subtraction. *Marine Ecology Progress Series* 488: 171–185.

Matter, SF, A Doyle, K Illerbrun, **J Wheeler**, J Roland (2011). An assessment of direct and indirect effects of climate change for populations of the Rocky Mountain Apollo butterfly (*Parnassius smintheus* Doubleday). *Insect Science* 18: 385-392.

Wheeler, JD, CJ Bampfylde, MA Lewis (2014). Modelling temperature-dependent larval development and subsequent demographic Allee effects in adult populations of the alpine butterfly *Parnassius smintheus*. *Theoretical Ecology*, in revision.

Selected Seminars and Conference Presentations

Poster presentation, Ocean Sciences Meeting, Honolulu, HI (Feb 2014)

Poster presentation, Microscale Interactions in Aquatic Environments, Les Houches, France (Mar 2013)

Poster presentation, Society for Integrative and Comparative Biology, San Francisco, CA (Jan 2013)

Oral presentation, Ocean Sciences Meeting, Salt Lake City, UT (Feb 2012)

Invited seminar, University of Alberta Mathematical Biology Seminar Series (Sept 2010)

Oral presentation, International Conference on the Biology of Butterflies, Edmonton, Canada (July 2010)

Invited seminar, Memorial University Dept of Mathematics and Statistics Seminar Series (April 2008)

Teaching Assistantships

Observational Physical Oceanography, Woods Hole Oceanographic Institution

Autumn 2012

Linear Algebra, University of Alberta

Winter 2010

Calculus I and II, University of Alberta

Autumn 2008-Autumn 2009

Technical Writing in Mathematics, Memorial University of Newfoundland

Winter 2008

Selected Fellowships, Scholarships and Awards

Alberta Ingenuity MSc Graduate Scholarship (2009-2010)
NSERC Canada Graduate Scholarship (2008-2010)
Captain Robert A. Bartlett Science Award (2008)
NSERC Undergraduate Student Research Awards (2006-2007)

Research Grants

NOAA National Sea Grant, with Lauren Mullineaux and Karl Helfrich (2014-2016, approx. USD \$125,000)
Project Title: Behavioural responses of competent larval oysters (*Crassostrea virginica*) to chemical settlement cue in turbulent flow