

Genevieve Bernatchez, M.Sc., Biologist

Email: g_bernatchez@hotmail.com

Education

2012: Northeastern University, Boston, MA, U.S., Biology Department. M.Sc.
*The nonconsumptive and consumptive effects of the invasive green crab (*Carcinus maenas*) on macroinfaunal diversity, abundance and ecosystem functioning in a New England salt marsh* Advisor: Dr. Geoffrey C. Trussell

2001: Northeastern University, Boston, MA, U.S., Biology Department
East/West Marine Biology Program

2000: Université du Québec à Rimouski, Rimouski, Canada, Biology Department
B. Sc. in Wildlife management

Working experience

2014-Present: **Assistant Specialist I** (Dr. Bracken and Dr. Sorte Laboratories, UC Irvine)
Managing the daily operations of the lab. Taking part of ongoing research investigation related to the study of the links between marine communities and ecosystems functioning

2014-2014: **Long Island Sound Study Water Quality Intern** (NEIWPC)
Compile and format water quality datasets for multivariate time series analysis to assist with a review of the LISS monitoring program. Additional fieldwork, laboratory analyses and office work

2012-2014: **Research Assistant**, National Oceanic Atmospheric Administration, National Marine Fisheries Service (NOAA, NMFS)
Collection, processing, and analysis of biological, chemical and environmental samples as part of an ongoing research investigation related to aquaculture habitat effects and climate changes

2010-2011: **Guest lecturer**
Northeastern University for Dr. Cascade Sorte on Conservation Biology
Eastern Connecticut State University for Dr. Joshua Idjadi, on Salt Marsh Ecology

2010-present: **Part-time lecturer**
College of Professional Studies at Northeastern University for the following classes: Biology 1 (Principles), class and lab, Biology 2 (Diversity) lab

2005-2012: **Lead teaching assistant**
Three Seas Program at Northeastern University
Marine Invertebrate Zoology

Responsibilities included creating the lab curriculum, writing lab instructions, and grading

2002-2012: Laboratory technician

Northeastern University, Marine Science Center

Responsibilities include: worked on various research projects, prepare and maintain the equipment for field and laboratory work

2001-2012: Teaching assistant

Northeastern University: Experimental Design in Marine Ecology, General Biology 1 and 2, Neuroethology, Biology of Fishes, Marine Botany, Marine Birds and Mammals, Introduction to Marine Biology

1999-2000: Natural science interpreter

Parc du Mont St-Bruno, Government Park, Québec, 2000

Parc de l'île Bonaventure et du Roche Percé, Government Park, Québec, 1999
Interpretation of the nature and history of that region.

Other Training and information

Citizenship: American and Canadian

Languages: English and French

Computer program/software: IMB, MAC, Microsoft Word, Excel, PowerPoint, JMP, ArcGIS

Certification:

1997: Introduction to Pleasure Boating certified -33hours

2000: NAUI scuba diver certification

2000: Client Plus+ Formation through Sépaq and CQRHT, public relations

2014: Maps and the Geospatial Revolution by The Pennsylvania State University on Coursera.

Technical skills- Research

Nutrients and Chlorophyll "a" analysis using Lachat Quickem 8500 method, Quattro Seal Analytical instrument, spectrophotometer and fluorometer techniques

DIC analyzer, microprobes usage, sterilizing techniques, pipetting, weighing, and mixing

Carbon/Nitrogen ratio analysis using FLASH EA 1112 series NC soil analyzer and an Elemental Analyzer

Methods for analyzing carbohydrates, protein content, DIN, alkalinity, pH, nutrients, moisture content, C/N ratio, total phosphorus, YSI, lamotte test kit

Benthic sampling using coring, staining and preserving techniques. Using both dissecting and compound microscopes, performing dissections

Maintaining and conducting field experiments on phytoplankton (natural and cultured species), fin fish (*Centropristis striata*, black sea bass), crustaceans (*Carcinus maenas*, green crab), mollusks (*Littorina littorea*, common periwinkle) and many other marine species

Honors and awards

2006-2009: National Estuarine Research Reserve Graduate Research Fellowship for 3 years of funding (\$20,000 annually)

2004-2005: Summer stipend, Wells National Estuarine Research Reserve, Maine (\$4,000 annually)

Presentations in academic conferences and others

2003-2010: Benthic Ecology Meeting; Presented a talk yearly at these meetings based on research projects.

2008: Participant in the Boston Islands Harbor Intertidal Bioblitz, Massachusetts

Publication

Altieri, A. H., G. C. Trussell, P. J. Ewanchuk, G. Bernatchez and M. E. S. Bracken (2009). Consumers control diversity and functioning of a natural marine ecosystem. PLoS One 4(4): e5291. Open access

Bernatchez, G. (2012). *The nonconsumptive and consumptive effects of the invasive green crab (Carcinus maenas) on macroinfaunal diversity, abundance and ecosystem functioning in a New England salt marsh*. MA thesis, Northeastern University. <http://hdl.handle.net/2047/d20002728>