

Nathan L. Stewart, Ph.D.

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EDUCATION

2007-2011	University of Alaska Fairbanks Ph.D., Marine Biology, School of Fisheries and Ocean Sciences	Fairbanks, AK
1996-2000	Carleton College B.A., Biology	Northfield, MN

PROFESSIONAL EXPERIENCE

2013-	Boston University Faculty Lecturer in Biology Faculty lecturer in (EBE), the BU Marine Program (BUMP), and the Core Curriculum. Courses taught: Tropical Marine Invertebrates (BI 569, Belize), Coral Reef Ecology (BI 539, Belize), Evolutionary Ecology (BI 303), and Biodiversity (CC 106), and Biological Designs for Sustainability (BI 486/686).	Boston, MA
2013	Greenland Ice Sheet Traverse Scientist Field Logistician and instrument specialist for the measurement of snow spectral albedo, snow physical properties, and elemental carbon during NSF SAGE, a 1200 mi. snow machine expedition across northern Greenland (NSF Office of Polar Programs and CRREL), April 25 th -June 10 th , 2013.	Greenland
2013	NSF GLACIER Program Leader Research ecologist and tropical ecology program leader for the Global Change Initiative – Education and Research (GLACIER) Project, International Teacher-Scientist Partnership (NSF, AAAS, Boston University, and the University of Belize)	Belize
2012-2013	Boston University Visiting Lecturer in Ecology Visiting Professor of Evolutionary Ecology (BI 303)	Boston, MA
2012	Wellesley College Faculty of Biology Visiting Professor of Marine Biology (BISC 210)	Wellesley, MA
2012	BBC Natural History Unit Field Leader Coastal field ecologist and remote camera logistician for <i>The Great Bear Stakeout</i> , BBC One (aired April 24 th 2013) Producers: V. Berlowitz and J. Wilson.	Katmai, AK
2012	Stonehill College Faculty of Biology Visiting Professor of Ecology (BIO 307)	Easton, MA
2011-2012	Tufts University Faculty of Environmental Science Experimental College Visiting Professor of Arctic Resilience. <i>Change and Resilience in the Arctic</i> (EXP 0027-F), original syllabus cross-listed with ENVS.	Medford, MA
2010	PBS Nature Field Technician Field Technician and Film Assistant for <i>Bears of the Last Frontier</i> , Nature (aired May 8 th 2011). Producers: J. Pontecorvo and C. Morgan.	Katmai, AK
2008-2010	University of Alaska Fairbanks Teaching Fellow Doctoral teaching fellow for kelp forest ecology, field techniques in subtidal ecology, and AAUS scientific diving. PI: B. Konar	Fairbanks, AK

2007-2011	Ph.D. in Marine Biology, University of Alaska Fairbanks Testing the nutritional limitation and predator avoidance hypotheses for restricted sea otter habitat use in the Aleutian Islands, Alaska. Advisor: Brenda Konar	Fairbanks, AK
2005-2007	PISCO Acoustic Telemetry Technician Subtidal technician for the Partnership for the Interdisciplinary Study of Coastal Oceans (Packard Foundation). PI: M. Carr	Santa Cruz, CA
2004	Conservation Easement Technician, The Nature Conservancy Monitoring Technician in charge of target species assessment, GIS mapping, and EDR report writing in the Rocky Mountains Ecoregion. PI: C. Pague	Boulder, CO
2003	NSF REU Nyanza Project Instructor Instructor and field team leader in biological and limnological Studies of Lake Tanganyika. PI: A. Cohen and E. Michel	Tanzania
2001-2003	East African National Parks Officer Research Ecologist for Nyika National Park, Trans-frontier Collaboration with the Frankfurt Zoological Society, US Peace Corps, and GTZ Germany.	Malawi
2000	Columbia University Biosphere 2 Reserve Teaching Assistant Teaching Assistant in intertidal ecology. PI: R. Brusca	Oracle, AZ
2000	Research Technician, Heron Island Research Station Principal Investigator: Gary Wagenbach, Carleton College, University of Queensland. "Benthic utilization distributions in a coastal lagoon dwelling elasmobranch, <i>Rhinobatus typus</i> ."	Australia
2000	Research Technician, Leigh Marine Laboratory Principal Investigator: Gary Wagenbach, Carleton College, University of Auckland. "Post-disturbance community composition in a temperate rocky intertidal community."	New Zealand

HONORS & RECOGNITION

2013	Award for Teaching Excellence, Tufts University (Recipient in 2012 and 2013)
2011	Robert Byrd Research Award, University of Alaska Fairbanks
2010	Frances and Alfred Baker Memorial Scholarship in Marine Biology (Recipient in 2008 and 2013)
2010	Best Ph.D. Poster Award, Alaska Marine Science Symposium (Recipient in 2009 and 2010)
2010	Golden Key International Honor Society Inception
2009	Arctic Institute of North America Grant in Aid of Research recipient
2009	Dieter Family Research Grant recipient
2009	Ken Turner Memorial Research Grant recipient
2009	NSF Graduate Research Fellowship Honorable Mention, 93 rd percentile
2007	University of Alaska Fairbanks Graduate School Fellowship (2007-2009)
2005	Americorps Award for Excellence in Conservation, The Nature Conservancy, Colorado
2003	Department of National Parks and Wildlife Officer's Award, Malawi, East Africa
2000	Honors Australasian Marine Biology Program, Heron Island and Leigh Marine Laboratory
1998	Honors SIT Coastal Ecology Program, Zanzibar Archipelago, Tanzania
1998	UN Honors in Kiswahili Language Proficiency, Adv-High on the ACTFL scale

PUBLICATIONS

Stewart NL, Konar B, and Tinker MT. Testing the nutritional limitation and predator avoidance hypotheses for restricted sea otter habitat use in the Aleutian Islands, Alaska. *Oecologia*, November 22nd 2014.

Stewart NL, Konar B, and Doroff AM. 2014. The influence of habitat complexity and prey availability on sea otter resource selection in a heterogeneous environment. *Bulletin of Marine Science* 90: 921–939.

Stewart NL and Konar B. 2012. Kelp forests vs. urchin barrens: alternate stable states and their effect on prey quality in the Aleutian Islands, Alaska. *Journal of Marine Biology* 2012:1–12.

Freiwald J, **Stewart NL**, Yates DC, and Bernardi G. 2009. Isolation and characterization of nine polymorphic microsatellite loci of the kelp greenling, *Hexagrammos decagrammus*, a temperate reef fish. *Molecular Ecology Resources* 9:563–565.

SELECTED PRESENTATIONS

- 2015 “The effects of sea ice loss on ice-obligate species and ice-adapted peoples of the Arctic”
Climate Change Invited Speaker, Emerson College, Boston, MA
- 2014 “Sea otter restricted habitat use; further support for the sequential megafaunal collapse theory”,
Environmental Studies Invited Speaker, Amherst College, Amherst, MA
- 2013 “Implications of an ice-free Kotzebue Sound on ringed seal (*Phoca hispida*) habitat selection”,
Institute of Marine Sciences Seminar, University of Alaska Fairbanks
- 2012 “Testing the nutritional limitation and predator avoidance hypotheses for restricted sea otter
habitat use in the Aleutian Islands, Alaska. Ecology, Behavior, and Evolution (EBE)
Invited Seminar Speaker, Department of Biology, Boston University, Boston, MA
- 2012 “Alternate stable states and their effect on subtidal prey quality in the Aleutian Islands, Alaska.
Invited Seminar Speaker, Tufts Institute for the Environment (TIE), Tufts University,
Medford, MA

PROFESSIONAL ACTIVITIES

- 2013 NSF GLACIER Global Climate Change Curriculum Designer, Boston University, MA
- 2010 NOAA Rapporteur, Deep Sea Corals Workshop, Anchorage, AK
- 2009 Proposal Reviewer, American Academy of Underwater Sciences
- 2009 Alaska Sea Grant Curriculum Reviewer for Alaska Seas and Rivers K-8 curriculum, NOAA
- 2008 Under-ice Dive Assistant, Konganevik Point Photo Survey, Arctic National Wildlife Refuge
- 2008 Ice-diver Film Support, “Arctic Ocean”, *Jeff Corwin’s Wildlife*, Animal Planet, Discovery
Channel (aired September 12th 2008)

RESEARCH CRUISES

- 2007-11 Alaskan Arctic, Beaufort Sea, R/V MMS Launch 1273. Research lead for high Arctic boulder
patch community ecology. 116 working days at sea, summers, 2007-2011. Sponsored by
the Coastal Marine Institute.
Aleutian Islands, R/V Pt. Sur. Project leader for research on kelp forest interaction webs. 68
working days at sea, summers 2009-2010. Sponsored by the NSF.
Gulf of Alaska, Kodiak Archipelago, R/V Waters. Project leader for field research on
Macrocystis kelp forest community sampling. 8 working days at sea, summer 2008.
Sponsored by CIRCAC, Cook Inlet, Alaska.
Western Aleutian Islands, R/V Thomas G. Thompson. Research Assistant for sea urchin
herbivory research. 22 working days at sea, summer 2008. Sponsored by the NSF.
Prince William Sound, R/V Tempest. Research technician for rhodolith ecology. 12 working
days at sea, 2007. Sponsored by the Polar Regions Undersea Research Center, NOAA.

WORKSHOPS & MEETINGS

- 2013 Snow Surface Area Workshop, Takuvik International Laboratory, Quebec City, Canada
- 2012 Wellesley College Pedagogy Workshop, Presenter,
- 2011 Alaska Marine Science Symposium, Presenter, 19th-23rd January, 2011, Anchorage, AK
- 2010 Arctic Coastal Marine Institute Annual Meeting, Presenter, 19th November, Fairbanks, AK
- 2008-11 Alaska Marine Science Symposium, Presenter, 19th-23rd January, Anchorage, AK
- 2007 Primer-e Statistical Package Workshop. 27th August-1st September, Fairbanks, AK

ASSOCIATION MEMBERSHIPS

- 2010- Golden Key International Honor Society
- 2008- American Chemical Society
- 2007- Sigma Xi Scientific Research Society
- 2005- American Academy of Underwater Sciences
- 2005- Divers Alert Network

TRAINING & CERTIFICATION

- 2011 Level 1 Avalanche Training, Alaska Avalanche School
- 2009- UAF IACUC Training (Institutional Animal Care and Use Committee)
- 2008- PADI Ice Diver
- 2007- Unescorted Arctic North Slope Training
- 2006- AAUS Scientific SCUBA Diver, certification depth 130'
NAUI Master SCUBA Diver
NAUI Rescue Diver
DAN (Divers Alert Network) Emergency Oxygen Administration
- 2005- First Aid and CPR certified