



UNITED STATES DEPARTMENT OF COMMERCE
National Oceanic and Atmospheric Administration
National Marine Fisheries Service
P.O. Box 21668
Juneau, Alaska 99802-1668

November 7, 2022

Simon Kinneen, Chair
North Pacific Fishery Management Council
1007 W. 3rd Avenue, Suite 400
Anchorage, AK 99501

Dear Mr. Kinneen:

I am pleased to nominate Dr. Skylar Bayer to serve on the NPFMC Scallop Plan Team. Dr. Bayer is an expert in scallop biology, reproduction, population dynamics, habitat preferences, community ecology, and has research experience in fishery data analysis and field methodology development. Her CV is enclosed for your consideration.

Dr. Bayer recently (September 2022) joined the NOAA Fisheries Alaska Regional Office Habitat Conservation Division as a Marine Habitat Resource Management Specialist. Skylar comes to us with expertise in applied shellfish biology and ecology – both in fisheries and aquaculture.

Scallops were the focus of her Ph.D. where she developed methodologies for measuring fertilization success in Atlantic sea scallops in the field and tracked spawning events using environmental DNA techniques (see CV for publication details).

She continued research with scallops, collaborating with colleagues in Iceland's Marine and Freshwater Research Institute as a Fulbright Fellow in 2021, and analyzing long term population dynamics of the Iceland scallop fishery. She has forthcoming publications from this latest scallop fishery-focused research.

Dr. Bayer's appointment would fill a recent vacancy in the Scallop Plan Team as well as provide expertise in scallop biology, population dynamics, and habitat interactions that is critical in management decisions.

We appreciate the opportunity to provide scientists in support of the NPFMC plan teams.

Sincerely,

A handwritten signature in blue ink, appearing to read "Jonathan M. Kurland".

Jonathan M. Kurland
Regional Administrator

Enclosure: Skylar R. Bayer Curriculum Vitae
Cc: David.Witherell@noaa.gov, Diana.Evans@noaa.gov



SKYLAR R. BAYER

CONTACT INFORMATION

Position: Resource Management Specialist

Telephone: 617-771-5173 (c)

Institution: NOAA Fisheries

Email: skylar.bayer@noaa.gov

Division: Habitat Conservation Division

skylarrb@gmail.com

Address: 709 W 9th Street, Juneau, AK 99801

Website: skylarbayer.wordpress.com

Twitter: @drsrbayer

EDUCATION

2011 - 2017 **Ph.D.**, Marine Biology, *Advisor:* Dr. Richard Wahle, Darling Marine Center, University of Maine, Walpole, ME

2009 - 2011 **M.Sc.**, Biological Oceanography, *Advisor:* Dr. Lauren Mullineaux, Massachusetts Institute of Technology & Woods Hole Oceanographic Institution Joint Program, Boston & Woods Hole, MA

2005 - 2008 **B.Sc.**, Marine Biology, Cum Laude, *Advisor:* Dr. Jon Witman, Brown University, Providence, RI

POSITIONS IN RESEARCH

2022 - Present **Marine Habitat Management Specialist**, Division of Habitat Conservation, Alaska Regional Office, NOAA Fisheries, Juneau, AK

2021 **Iceland Fulbright Scholar**, Hafrannsóknastofnun, Hafnarfjörður, Iceland
Sponsor: Dr. Jonas Jonasson

2020 – 2022 **Assistant Professor of Biology**, Aquaculture and Extension Specialist, Faculty Manager of the Shellfish Research Program, Center for Economic and Environmental Development, Biology, Marine Biology and Environmental Sciences Department, Roger Williams University, Bristol, RI

2019 –2020 **NRC Postdoctoral Research Associate**, NEFSC Milford Lab, Milford, CT
Supervisor: Dr. Julie Rose (NEFSC Milford Lab)

2017-2018 **Postdoctoral Research Associate**, Downeast Institute, Beals Island, ME
Supervisor: Dr. Phil Yund (Downeast Institute)

2011-2017 **Graduate Research Assistant**, Darling Marine Center, Walpole, ME
Mentors: Drs. Richard Wahle & Damian Brady (University of Maine), Dr. Chris Petersen (College of the Atlantic) & Dr. Pete Countway (Bigelow Laboratory for Ocean Sciences)

2009-2011 **Graduate Research Assistant**, WHOI, Woods Hole, MA
Mentor: Dr. Lauren Mullineaux (Woods Hole Oceanographic Institution, aka WHOI)

2007 **Summer Student Fellow**, WHOI, Woods Hole, MA
Mentor: Dr. Lauren Mullineaux (WHOI)

2007 **Student Researcher**, Sea Education Association, Woods Hole, MA
Mentor: Dr. Kara Lavendar Law (Sea Education Association)

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2006 **NSF Research Experience for Undergraduates**, Toolik Field Station, AK
Mentors: Drs. Gus Shaver & Anne Giblin (Marine Biological Laboratories)

GRANTS IN SUPPORT OF RESEARCH

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- 2022-2024 **Rhode Island Sea Grant**, *Temporal and spatial dynamics of rust tide caused by *Margalefidinium polykrikoides* on Rhode Island shellfish farms in Narragansett Bay and resulting impacts on cultured oysters*, Rhode Island, USA (\$250,000) [PI]
- 2022 **U.S Department of Agriculture**, *Research the Impact of Aquatic Invasive Species on Shellfish Aquaculture in Rhode Island*, Coastal Resource Management Council of Rhode Island. (subcontract: \$32,000) [Co-PI]
- 2021-2022 **Rhode Island Science and Technology Advisory Council**, *Testing the ontogenetic migration hypothesis in the emerging Rhode Island Jonah crab fishery with novel molecular isotope geochemistry and acoustic tagging*. (Subcontract of \$14,051) [Co-PI]
- 2021-2022 **Fluid Imaging**, *Characterizing Plankton Biodiversity: Unveiling the Invisible Forest Through Provocative Storytelling*, (Use of FlowCam 5000 for Spring 2022) [Co-PI]
- 2021 **Speigel Center for Global and International Programs**, Faculty Travel Grant/Program Development Proposal for Iceland, Roger Williams University. (\$2,000) [PI]
- 2021 **Sloan Book Foundation**, honorarium support for authors and newsletter contributors for *Uncharted: how scientists navigate health, research, and bias*. (\$15,000) [PI]
- 2021 **Iceland Fulbright Scholar**, Fulbright Scholars Program, Institute of International Education, Washington, DC, USA. (\$20,000)
- 2021-2026 **Rhode Island Department of Environmental Management**, Funds to support reseeded efforts and research of quahog in collaboration with Rhode Island Shellfisherman's Association. (\$2,000 per year, totaling \$10,000) [PI]
- 2020-present **Shellfish Restoration Foundation of Narragansett Bay**, *Oyster Enhancement in Warren, RI*. (\$28,000 awarded in 2020, additional \$15,000 donated in 2021). [Co-PI]
- 2016-2017 **Maine Sea Grant Program Development Fund**, two separate awards supporting scallop environmental DNA research at Bigelow Laboratory for Ocean Sciences. (totaling \$14,000)
- 2015-2017 **Janet Waldron Doctoral Research Fellowship**, University of Maine, USA. (\$50,000)
- 2012-2013 **NOAA Research Set Aside Program**, *Developing Tools to Evaluate Spawning & Fertilization Dynamics of the Giant Sea Scallop – Phase II: Field trials in experimental populations*, National Oceanographic and Atmospheric Association. (\$192,455)
- 2009-2010 **Coastal Ocean Institute Grant Award**, WHOI, USA (\$3,000)
- 2009-2012 **NSF Graduate Research Fellowship**, National Science Foundation, USA (\$120,000)

PEER-REVIEWED BOOKS

Bayer, SR & Serrato Marks, G (Eds.). 2022. *Uncharted: how scientists navigate health, research, and bias*. Columbia University Press. *In Peer-Review*.

PEER-REVIEWED PUBLICATIONS (first in 2011)

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9. Merkle, BG, Valdez-Ward, E, Shukla, P, & **SR Bayer**. 2022. Sharing science through shared values, goals, and stories: An evidence-based approach to making science matter. *Human-Wildlife Interactions* 15(3), article 27. (*Open Access*)

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8. Neeley, L, Barker, E, **Bayer, SR**, Maktoufi, R, Wu, KJ & M Zaringhalam. **2020**. In the first-person: narrative and identity in science. *Frontiers in Communication*. doi: 10.3389/fcomm.2020.00035. (*Open Access*)
7. **Bayer, SR**, Countway, PA, Wahle, RA. **2019**. Developing an eDNA toolkit for quantifying spawning events in broadcast spawners: moving beyond fertilization assays. *Marine Ecology Progress Series*, 621: 1270141. (*Open Access*)
6. Bethoney, ND, Cleaver, C, Asci, SC, **Bayer, SR**, Wahle, RA, Stokesbury, KDE. **2019**. A comparison of drop camera and diver survey methods to monitor Atlantic sea scallops (*Placopecten magellanicus*) in a small fishery closure. *Journal of Shellfish Research*, 38(1): (17 April 2019).
5. **Bayer, SR**, Wahle, RA, Brady, DC, Jumars, PA, Stokesbury, KD, & J Carey. **2018**. Fertilization dynamics in scallop aggregations: reconciling model predictions with field measurements. *Ecosphere*, 9(8): e02359. 10.1002/ecs2.2359 (*Open Access*)
4. **Bayer, SR**, Bianchi, KA, Atema, J & MW Jacobs. **2017**. Unexpected effects of prior experience on shelter seeking behavior of juvenile American lobsters. *The Biological Bulletin*, 232(2): 101-109.
3. **Bayer, SR**, Wahle, RA, Brady, DC & PA Jumars. **2016**. Design and testing chambers to measure scallop fertilization success in the field. *Marine Ecology Progress Series*, 551: 141-154.
2. Mullineaux, LS, Le Bris, N, Mills, SW, Henri, P, **Bayer, SR**, Secrist, RG & N Siu. **2012**. Detecting the influence of initial Pioneers on succession at deep-sea vents. *PLoS ONE*, 7(12): e50015. doi:10.1371/journal.pone.0050015 (*Open Access*)
1. **Bayer, SR**, Mullineaux, LS, Waller, RG & AR Solow. **2011**. Reproductive traits of pioneer gastropod species colonizing a deep-sea hydrothermal vent after an eruption. *Marine Biology*, 158(1): 181-192.

PEER-REVIEW MANUSCRIPTS IN PREPARATION

-
- Bayer, S** & Jonasson, J. The Recovery of a Fishery Collapse: An Analysis of Reproduction and Recruitment in a Once Thriving Iceland Scallop Population. (*In prep*)
- Bayer, S**, Brooks, D, Brady, DC, & Wahle, RA. Bivalve larval retention in an estuary: Connecting adult population density, spawning, oceanographic modeling of larval dispersal, and juvenile spat collection. (*In prep*)
- Bayer, SR**, Cubillo, A, Dixon, M, Bricker, S, Meseck, S, Pousse, E, Bernatchez, G, Poach, M, Ferreria, J, Wikfors, G, Rose, J. Modeling environmental nitrogen extraction from an oyster aquaculture farm in Greenwich, Connecticut. (*In prep*)
- Cleaver, C, **Bayer, S**, McMahan, M, Jekielek, P, Moritz, B, Batchelder, J, Arnold, S, Guenther, C, Miller, D, Mill Tricer, T, Wahle, RA, Wilson, C, Wotton, J, & Young, T. A cooperative small-scale scallop fishery closure: A haven for recruits. (*In prep*)
- Gurney-Smith, H., Wright-Fairbanks, E.K., & **Bayer, S**. Atlantic Sea Scallop (*Placopecten Magellanicus*) culture in Canada and the United States. DFO Technical Report. (*In prep*)
- Rose, J, Galimany, E, Wikfors, G, DeRosia-Banick, K, Arnott, S, **Bayer, SR**, Bricker, S, & Pousse, E. Contributions of natural shellfish populations to coastal nitrogen reduction at the local scale. (*In prep*)
- Rose, J, Galimany, E, Wikfors, G, **Bayer, SR**. Comparison of filtration activities by subtidally grown ribbed mussels across southern New England estuaries. (*In prep*)

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TEACHING EXPERIENCE

- 2020 - 2022 **Assistant Professor**, *Marine Biology, Aquaculture Survey Course, Aquatic Animal Husbandry, Animal Nutrition, Marine Resource Management, Limnology, Science Communication, Introduction to Ecology and Evolution (Lab), Aquaculture Research Credits (AQS 450)*, Roger Williams University, Bristol, RI, USA
- 2017 **Independent Project Instructor**, three McDaniel's College students, May – August, Darling Marine Center, ME, USA; Co-instructor: Dr. Molly Jacobs
- 2015 **Teaching Assistant**, *Integrative Marine Science*, Spring Semester, University of Maine, ME, USA
- 2014 **Teaching Assistant**, *Ecology & Invertebrate Zoology*, Semester by the Sea, Fall Semester, University of Maine, Darling Marine Center, ME, USA
- 2013 **Teaching Assistant**, *Invertebrate Zoology*, Fall Semester, University of Maine, ME, USA
- 2013 **Teaching Assistant**, *Estuarine Oceanography*, May Term, University of Maine, Darling Marine Center, ME, USA
- 2009 **Teaching Assistant**, *Ecology*, Massachusetts Institute of Technology, MA, USA
- 2008 **Teaching Assistant**, *Ecology*, Brown University, RI, USA

STUDENT ADVISING, MENTORSHIP & SUPERVISING

Undergraduate

- 2020 – 2022 **(1)** Academically advise 16 undergraduates, **(2)** Unofficially mentor **10** students in post-college job-seeking, **(3)** Oversee **15** volunteer and work study students in the shellfish hatchery, **(4)** mentor and oversee **two** current research credit students (AQS 450), **(5)** advising **one** senior thesis student, **(6)** Written letters of recommendation for **ten** students, **(7)** Faculty supervisor for **8** summer interns in the shellfish research program
- 2017 **(1)** Co-mentored 3 students from McDaniel's College in summer research projects, and **(2)** one student intern in the Yund Lab. All students produced posters for their senior thesis requirements, Darling Marine Center, ME, USA
- 2011-2016 Co-mentor with advisor Dr. Rick Wahle for 12 undergraduate interns in the laboratory. Darling Marine Center, ME, USA

Graduate

- 2019-2022 Unofficial advisor and mentor to Master's Student Janine Barr (Rutgers University), Ph.D. students Caitlin Cleaver and Phoebe Jekielek (University of Maine)
- 2018-2021 Volunteer mentor for five graduate students, *Society for Women in Marine Science*. Committed to monthly Skype check-ins with each student, aiding with career advice, networking, and listening as a neutral third-party.

CRUISE & FIELD RESEARCH

- 2021 **Scientist**, *R/V Bjarni Sæmundsson*, Norway lobster survey, MFRI, Iceland
- 2019-2020 **Research Scientist**, Greenwich Aquaculture Project, NEFSC Milford Laboratory, CT, USA
- 2018 **Onshore Scientist**, *R/V Atlantis*, Cruise AT 42-06, East Pacific Rise, Pacific Ocean
- 2017 **Research Scientist**, intertidal blue mussel population sites in downeast Maine, USA

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- 2015 **Observer**, various fishing vessels, Lobster Sea Sampling Program, Department of Marine Resources, ME, USA
- 2013-present **Volunteer Scientist**, Mid-Coast Maine Cooperative Scallop Project, Hurricane Island Foundation, ME, USA
- 2011-2017 **Research Scientist**, small boat operations on the Damariscotta River estuary, year round, Darling Marine Center, ME, USA
- 2010 **Research Graduate Student**, *Larval Biology* Research Projects, University of Washington, Friday Harbor Labs, WA, USA
- 2009 **Research Scientist**, *R/V Oceanus*, North Atlantic Cruise, Woods Hole Oceanographic Institution, MA, USA
- 2007 **Research Scientist**, *R/V Atlantis*, AT 15-26, East Pacific Rise, Pacific Ocean
- 2007 **Research Student**, *SSV R.C. Seamans*, Tahiti-Marquesas-Hawaii, Pacific Ocean
- 2006 **Research Student**, Research Experience for Undergraduates (NSF), Toolik Field Station, North Slope, AK, USA

FELLOWSHIPS & AWARDS

- 2021-2022 **Diversity and Inclusion Faculty Fellow**, Roger Williams University, Bristol, RI
- 2021 **Iceland Fulbright Scholar**, Fulbright Scholars Program, Institute of International Education, Washington, DC, USA. (\$20,000)
- 2019-2020 **NRC Postdoctoral Research Associate Fellow (2 years)**, National Academy of Sciences, USA (\$125,000)
- 2018-2019 **Sea Grant John A. Knauss Marine Policy Fellowship**, National Oceanographic and Atmospheric Administration, USA (\$60,000)
- 2017 **First Place in the Three Minute Thesis Competition**, Graduate College, University of Maine, USA
- 2015-2017 **Janet Waldron Doctoral Research Fellowship**, University of Maine, USA (\$50,000)
- 2015 **Outstanding Service Award**, College of Natural Sciences, Forestry and Agriculture, University of Maine, USA (\$1,000)
- 2013 **Student of the Month**, Graduate School, University of Maine, USA
- 2009-2010 **Coastal Ocean Institute Grant Award**, Woods Hole Oceanographic Institution, USA (\$3,000)
- 2009-2012 **NSF Graduate Research Fellowship**, National Science Foundation, USA (\$120,000)
- 2004-2008 **Henry David Thoreau (HDT) Foundation Scholarship**, HDT Foundation, USA (\$30,000)

INVITED SPEAKING EVENTS

Seminars, Panels, Workshops & Conferences

- 2022 **Invited Speaker**, Workshop on inclusion in science, July 15, *Hertz Foundation*
- 2021 **Invited Speaker**, Beth Staples' Communication Course, "Storytelling & Science: How to Tell Your Story." March 25, *University of Maine*.

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- 2021 **Invited Speaker**, Munro Lab, “My Science and Science Communication Career Paths.” February 8, *Rutgers University*.
- 2021 **Invited Speaker**, Susan Walsh’s Science Communication Course “My Science Communication Journey.” January 19, *Soka University*.
- 2020 **Invited Seminar Speaker**, University of Rhode Island, Graduate School of Oceanography Seminar series “Nutrient removal by Greenwich, CT oysters through biodeposition and excretion measurements.” December 2, *University of Rhode Island*.
- 2020, 2022 **Invited Guest Lecturer**, Oregon State University class and undergraduate Sea Grant program, on science communication and storytelling from the perspective of a scientist
- 2020 **Invited Co-host**, Virtual Water-cooler Chat “Using Storytelling to Counter Misinformation in Science Communication,” April 17, *Ecological Society of America*
- 2020 **Invited Webinar Speaker**, “Nutrient removal by Greenwich, CT oysters through biodeposition and excretion measurements,” March 12, *NMFS Office of Aquaculture*
- 2019 **Invited Speaker**, *Problems in Environmental Science*, Colby College & Bigelow Laboratories for Ocean Sciences, East Boothbay, ME, USA
- 2019 **Invited Speaker**, *Science Communication Workshop, Second Century Stewardship Program*, Schoodic Institute & Acadia National Park, Winter Harbor, ME, USA
- 2019 **Invited Seminar Speaker**, SMAST, UMass Dartmouth, New Bedford, MA USA
- 2018 **Keynote Speaker**, Atlantic Estuarine Research Society, Stockton University, NJ, USA
- 2018 **Seminar Speaker**, NOAA Central Library Brown Bar Seminar series, MD, USA
- 2018 **Invited Instructor**, *Science Journalism and Outreach* course, Bates College, ME, USA
- 2018 **Invited Featured Speaker**, *Telling Stories, Changing Climates*, Johnson County Community College, KS, USA
- 2017 **Invited Guest Speaker**, Bates College *Purposeful Work Initiative* Panel, ME, USA
- 2017 **Invited Seminar Speaker**, Biology Department, WHOI, MA, USA
- 2015 **Invited Seminar Speaker**, Maine Maritime Academy, Castine, ME, USA

Community Engagement Presentations

- 2021 **Invited facilitator**, “Shellfish Restoration and Enhancement in RI,” *Bay SAMP*, RI, USA
- 2019 **Invited co-speaker with Dr. Phil Yund**, “Where do mussel seed come from and go to in Eastern Maine?” *Maine Fishermen’s Forum*, ME, USA
- 2018 **Invited Speaker**, “Bivalves: The headless molluscs that colonized the globe!” *Merry Spring Public Summer Talk Series*, ME, USA
- 2016 **Invited Speaker**, “Why the sex lives of our seafood matters,” TEDx Piscataqua River *On The Edge*, NH, USA
- 2013 **Speaker**, *Expanding Your Horizons* young women’s workshop, UMaine, ME, USA

Appearances on Stage, Television, Podcasts & Radio

- 2020 **Invited Interviewee**, “Scallops & Uncharted Book,” *Water Women* podcast, Canada
- 2019 **Invited Interviewee**, “The Heart of the Ocean,” *The Big Deep* podcast, Los Angeles, CA

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- 2019 **Storyteller**, *Stories from the Stage*, WGBH, Boston, MA, USA
- 2019 **Storyteller**, “Friends in SCUBA,” Episode 7, *Sound Bites*, Maine Public Broadcasting Network (NPR), ME, USA
- 2018 **Guest Scientist**, “Science under the microscope (Prove it: Part 2),” *Brains On!*, Minnesota Public Radio, MN, USA
- 2017 **Invited Scientist**, “King Scallops of Wester Ross and Sea and Bay Scallops of Maine,” *Rob Moir’s Environmental Dialogue*, USA
- 2015 **Invited Guest and Contributor**, “Storytelling,” “Scallops,” “Darling Marine Center’s 50th Anniversary,” *Maine Calling*, Maine Public Broadcasting Network (NPR), ME, USA
- 2014-present **Storyteller**, “Phoning Home from Alvin,” “The Hummingbird of Doom,” “The Captain is Always Right,” “My Friend Andy,” *The Story Collier*, NY, USA

SYNERGISTIC ACTIVITIES

Outreach

- 2022 **Faculty Guide & Organizer**, Rhode Island U.S. Senator visit and celebration of the aquaculture at Roger Williams University
- 2022 **Invited Panelist**, *To The Surface* screening and discussion, Bristol Art Museum
- 2022 **Invited Guide/Presenter**, *The Big Question*, Maine Humanities Council
- 2021 **Shucker**, Rhode Island Shellfisherman’s Association, Newport Seafood Festival
- 2021 **Creator**, RWU Shellfish Program Instagram account, @rwu_shellfish_program
- 2020-present **Lead Researcher/Coordinator**, Rhode Island Shellfisherman’s Association quahog reseeded project, Rhode Island, USA
- 2020 **Invited Scientist**, Zoom speaker for high school and middle school classes in Maryland and Kentucky, USA
- 2019 **Volunteer**, *Experience the Sound Festival*, Greenwich, CT
- 2018-present **Co-editor**, *Uncharted: How scientists navigate health, research, and bias*, under contract with *Columbia University Press* (to be released in 2022 or 2023)
- 2018 **Scientist**, “The Expert Is In,” Smithsonian Museum of Natural History, Washington, DC
- 2018-2019 **Outreach Scientist**, *Skype A Scientist*, USA
- 2017 **Photographer**, Featured photo, *Science 260 News* of National Science Foundation
- 2017-present **Producer**, *Ocean Lovin’* podcast series with *Ocean Science Radio*, USA
- 2016 **Entrant**, “Dance your Ph.D.” contests, AAAS, USA
- 2015 **Naturalist**, *Road Scholar* trip aboard the *Windjammer Angelique*, Camden, ME
- 2015-2017 **Host and producer**, *Strictlyfishwrap Science Radio Hour* live show & podcast, ME
- 2014-present **Producer**, *The Story Collider*, storytelling performances and podcast
- 2013 **Guest**, field report special, *The Colbert Report*, “The Enemy Within – Dr. Skylar Bayer”
- 2013-present **Contributor**, *Scientific American*, *ESA’s The Bulletin*, *National Shellfisheries Association Newsletter*, *Fisheries*, *The Plainspoken Scientist*, *ESA’s #MySciComm*, *SICB*, *Maine Sea Grant*, *University of Maine*, *Maine Boats Homes & Harbors*, *Folks! Magazine*

Service

- 2022 **Invited Member**, Rhode Island Governor’s Science and Technology Advisory Board
- 2022 **Member**, Wetlands Faculty position search committee, Roger Williams University

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- 2022-present **Unpaid Collaborator**, *Identification of hard clams resistant to HN disease and development of diagnostic test methods*, Northeastern Regional Aquaculture Center (NRAC)
- 2021-2022 **Chair**, Shellfish field technician & Algae Manager search committees, Roger Williams University
- 2021-2022 **Co-Chair**, BMBES & CEED Website Committee, Roger Williams University
- 2021-2022 **Co-Chair**, MNS Seminar Committee, Roger Williams University
- 2021-2022 **Senate Secretary**, Roger Williams University Faculty Senate
- 2021-2024 **Member**, Diversity Committee, *Ecological Society of America*
- 2021-2022 **Independent Reviewer**, *Paleo Perspectives on Climate Change program*, NSF
- 2021 **Independent Reviewer**, *Maine Aquaculture Hub*, Maine Sea Grant
- 2021 **Contributor & Editor**, Biology, Marine Biology, Environmental Sciences Department Program Review Report for accreditation, Roger Williams University
- 2021 **Faculty Contributor**, Strategic planning groups in Environmental Justice and Coastal Resiliency, Roger Williams University
- 2020-2021 **Invited Member**, Seafood Working Group, Rhode Island Food Policy Council
- 2020 **Trainee**, Intercultural U Diversity and Inclusion workshop, Roger Williams University
- 2020-present **Non-Maine Collaborator**, *Scallop Research Collaborative*, funded NRAC Mini-Grant
- 2020 **Volunteer Reviewer for Knauss Virtual Review Panel**, 2021-2022 Knauss Marine Policy Class, *National Sea Grant Program*, Silver Spring, MD
- 2021 **Organizer**, science storytelling workshop, *Ecological Society of America's Annual Meeting*
- 2020, 2021 **Organizer**, Science Policy 101 short course, *Ecological Society of America Annual Meeting*
- 2019 **Invited Technical Review Panelist**, 2020-2022 Biennial Research Competition, *Oregon Sea Grant*, Corvallis, OR
- 2019-2020 **Communication & Engagement Section Representative**, *Ecological Society of America* Committee of Diversity & Education
- 2019-present **Editor-in-Chief**, Human Dimensions Series, *The Bulletin of the Ecological Society of America*
- 2019 **Independent Reviewer**, The Royal Society, United Kingdom
- 2018-2021 **Secretary-elect (2019-2020), Online Editor & Policy Liaison (2018-2019)**, Communication & Engagement Section of the *Ecological Society of America*
- 2018 **Organizer**, two symposia for the 2018 *Conservation Marketing and Engagement Congress*, George Mason University, VA
- 2018-2019 **Editor**, Sea Grant Knauss Fellow Newsletter, Washington, DC
- 2017 **Grant Reviewer**, NOAA Saltonstall-Kennedy Grant Program
- 2015 **Organizer**, School of Marine Science Grad Student Symposium, ME
- 2014-2017 **Committee Member**, UMaine Marine Science Professional Development Club, ME
- 2014 **Rapporteur**, *US-Canada Scallop Summit Meeting*, St. Andrew's, NB, Canada
- 2012-2014 **Graduate Student Representative**, Darling Marine Center Safety Committee, ME
- 2010-2011 **Chair**, MIT-WHOI Joint Program Student Representative Board, WHOI, MA

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PERSPECTIVES, REVIEWS, INTERVIEWS, OPINIONS & TECHNICAL REPORTS

-
- Bayer, SR. 2020.** Scallop Research: Aided by Unique Partnership. *Maine Boats Homes & Harbors Magazine*: Issue 163: **March/April 2020**. Online Access: <https://maineboats.com/print/issue-163/scallop-research> (Also available in print)
- McDonough Mackenzie, C, Barak, RS, **Bayer, SR**, Bletz, M, Brunson, MW, Dudney, J, Gaoue OG, Gill, JL, Harris, A, Kuebbing, S, McGill, Nocco, M, Tonietto, RK, Vahsen, ML & EF Waring. **2020**. Plant Love Stories: Share your story and grow a movement. *The Bulletin of the Ecological Society of America*. doi: [10.1002/bes2.1663](https://doi.org/10.1002/bes2.1663) (Open Access)
- Hettinger, A, Merkle, BG, Schwarz, K, **Bayer, SR**, Whalen, E, & J Purrenhage. **2019**. Human Dimensions: Communication & Engagement, Where Ecology and Human Dimensions Meet. *The Bulletin of the Ecological Society of America*. doi: [10.1002/bes2.1641](https://doi.org/10.1002/bes2.1641) (Open Access)
- Hettinger, A, Kumar, A, Eaves, T, Anderson, S, Merkle, BG, **Bayer, S**. **2019**. Extending the Vision: Highlighting the Human Dimensions of the Ecological Society of America. *The Bulletin of the Ecological Society of America*. doi: [10.1002/bes2.1595](https://doi.org/10.1002/bes2.1595) (Open Access)
- Serrato Marks, G, **Bayer, SR**. **2019**. Our Disabilities Have Made Us Better Scientists. *Scientific American*, September 2019 Issue. ([Online Version in Voices Blog](#), Magazine edition available upon request).
- Bayer, SR**, Hettinger, A. **2019**. Storytelling: A natural tool to weave the threads of science and community together. *The Bulletin of the Ecological Society of America*. doi:[10.1002/bes2.1542](https://doi.org/10.1002/bes2.1542). (Open Access)
- Bayer, SR**. May **2018**. [SciComm Lit Review: Skylar Bayer reviews "Writing Science in Plain English."](#) Communication & Engagement Section of ESA.
- Bayer, SR**. December **2017**. [The Secret World of Dinosaur Tracks](#). Written per request of the *Society of Integrative and Comparative Biology* 2018 annual conference.
- Bayer, SR**. June **2017**. [#MySciComm Series: Skylar Bayer on saying "yes, and..." to science storytelling on radio, national TV, and beyond](#). Communication & Engagement Section of ESA.
- Bayer, SR**. **2016**. A shellfish disease database 20 plus years in the making. National Shellfisheries Association Quarterly Newsletter, 2016(4).
- Bayer, SR**. October **2016**. [Writing your own press release](#). The Plainspoken Scientist, American Geophysical Union.
- Bayer, SR**. July **2016**. [Benefits of the audio experience](#). The Plainspoken Scientist, American Geophysical Union.
- Bayer, SR**, Cheney, T, Guenther, C & JA Sameoto. **2016**. Proceedings of the US and Canada Scallop Science Summit: St. Andrews, New Brunswick, May 6-8, 2014. Can. Tech. Rep. Aquat. Sci. 3151: v + 48p.
- Bayer, SR**, Becker, BJ & PS McDonald. **2015**. Summary of the 2015 National Shellfisheries Association Meeting. *Fisheries*, 40(9): 439-440.
- Bayer, SR**. **2015**. The 20th Annual International Pectinid Workshop: An Overview. National Shellfisheries Association Quarterly Newsletter, 2015(3):7.
- Bayer, SR**. **2015**. Plenary Speakers – Monterey. National Shellfisheries Association Quarterly Newsletter, 2015(2):10-11.
- Bayer, SR**. **2014**. The Bourne-Chew Identity. National Shellfisheries Association Quarterly Newsletter, 2014(3): 4-5.
- Bayer, SR**. **2013**. 27 Years of Culturing Juvenile American Lobsters with Dr. Brian Beal. National Shellfisheries Association Quarterly Newsletter, 2013(3): 6-7.

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SELECTED PRESENTATIONS AT SCIENTIFIC CONFERENCES

- Bayer, SR.** Cooperative research on the sea: listening, story-sharing and relationship-building. Ecological Society of America, Montreal, Quebec, Canada. August **2022**. (oral, science communication)
- Bayer, SR,** Smolowitz, R, Wikfors, G & Scott, T. Temporal dynamics of *Margalefidinium polykrikoides* rust tides and impacts on Rhode Island oyster farm. Gulf of Maine HAB Science Symposium, Virtual, February 16th, 2022 (oral)
- Newman, R, Merkle, BG, Schwartz, K, **Bayer, SR** & Cook, EM. WK 9: Telling Stories, Sharing Knowledge, and Seeing the Nature of Things: Teaching Scientific Communication in Ecology Courses. Ecological Society of America, Long Beach, California USA. August **2021**. (Workshop, science communication)
- Bayer, SR.** Congress as an Ecosystem. (part of the congressional policy workshop 101) Ecological Society of America, Long Beach, California USA. August **2021**. (oral, policy)
- Bayer, SR.** The Recovery of a Fishery Collapse: An Analysis of Reproduction and Recruitment in a Once Thriving Iceland Scallop Population. Iceland Fulbright Scholars Symposium, Virtual, May 10th, 2021. (oral)
- Barr, J, Munroe, D, Calvo, L, Kreeger, D, Cheng, JM, Rose, HM, & **Bayer, S.** Quantifying farm-scale ecosystem services associated with eastern oyster aquaculture in the northeast. National Shellfisheries Association Annual Meeting, Virtual, March 25th, 2021. (poster & oral presentations)
- Dixon, M, Mizuta, D, Meseck, S, Morse, D, **Bayer, S,** & Wikfors, G. Sea scallop, *Placopecten magellanicus*, filtration and feeding relative to seston quantity and quality in the Damariscotta River, Maine, USA. National Shellfisheries Association Annual Meeting, Virtual, March 25th, 2021. (oral)
- Bayer, SR.** Congress as an Ecosystem. (part of the congressional policy workshop 101) Ecological Society of America, Virtual. August **2020**. (oral, policy)
- Bayer, SR.** My career in public policy. Ecology Careers Session. Ecological Society of America, Online. August **2020**. (oral, policy)
- Bayer, SR,** M Dixon, A Armbruster, S Bricker, S Meseck, M Poach, E Pousse, G Wikfors & J Rose. Calculating nutrient removal by local Greenwich oysters through biodeposition and excretion measurements. Milford Aquaculture Seminar. Shelton, Connecticut. January **2020**. (oral)
- Bayer, SR.** Crafting a policy-friendly message for Congress. Ecological Society of America. Louisville, Kentucky. August **2019**. (oral, policy)
- Bayer, SR.** Highlighting the STORY In Plant Love Stories. Ecological Society of America. Louisville, Kentucky. August **2019**. (oral, science communication)
- Bayer, SR.** The Up-Goer Five Challenge: Using Building Blocks from Food-Rock Animals to Catch Racing-Him-Cells and Round-Her-Cells Making Babies in the Big Water! American Geophysical Union. Washington, District of Columbia. December **2018**. (oral, science communication)
- Bayer, SR.** Where have all the invertebrates gone? Conservation Marketing and Engagement Congress. Arlington, Virginia. October **2018** (oral)
- Bayer, SR,** PD Countway & RA Wahle. An environmental DNA (eDNA) approach for investigating the reproductive biology of sea scallops. American Fisheries Society. Atlantic City, New Jersey. August **2018**. (oral)
- Bayer, SR.** Environmental Policy: What's science got to do with it? The value of a Knauss Sea Grant Fellowship. Ecological Society of America. New Orleans, Louisiana. August **2018**. (oral, policy)
- Bayer, SR,** PD Countway & RA Wahle. An environmental DNA (eDNA) approach for investigating the reproductive biology of sea scallops. Ocean Science Meeting. Portland, Oregon. February **2018**. (poster)

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- Bayer, SR**, PD Countway & RA Wahle. Developing a genetic toolkit to detect and quantify sea scallop spawning events. International Pectinid Meeting and Workshop, Portland, Maine. April **2017**. (oral)
- Cleaver, C, Arnold, S, Asci, S, Batchelder, J, **Bayer, SR**, Bethoney, ND, Jekielek, P, Miller, D, Miller, I, Moritz, B, Stokesbury, KD, Wahle, RA & J Wotton. The effect of small-scale closed areas on populations of *Placopecten magellanicus* in Maine. International Pectinid Meeting and Workshop, Portland, Maine. April **2017**. (poster)
- Bayer, SR**, RA Wahle, DC Brady & PA Jumars. Building a tool kit to assess reproductive performance of commercially exploited broadcast spawners inside and outside no-take zones. International Marine Conservation Congress. St John's, Newfoundland, Canada. August **2016**. (oral)
- Bayer, SR**, RA Wahle, DC Brady & DA Brooks. A marriage of larval modeling and empirical data: Linking adult, larval and juvenile scallops in an estuary. Benthic Ecology Meeting. Portland, Maine. March **2016**. (oral)
- Bayer, SR**, RA Wahle, DC Brady & DA Brooks. A marriage of larval modeling and empirical data: Linking adult, larval and juvenile scallops in an estuary. Ocean Science Meeting. New Orleans, Louisiana. February **2016**. (poster)
- Bayer, SR**, RA Wahle, DC Brady & PA Jumars. The first field evidence of fertilization in the giant sea scallop. Society for Integrative and Comparative Biology, Portland, Oregon. January **2016**. (oral)
- Bayer, SR**, RA Wahle & DC Brady. Giant sea scallop spawning phenology tracks peak summer temperatures in the Damariscotta. Regional Association for Research on the Gulf of Maine (RARGOM), Portsmouth, New Hampshire. October **2015**. (poster)
- Bayer, SR**, RA Wahle, & DC Brady. Population density and fertilization: the giant sea scallop. International Pectinid Meeting and Workshop, Galway, Ireland. April **2015**. (oral)
- Bayer, SR**, RA Wahle, DC Brady & PA Jumars. The first field evidence of fertilization in the giant sea scallop. National Shellfisheries Association Annual Meeting, Monterey, California. March **2015**. (oral)
- Bayer, SR**, RA Wahle, DC Brady & PA Jumars. The first field evidence of fertilization in the giant sea scallop. Benthic Ecology Meeting, Quebec City, Quebec. March **2015**. (oral)
- Bayer, SR**, RA Wahle, J Gaudette, KDE Stokesbury, M Sieracki, PA Jumars & R Maxwell. NOAA/RSA Projects: Developing Tools to Evaluate Spawning and Fertilization Dynamics of the Giant Sea Scallop. New England Fisheries Management Council Scallop Plan Development Team Meeting. New Bedford, MA. April **2014**. (oral)
- Bayer, SR**, RA Wahle, DC Brady, DA Brooks & PA Jumars. Scale of fertilization success in an exploited broadcast spawner: from an individual to an estuary. Ocean Science Meeting, Honolulu, Hawaii. February **2014**. (poster)
- Bayer, SR**, RA Wahle, DC Brady, CE Bergeron & PA Jumars. Exploring fertilization success of *Placopecten magellanicus* aggregations in an empirically-informed model. International Pectinid Workshop and Meeting, Florianopolis, Brazil. April **2013**. (poster)
- Bayer, SR**. Exploring fertilization success of *Placopecten magellanicus* aggregations in an empirically-informed model. Benthic Ecology Meeting, Savannah, GA. March **2013**. (oral)
- Bayer, SR**. Exploring reproductive success of ocean scallop aggregations through coupled laboratory and field experiments. Benthic Ecology Meeting, Norfolk, VA. March **2012**. (oral)
- Bayer, SR**, MW Jacobs, N Shuttari & J Atema. A new beginning on the benthos? No effect of larval or postlarval experiences on settlement and shelter-seeking behaviors of the lobster *Homarus americanus*. International Conference and Workshop on Lobsters, Bergen, Norway. June **2011**. (poster)

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SELECTED NEWS & MEDIA

-
- 2022 **Roger Williams University Magazine**, Seeding Research Opportunities: Fulbright Scholar Skylar Bayer. *Print only*.
- 2021 **Inside Higher Education**, The Changing Face of Science, 4 May. <https://www.insidehighered.com/news/2021/05/04/federal-report-shines-light-historically-underrepresented-groups-science>
- 2021 **Maine Alumni Magazine**, University of Maine, Class Notes, Winter 2021, pp 55. <https://www.flipsnack.com/UMaineAlumni/winter-2021-maine-alumni-magazine.html>
- 2020 **Sea Education Association**, Sea Alumna Dr. Skylar Bayer joins faculty at Roger Williams, authors book, 6 October. https://www.sea.edu/sea_currents/single/sea-alumna-dr.-skylar-young-bayer-joins-faculty-at-roger-williams-authors-b
- 2019 **NCCOS News**, NOAA, Partners Evaluate Nitrogen Removal Potential of Oysters in Long Island Sound, 15 November. <https://coastalscience.noaa.gov/news/nccos-and-nefsc-scientists-join-industry-and-community-partners-for-lab-and-field-experiments-to-confirm-bioextractive-removal-of-nitrogen-by-oysters/>
- 2019 **UMaine News**, Researchers use DNA in seawater to monitor scallop reproduction. 23 August. <https://umaine.edu/news/blog/2019/08/23/researchers-use-dna-in-seawater-to-monitor-scallop-reproduction/>
- 2018 **Scientific American**, Young and Struggling in Science. October Issue. <https://www.scientificamerican.com/article/young-and-struggling-in-science/>
- 2018 **Rapid Ecology**, How Improvisation and Acting can Boost Your Science (Really!). 26 September. <https://rapidecology.com/2018/09/26/how-improvisation-and-acting-can-boost-your-science-really/>
- 2018 **Live Science**, Here's What Happens to a Styrofoam Cup Under the Deep Sea's Crushing Pressure. 11 June. <https://www.livescience.com/62782-styrofoam-cups-deep-sea-shrunkencupoff.html>
- 2018 **UMaine News**, UMaine graduates explore marine policy in Washington, D.C. 31 January. <https://umaine.edu/news/blog/2018/01/31/umaine-graduates-explore-marine-policy-washington-d-c/>
- 2018 **PenBay Pilot**, Bivalves: headless mollusks that conquered the planet, January. <https://www.penbaypilot.com/article/bivalves-headless-mollusks-conquered-planet/96796>
- 2017 **Lincoln County Magazine**, Scallop Secrets. Vol. 13 (10), June 2017 (Print Only)
- 2017 **Phys.org**, Reading the genetic signature of the sea scallop, 12 October. <https://phys.org/news/2017-10-genetic-signature-sea-scallop.html>
- 2017 **Ecological Society of America**, ESA SciComm Section puts the human element front-and-center in #MySciComm blog series and #ESA2017 workshops and special events. 7 August. <https://www.esa.org/esablog/guest-posts/esa-sci-comm-section-puts-the-human-element-front-and-center-in-mysci-comm-blog-series-and-esa2017-workshops-and-special-events/>
- 2016 **Phys.org**, Scientist learns population size of scallops affects fertilization success. 25 August. <https://phys.org/news/2016-08-scientist-population-size-scallops-affects.html>

SKYLAR R. BAYER

RECENT CERTIFICATIONS AND TRAINING PROGRAMS

2021	Boat safety training, Roger Williams University, Bristol, RI
2021	CPR & First Aid, Roger Williams University, Bristol, RI
2020	Introduction to R online course, PR Statistics, Glasgow, UK
2020	WikiScholar, Wikipedia Editing Course through 500 Women Scientists, Wiki Education Foundation, New York, NY
2019	Primer-e Workshop, Marine Biological Association, Plymouth, UK
2018	COMPASS Science & Policy Communication Training Workshop, Washington, DC
2017	Diving First Aid for Professional Divers certified by DAN, Walpole, ME
2014	Alan Alda Center for Communicating Science, One-Day Workshop, Dartmouth, NH

SKILLS

Small boat handling, long-term research cruises, SCUBA field operation logistics, oceanographic equipment deployments, animal husbandry, spawning induction, histology, species identification, statistics, quantitative real-time PCR, DNA extraction, environmental DNA analysis, computer modeling (MATLAB, R, Primer-e), science communication, writing press releases, public speaking, science policy

OTHER

Reviewer for Research Manuscripts: Journal of Shellfish Research, Aquatic Biology, Environmental DNA, Aquaculture Reports, Environmental Pollution, Aquaculture

Orcid ID: 0000-0003-4128-9536

Societies: Ecological Society of America (**current**), East Coast Shellfisheries Association (**current**), Society of Conservation Biology (previous), American Geophysical Union (previous), American Fisheries Society (previous), Society of Integrative and Comparative Biology (previous), Association for the Sciences of Limnology and Oceanography (previous), National Shellfisheries Association (previous)

Additional community & outreach experiences:

2018-2019	Volunteer , overnight stays at <i>Calvary Women's Services</i> in Washington, DC
2016-present	Student , Brazilian Jiu Jitsu, purple belt, Maine, D.C., Rhode Island, Iceland
2015	On-camera correspondent and producer , <i>Village Soup TV Sports Fix</i> , ME
2012-2015	Skater, coach, interleague liaison, team captain (2014), <i>Rock Coast Rollers</i> , ME