**Sarah G. Glancy**

Zooplankton Taxonomist Telephone: 248-345-5341

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Woods Hole Oceanographic Institution

Woods Hole, MA, 02543

EDUCATION

2020 M.S. Natural Science, State University of New York at Plattsburgh, Plattsburgh, NY

2012 B.S. Biology, Gannon University, Erie, PA

WORK EXPERIENCE

Research Assistant III, November 2019- Current

Research Assistant II, September 2017 - 2019

Research Assistant I, January 2016 to September 2017

Woods Hole Oceanographic Institution, Woods Hole, MA

*WHOI-Related*

WHOI Vehicle Certified

All indicated safety training- Current

Research Technician, June 2013 to May 2016

Lake Champlain Research Institute, Plattsburgh, NY

Teaching Assistant, Fall, 2013 to Spring 2014

SUNY Plattsburgh, Plattsburgh, NY

Great Lakes Invasive Species Intern, May to August 2012

Pennsylvania Dept. Environmental Protection, Erie, PA

FIELDWORK

Approximately 60 days sea time including use of submersible, MOCNESS, bongo nets, and midwater and bottom trawls

Vessels: *Henry B. Bigelow, Alucia, Endeavor, Tioga, Sea Holly III, Discovery, Auk, Alosa*

Submersible: *Nadir*

Geographic regions: NE US shelf, Stellwagen Bank, Slope Sea, Bahamas, Sargasso Sea

2019: *Henry B Bigelow*, August, 15 days Ocean Twilight Zone, N.W. Atlantic

2019: *Tioga*, Monthly day cruises, LTER, Martha’s Vineyard Coastal Observatory

2019: *Sea Holly III*, multiple springtime day cruises, Right Whale Feeding, S. Martha’s Vineyard and Nantucket Shoals

2019: *Alucia*, March, ten-day, Ocean Twilight Zone, Tongue of the Ocean and Sargasso Sea

2019: *Endeavor*, January six-day LTER cruise, S. New England Shelf transect

2018: *Endeavor*, July six-day LTER cruise, S. New England Shelf transect

2018: *Endeavor*, January/February six-day LTER cruise, S. New England Shelf transect

2018: *Tioga*, Monthly day cruises, LTER, Martha’s Vineyard Coastal Observatory

2017: *Auk*, Stellwagen Bank National Marine Sanctuary

2016: *Alosa*, SE Massachusetts lakes and ponds

PROFESSIONAL ORGANIZATIONS

World Association of Copepodologists, member.

RESEARCH INTERESTS

Zooplankton diversity and Ecology. Copepod morphological and molecular taxonomy. Fish-zooplankton interactions. Multidecadal fluctuations in zooplankton assemblages.

RESEARCH

**Professional**

Ocean Twilight Zone project: feeding habits of mesopelagic fishes (January 20018- Present)

* + Field sampling, at sea and sample management
	+ Supervising junior technicians and students
	+ Curating morphological marine copepod library
	+ Stomach content identification and analysis

Northeast US Shelf Long-term Ecological Research project: size structure and composition of the zooplankton community and forage fish feeding (2017- Present)

* + Pre- and post-cruise organization of gear and samples
	+ Leading at sea biological sampling
	+ Identifying and implementing ambient and prey plankton analysis methods
	+ Coordinate collaboration with NOAA for fish and zooplankton processing
	+ Training students in relevant methods and skills

Bottom-up drivers on sand lance feeding, condition, and distribution, Stellwagen Bank National Marine Sanctuary (2017- Present)

* + Plankton taxonomy of ambient and prey zooplankton
	+ Teaching zooplankton taxonomy
	+ Field collection of plankton and fish

Shelf-break upwelling in Beaufort Sea: influences on Arctic cod feeding success (2016- Present)

* + Identification of prey from arctic cod (*Boreogadus saida*)

Use of Phoenix Island Protected Area by tunas for spawning (2015-2017)

* + Sorting fish larvae from plankton samples

Coral Chorus: Soundscapes and larval fish recruitment (2015-2018)

* + Sorting tropical ichthyoplankton from light traps

Impacts of anadromous herring on lake metabolism and sediment biogeochemistry (2016 – 2018)

* + Zooplankton Taxonomy: identification and enumeration of non-rotifers from pelagic waters
	+ Sediment core processing for biogeochemistry and paleolimnology
	+ Paleolimnological methods research and application

Variability in nursery habitat for larval river herring (2016-present)

* + Zooplankton Taxonomy: identification and enumeration of non-rotifers from pelagic waters
	+ Developing protocols for using ethanol preserved samples in Imaging Flow-Cytobot
	+ Training students to identify microzooplankton

**Graduate**

Adirondack Zooplankton Communities: Description, analysis and fish stocking implications. (Dec. 2013 – May 2015)

* + Orchestrated field sampling methods to collect information on previously undescribed lakes
	+ Identification and statistical analysis of all samples
	+ Creating a zooplankton key for the Adirondack region

**Undergraduate**

Allocation of resources to somatic growth and reproduction in *Bythotrephes longimanus* (Jun. 2011-Dec. 2012)

* + Collecting in Presque Isle Bay and Lake Erie
	+ Photographing and measuring on InfinityAnalyze and microscope
	+ Statistics and analysis

Population study of *Myotis lucifugus* in relation to White Nose Syndrome (March 2010-April 2011)

* + Population monitoring by marking methods
	+ Seasonal and annual fluctuation in populations

PROFESSIONAL ACTIVITIES

1st Advanced Zooplankton Course; Morphological and Molecular taxonomy of Marine Copepods. Stazione Zoologica Anton Dorhn, Naples, Italy. Fall 2018

TRAINING & MENTORING

2020 Summer intern Katelyn Redmond (UMass Amherst)

2019 Semester at Woods Hole Student Kent Pham (Univ. of Sciences)

2019 WHOI Summer Student Fellow Jonathan Low (Univ. Tampa)

2019 Guest Investigator Caleb Blanton

2019 Summer volunteer John Collins

2018 Science fair student Abby Neubert (Falmouth Academy)

2018 WHOI Summer Student Fellow Julia Cox (UMass Amherst)

2018 Research Assistant I & II Helena McMonagle

2018 Summer guest student Laura Pino (Penn State)

2018 Summer guest student Agatha Freedberg (UMiami)

2018 Summer intern Elizabeth Constantine (Stonehill College)

2018 Summer volunteer Spencer Lott

PRESENTATIONS

M Wojcicki, **SG Glancy**, PG Batta-Lona, JK Llopiz, A Govindarajan, AC Bucklin. (2020) Discovering Trophic Interactions in the Ocean Twilight Zone: Metabarcoding Analysis of Mesopelagic Fish Diet Diversity. Ocean Sciences Meeting 2020, San Diego, CA.

AC Bucklin, PG Batta-Lona, M Wojcicki, **SG Glancy**, A Govindarajan, JK Llopiz. (2020) Metabarcoding Analysis of Diet Diversity of Mesopelagic Fishes and Salps. Ocean Sciences Meeting 2020, San Diego, CA.

JJ Suca, D Wiley, TL Silva, AR Robuck, D Richardson, **SG Glancy**, T Giandonato, MA Thompson, P Hong, H Baumann, L Kaufman, JK Llopiz. (2020) Environmental drivers of the presence and persistence of sand lance hotspots on the Northeast US Shelf. Ocean Sciences Meeting 2020, San Diego, CA.

K Gardner, S Thorrold, LA Houghton, R Francolini, **SG Glancy**, P Caiger, H McMonagle, JK Llopiz. (2020) Visualizing mesopelagic food webs in the western North Atlantic using stable carbon isotope analysis of essential amino acids. Ocean Sciences Meeting 2020, San Diego, CA.

J Low, **SG Glancy**, E Peacock, HM Sosik, JK Llopiz. Analyzing Spatial Variations of Zooplankton Community Size Structures on the Northeast US Shelf. (2020) Ocean Sciences Meeting 2020, San Diego, CA.

J Strock, S Cox, **SG Glancy**, J Sheppard, JK Llopiz. (2018) Individual-Level Variability in Foraging Resource Use Influences Size-at-Emigration in Anadromous Alewife. 48th Annual Meeting of the American Fisheries Society. Atlantic City, NJ.

**Glancy, SG**. Llopiz, J. (2018) An Overview of Effective Morphological Taxonomy of Digested versus Ambient Marine Copepods. First Advanced Zooplankton Course: Morphological and Molecular Taxonomy of Marine Copepods. Stazione Zoologica Anton Dorhn, Naples, Italy.

**Glancy, SG**., Mihuc, T. (2015) Comparing Zooplankton Communities of 52 Adirondack Lakes with Variable Fish Histories. International Association for Great Lakes Research Conference. Univ. VT. Burlington, VT.

**Glancy, SG**., Mihuc, T. (2015) Comparing Zooplankton Communities of 52 Adirondack Lakes with Variable Fish Histories. Northeastern Natural History Conference. Springfield, MA.

**Glancy, SG**., Mihuc, T. (2014) Comparing Cold Water Zooplankton Communities of Adirondack Lakes with Variable Fish Introduction Histories. Northeastern Natural History Conference. Springfield, MA.

**Glancy, SG**., Legerski, M., Andraso, G., and Ganger, M. (2012) Morphometric predictors of reproductive success in the invasive cladoceran *Bythotrephes longimanus*. Regional Science Consortium, Tom Ridge Env. Center, Erie, PA

**Glancy, SG**., Legerski, M., Andraso, G., and Ganger, M. (2012) Morphometric predictors of reproductive success in the invasive cladoceran *Bythotrephes longimanus*. The Penn State Behrend – Sigma Xi 20th Annual Undergraduate Student Research and Creative Accomplishment Conference. Erie, PA.

**Glancy SG**., Corello, K., and Ropski, S., (2012) Population Ecology of *Myotis lucifugus* on the Gannon University Campus. The Penn State Behrend – Sigma Xi 20th Annual Undergraduate Student Research and Creative Accomplishment Conference. Erie, PA

**Glancy SG**., Corello, K., and Ropski, S., (2011) Population Ecology of *Myotis lucifugus* on the Gannon University Campus. Tri-Beta Undergraduate District Convention. Ebensburg, PA