

OBJECTIVE

To utilize my science and communication skills to conduct meaningful research with tangible outcomes.

EXPERIENCE

Ocean Analytics, LLC

Consulting services

Stonington, Maine

January 2017-present

- Microplastic laboratory analysis
- Speaker
- Review & dissemination of scientific publications
- Single-use plastic legislation research

Adventure Scientists

Principal Investigator: Global Microplastics Initiative

Stonington, Maine/Bozeman, Montana

May 2014 – March 2018

- Laboratory management and QA/QC
- Hire, train and supervise lab analyst
- Data management, analysis for use in regulatory processes
- Peer-reviewed publication
- National and international academic presentation

Long Cove Sea Farm, LLC

Aquaculture Owner/operator

Stonington, Maine

January 2015-present

- Responsible for all aspects of business & oyster husbandry

The Shaw Institute

Coastal Monitoring Coordinator

Blue Hill, Maine

January 2013 – November 2015

- Management and execution of water quality monitoring program & citizen science program
- Results reporting, GIS mapping
- Grant writing and program budget administration
- Hire, train and supervisor to research interns
- Maine State House research testimonies on plastic research

Ocean Classroom Foundation

Marine Educator

New England, USA

May 2010 – August 2010

- Teach 15- 23 junior high/high school students/at-risk youth on 125 ft live-aboard schooner
- Curriculum design
- Medical Officer, education/food budget and crew duties

Motupore Island Research Center

Project Manager: Seahorse Distribution, Diversity and Trade

Papua New Guinea

March 2007–December 2007

- Organize and conduct diving and net surveys in remote waters
- Data entry and statistical analysis, GIS mapping
- Wet laboratory and field assistant manager
- Public liaison and outreach with remote island tribes/fisherman

EDUCATION

University of Tasmania

Bachelor of Science, Zoology 2006

Hobart, Tasmania, Australia

College of the Atlantic

Master of Philosophy in Human Ecology 2018

Bar Harbor, Maine

PUBLICATIONS

Lima, A.R.A., Ferreira, G.B., Barrows, A.P.W., Christiansen, K.S., Treinish, G., Toshack, M.C. (2020). **Global patterns for the spatial distribution of floating microfibers: Arctic Ocean as a potential accumulation zone.** Journal of Hazardous Materials 40, (2021) 123796.

Barrows, A.P.W., Christiansen, K.S., Bode, E.T. and Hoellein, T.J. (2018). **A watershed-scale, citizen science approach to quantifying microplastic concentration in a mixed land-use river.** Water Research 147, 382-392.

Barrows, A.P.W., Cathey, S.E., Petersen, C.W. (2018). **Marine environment microfiber contamination: Global patterns and the diversity of microparticle origins.** Environmental Pollution 237, 275-284.

Miller, R.Z., Watts, A.J.R., Winslow, B.O., Galloway, T.S., Barrows, A.P.W. (2017). **Mountains to the sea: River study of plastic and non-plastic microfiber pollution in the northeast USA.** Marine Pollution Bulletin 124, 245-251.

Barrows, A.P.W., Neumann, C.A., Berger, M.L., Shaw, S.D. (2016). **Grab vs. neuston tow net: a microplastic sampling performance comparison and possible advances in the field.** Analytical Methods. Advanced Article

Bar-Ness, Y.D., McQuillan, P.B., Whitman, M., Junker, R.R., Cracknell, M., Barrows, A. (2011). **Sampling forest canopy arthropod biodiversity with three novel minimal-cost trap designs.** Australian Journal of Entomology. 51(1):12 – 21

Baine M.S.P., Barrows A.P.W., Ganiga, G., Martin-Smith, K.M. (2009). **Residence and Movement of Pygmy Seahorses, Hippocampus bargibanti, on sea fans (Muricella spp.)** Coral Reefs. 27:2 Pp. 421.

Barrows A.P.W., Martin-Smith K.M., Baine M.S.P. (2008). **Population Parameters and Life History Characteristics of the Alligator Pipefish Syngnathoides biaculeatus (Bloch), in Papua New Guinea.** Journal of Fish Biology. 74: 4 Pp. 806-819.

CURRENT LEADERSHIP

Island Heritage Trust Board member

Island Workforce Housing Board member

Plastic Pollution Coalition Scientific Advisor Board member

World Ocean Observatory Board member

5 Gyres Scientific Advisory Board member

College of the Atlantic Research Associate

