# Ellen George Karboski

SUNY Oswego, Department of Biological Sciences
7060 NY 104, Oswego NY 13126
ellen.karboski@oswego.edu
(805)290-2632


## EDUCATION

**Cornell University,** Department of Natural Resources, Ithaca NY

Ph.D. Natural Resources **2019**

Dissertation: Cisco *Coregonus artedi* restoration in Lake Ontario: Ecology, genetics, and science communication
Minor: Science communication through social media. Advisors: Dr. Lars Rudstam and Dr. Matthew Hare

**Cornell University,** Department of Natural Resources, Ithaca NY **2016**

M.S. Natural Resources

Thesis: Cisco *Coregonus artedi* spawning in Chaumont Bay, Lake Ontario. Advisor: Dr. Lars Rudstam

**University of Puget Sound**, Tacoma WA
B.S. in Biology, Minor in Environmental Studies **2010**
Coolidge Otis Chapman Honors Senior Thesis: The Zooplankton Community of a High-Elevation Oligotrophic Lake: Seasonal Population Dynamics, Interspecies Competition and Nutrient Cycling by Zooplankton. Advisor: Dr. Joel Elliott

**The School for Field Studies, Center for Marine Resource Studies**, South Caicos, British West Indies
Semester Abroad **2009**
Coursework in Marine Resource Management, Tropical Marine Ecology, and Environmental Policy
Directed Research Project: Methods for Comparing Reef Fish Diversity. Advisor: Dr. Benjamin Holt

## SELECTED RESEARCH EXPERIENCE

**Postdoctoral Researcher,** Cornell Biological Field Station, Bridgeport NY **2019**
Investigated the impact of ultrasonic algae control devices on fish behavior and distribution. Surveys targeted both offshore fish assemblages with hydroacoustics and nearshore fish assemblages with visual snorkel transects.

**Graduate Research Assistant,** Cornell University, Ithaca NY **2013-2019**
Participated in a collaborative project with the Nature Conservancy, USGS, USFWS, and NYSDEC addressing the limitations to cisco *Coregonus artedi* restoration in Lake Ontario. Study activities include radio telemetry of spawning cisco, larval and egg collection, early life history characteristics, assessment of spawning habitat using side scan sonar, genetic diversity and stock structure, and development of genetic species identification markers. Doctoral minor in communications with an emphasis on social media outreach.

**Fisheries Technician**, U.S. Geological Survey, Great Lakes Science Center, Ann Arbor MI **2011-2013**
Performed laboratory and field technician duties to support the Huron-Erie Corridor Project, which monitors and enhances fish spawning efforts in the Detroit and St. Clair Rivers. Conducted larval fish tows, demersal egg sampling and larval fish identification. Routinely trailered and operated 28' research vessels in a high-traffic riverine system. Processed and identified larval fish diets and zooplankton. Assisted with sturgeon set line sampling and PIT tagging, side scan sonar, freshwater mussel collection and large vessel trawling surveys.

## SELECTED TEACHING EXPERIENCE

**Assistant Professor,** Department of Biological Sciences, SUNY Oswego **Aug 2024 - Present**

Teach coursework in biology and environmental science, supervise undergraduate capstone research projects, and conduct research on Great Lakes fisheries ecology and management.

**Continuing Lecturer,** Natural Resources Graduate Program, Paul Smith's College **Jun 2021—Aug 2024**

Design and teach natural resources management, ecosystem services, and science communication courses to graduate and undergraduate students in a hybrid online/in-person program. Instruct students in aquatic field sampling techniques and R statistical programming. Advisor for the aquatics concentration graduate students. Oversee graduate research projects. Manage the graduate school's social media marketing campaigns.

**Adjunct Professor,** Laboratory Science Department, Jefferson Community College **Jan 2020-May 2021**

Instructor for BIO 223 Animal Behavior and BIO 132 Principles of Biology 2: Diversity of Life. Designed and implemented fully remote, online versions of both courses in response to the COVID-19 pandemic.

## PUBLICATIONS

***Publications***

- Getchell, R.G., **E.M. George,** A.N. Rice, J.M. Malatos, B.M. Chambers, A. Griefen, C. Neider, and L.G. Rudstam. 2022. Effects of ultrasonic algal control devices on fish. Lake and Reservoir Management 38(3) 240-255. **Nominated for the Jim LaBounty Best Paper Award, North American Lake Management Society.*
- K.J. Andres, S.A. Sethi, E. Duskey, J.M. Lepak, A.N. Rice, B.J. Estabrook, K.B. Fitzpatrick, **E. George**, B. Marcy-Quay, M.R. Paufve, K. Perkins, and A.E. Scofield. 2020. Seasonal habitat use indicates that depth may mediate the potential for invasive round goby impacts in inland lakes. Freshwater Biology 65(8) 1337-1347
- **George, E.M.** 2019. The history and ecology of cisco *Coregonus artedi* in the Laurentian Great Lakes. Aquatic Ecosystem Health and Management 22(3) 280-293.
- **George, E.M.**, D.L. Crabtree, M.P. Hare, and L.G. Rudstam. 2019. Early life history of cisco and lake whitefish in Chaumont Bay, Lake Ontario: distribution and lack of predation by alewife and rainbow smelt. Advances in Limnology 66:293-308
- **George, E.M.** 2019. Social media at #Coregonid2017: Extending the reach of a small conference with Twitter and Periscope. Advances in Limnology 66:13-22
- **George, E.M.**, D.L. Crabtree, M.P. Hare, J.M. Lepak, and L.G. Rudstam. 2018. Identifying research priorities for cisco in Lake Ontario: A workshop summary report. Workshop held at the Cornell Biological Field Station at Shackelton Point, Bridgeport NY, 31 May 2018.
- **George, E.M.**, M.P. Hare, D.L. Crabtree, B.F. Lantry, and L.G. Rudstam. 2018. Comparison of genetic and visual identification of cisco and lake whitefish larvae from Chaumont Bay, Lake Ontario. Canadian Journal of Fisheries and Aquatic Science 75(8) 1329-1336.
- **George, E.M.,** W. Stott, B.P. Young, C.T. Karboski, D.L. Crabtree, E.F. Roseman, and L.G. Rudstam. 2017. Confirmation of cisco spawning in Chaumont Bay, Lake Ontario using an egg pumping device. Journal of Great Lakes Research 43:204-208.
- **George, E.M.**, E.F. Roseman, B.M. Davis, and T.P. O'Brien. 2013. Feeding ecology of larval burbot *Lota lota* in Northern Lake Huron, Michigan. Transactions of the American Fisheries Society 142:6, 1716-1723.
- Riley, S.C., E.F. Roseman, T.P. O'Brien, A.L. Fingerle, J.G. Londer and **E.M. George**. 2012. Status and trends of the Lake Huron offshore demersal fish community, 1976-2011. Annual Report to the Great Lakes Fishery Commission, USGS Great Lakes Science Center, Ann Arbor MI.

## GRANTS RECEIVED

- New York SeaGrant. "Identifying genetic and habitat limitations to cisco restoration in Lake Ontario." 2016-2018.
- The Nature Conservancy and Margaret L. Wendt Foundation. "Cisco restoration in Lake Ontario." 2013-2015.

## AWARDS AND HONORS

- Nominated for the Jim LaBounty Best Paper Award, North American Lake Management Society **2023**
- Norman S. Baldwin Fishery Science Scholarship, International Association for Great Lakes Research **2019**
- David Bryson Memorial Scholarship, New York Chapter of the American Fisheries Society **2017**