

Kaitlyn Rae Clark

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EDUCATION

Virginia Institute of Marine Science—Gloucester Point, VA *August 2019–present*

Anticipated Graduation: August 2025

Ph.D. in Marine Science with a focus in Fisheries Science

Draft Dissertation Title: Impacts of reproductive and feeding ecology on the productivity of the Atlantic sea scallop (*Placopecten magellanicus*) resource

Research Advisors: David Rudders, Ph.D., and Roger Mann, Ph.D.

College of the Atlantic—Bar Harbor, ME

September 2015–June 2019

B.A. in Human Ecology with a focus in Marine Biology

Senior Project Title: Collecting oral histories of the marine worm industry in coastal Maine

Research Advisors: Chris Petersen, Ph.D., and Natalie Springuel

PROFESSIONAL EXPERIENCE

Instructor—William & Mary Camp Launch

June 2022–July 2022

Collaborated with a four-person instructional team to prepare and present engaging marine science content for a two-week camp for high school students from underserved communities. Developed and directed hands-on activities in the classroom and the local environment.

Intern—Smithsonian Environmental Research Center

June 2017–August 2017

Completed two experiments to assess the role of propagule pressure in the settlement and survival of eastern oysters as part of the Marine Invasions Lab.

Intern—Fund for Maine Islands

March 2017–June 2019

Conducted interviews at the 2018 Maine Fishermen's Forum and the 2018 National Working Waterfronts Symposium to document personal stories of fishing communities and working waterfronts through periods of change. Transcribed and developed interviews into articles and presentations.

Research Assistant—COA Marine Science

February 2017–June 2019

Collaborated with students and faculty to complete resource surveys of fisheries species in Frenchman Bay, Maine, including blue mussels (February 2017–May 2017) and rockweed (June 2018–August 2018). Documented the local ecological knowledge of marine worm harvesters and dealers in Maine to compare their observations with the scientific literature. Recorded and investigated the social dynamics—particularly aspects of cooperation, competition, and information-sharing—at work within the marine worm fishery.

Writing Tutor—COA Writing Center

September 2015–June 2019

Worked one-on-one with undergraduate students on clarity, punctuation, and grammar at every stage of the writing process. Directed the editing team for the Human Ecology Essay Collection, a book of senior essays, for three years.

TEACHING ASSISTANTSHIPS

Virginia Institute of Marine Science

Statistical Methods and Data Analysis: Fall 2020

College of the Atlantic

Fisheries, Fishermen, and Fishing Communities: Spring 2019

Chemistry I: Fall 2018

Communicating Science: Spring 2018, Spring 2016

Chaos and Fractals: Winter 2018, Winter 2017

Marine Biology: Fall 2016

PUBLICATIONS and PRESENTATIONS

Technical Reports

Roman, S.A., D.B. Rudders, R. Mann, and **K.R. Clark**. 2021. The effect of density on growth, yield, and reproduction of the sea scallop, *Placopecten magellanicus*. VIMS Marine Resource Report No. 2021-2.

Rudders, D.B., S.A. Roman, E. Mohr, and **K. Clark**. 2019. Results for the 2019 VIMS Industry Cooperative Surveys of the Mid-Atlantic, Nantucket Lightship Closed Area, Closed Area I, and Closed Area II Resource Areas. VIMS Marine Resource Report No. 2019-7.

Oral Presentations (*denotes presenter)

***Clark, K.R.**, S. Roman, R. Mann, and D.B. Rudders. The effect of density on reproductive activity in Atlantic sea scallops *Placopecten magellanicus*. Annual Meeting of the Tidewater Chapter of the American Fisheries Society. Nags Head, NC, USA. 25 March 2022.

*Roman, S., D. Rudders, R. Mann, and **K. Clark**. Understanding how growth and yield vary with respect to density for the Atlantic sea scallop. National Shellfisheries Association Annual Meeting. San Diego, CA, USA. 4 March 2022.

***Clark, K.R.**, S. Roman, R. Mann, and D.B. Rudders. The effect of density on reproductive activity in Atlantic sea scallops *Placopecten magellanicus*. National Shellfisheries Association Annual Meeting. San Diego, CA, USA. 4 March 2022.

*Rudders, D.B., R. Mann, S. Roman, **K. Clark**, and T. Redmond. The effect of density on growth, yield and reproduction of the Atlantic sea scallop, *Placopecten magellanicus*. Research Set-Aside Share Day Webinar, New England Fishery Management Council. 12 May 2021.

- ***Clark, K.R.**, S. Roman, R. Mann, and D.B. Rudders. The effect of density on reproductive effort in the Atlantic sea scallop, *Placopecten magellanicus*. Annual Meeting of the Tidewater Chapter of the American Fisheries Society (Virtual). 22 April 2021.
- ***Clark, K.R.**, S. Roman, R. Mann, and D.B. Rudders. The effect of density on reproductive effort in the Atlantic sea scallop, *Placopecten magellanicus*. National Shellfisheries Association Annual Meeting (Virtual). 24 March 2021.
- Rudders, D., R. Mann, S. Roman, and ***K. Clark**. The effect of density on growth, yield and reproduction of the Atlantic sea scallop, *Placopecten magellanicus*. Research Set-Aside Share Day Webinar, New England Fishery Management Council. 19 May 2020.
- ***Clark, K.R.** Oral histories of the marine worm industry in coastal Maine. Intertidal Zone Workshop for Acadia National Park. Schoodic Institute, Acadia National Park, ME, USA. 20 May 2019.
- Springuel, N., **K. Clark**, and C. Gribble [*All listed]. Closing plenary: Collecting stories at the symposium. National Working Waterfronts and Waterways Symposium. Grand Rapids, MI, USA. 17 May 2018.
- Springuel, N., N. Battista, **K. Clark**, C. Gribble, and S. Train [*All listed]. Mapping ocean stories at the National Working Waterfronts and Waterways Symposium. National Working Waterfronts and Waterways Symposium. Grand Rapids, MI, USA. 15 May 2018.

Poster Presentations (*denotes presenter)

- ***Clark, K.R.**, S. Roman, R. Mann, and D.B. Rudders. The effect of density on reproductive effort in the Atlantic sea scallop, *Placopecten magellanicus*. National Shellfisheries Association Annual Meeting (Virtual). 22-25 March 2021.
- ***Clark, K.R.**, D. DenDanto, and C.W. Petersen. Relative frequencies of seal wounds: A case study on Mount Desert Rock, Maine. Acadia National Park Science Symposium. Schoodic Point, ME, USA. 5 October 2016.

Outreach Publications and Presentations

- Clark, K.** 2022. Searching for sea scallops: The role of science in fisheries management. VA SEA 2022 Lesson Plans. Virginia Institute of Marine Science, William & Mary. <https://doi.org/10.25773/3mam-rs12>
- Clark, K.R.** Wild and shucked at sea: Sea scallops as a sustainable Virginia shellfish resource. Chefs' Seafood Symposium. Virginia Institute of Marine Science, Gloucester Point, VA, USA. 8 March 2022.
- Clark., K.**, and A. Shatz. 2021. Where have the oysters gone? Exploring the effects of technology and disease on the oyster fishery [Video]. In: Indigenous Life on the Nansmond River [ESRI Story Map]. <https://storymaps.arcgis.com/stories/efa89a87874044328af43b7a4357bb04>
- Clark., K.** 2021. Fisheries now: Marine worms. Downeast Fisheries Trail. <http://www.downeastfisheriestrail.org/fisheries-now/marine-worms/>.
- Clark., K.** 2021. Fisheries then: Marine worms. Downeast Fisheries Trail. <http://www.downeastfisheriestrail.org/fisheries-then/marine-worms/>.

- Springuel, N., and **K.R. Clark**. Marine worms, ecology and economy of two little known species. Coastal Conversations, WERU 89.9 FM. 26 April 2019. <https://archives.weru.org/coastal-conversations/2019/04/coastal-conversations-4-26-19-marine-worms-economy-and-ecology-of-two-little-known-species/>.
- Clark, K.**, editor. 2019, March. Voices of the Maine Fishermen's Forum: Micah Woodcock. Series coordinated by N. Springuel. Landings 27(3): 4, 21. <http://mlcalliance.org/pdf/newsletter-march-2019.pdf>.
- Clark, K.**, editor. 2019, February. Voices of the Maine Fishermen's Forum: Marcia Beal Brazer. Series coordinated by N. Springuel. Landings 27(2): 4. <http://mlcalliance.org/pdf/newsletter-february-2019.pdf>.
- Clark, K.**, editor. 2019, January. Voices of the Maine Fishermen's Forum: Bruce Fernald. Series coordinated by N. Springuel. Landings 27(1): 1, 17. <http://mlcalliance.org/pdf/newsletter-january-2019.pdf>.
- Clark, K.**, editor. 2018, December. Voices of the Maine Fishermen's Forum: Dan Harriman. Series coordinated by N. Springuel. Landings 26(12): 12, 16. <http://mlcalliance.org/pdf/newsletter-december-2018.pdf>.
- Clark, K.**, editor. 2018, November. Voices of the Maine Fishermen's Forum: Krista Tripp. Series coordinated by N. Springuel. Landings 26(11): 1, 18. <http://mlcalliance.org/pdf/newsletter-november-2018.pdf>.

GRANTS and FELLOWSHIPS

- Clark, K.R.** Investigating spatial variation in food utilization by Atlantic sea scallops (*Placopecten magellanicus*) through stable isotope ratios ($\delta^{13}\text{C}$ and $\delta^{15}\text{N}$) of adductor muscle tissue. VIMS Student Research Grant, \$1,800.
- Clark, K.R.** The effect of density on the reproductive output of the sea scallop, *Placopecten magellanicus*. Virginia Sea Grant Graduate Research Fellowship, 2020. \$80,000.
- Clark, K.R.** Collecting oral histories of marine worm harvesters in coastal Maine. Maine Space Grant, 2018. \$2,000.
- Clark, K.R.** Toward the sustainable management of mussel beds in Frenchman Bay. Maine Space Grant, 2017. \$750.
- Clark, K.R.** The wounded seal project. Maine Space Grant, 2016. \$1,000.

AWARDS and SCHOLARSHIPS

- R. Gordon & Catherine B. Smith Fellowship, VIMS Foundation: 2021
Student Travel Award, National Shellfisheries Association: 2021
William J. Hargis, Jr. Fellowship, VIMS Foundation: 2020
Brenton S. Halsey Fellowship, VIMS Foundation: 2020
Ferguson Enterprise Fellowship, VIMS Foundation: 2019
Rebecca Clark Memorial Scholarship in Marine Sciences, COA: 2018
Alice Blum Yoakum Scholarship, COA: 2017
Undergraduate Scholarship in Marine Sciences, Maine Sea Grant: 2017
Presidential Scholarship, COA: 2015 –2019

OUTREACH and ENGAGEMENT

K-12 Outreach Activities

Skype-a-Scientist: 2021–present, lead sessions with K-12 classrooms and community libraries about fisheries science and marine molluscs

Virginia Science and Educators Alliance (VA SEA): 2021, designed a lesson plan for 7th grade classrooms about the science and management of the Atlantic sea scallop fishery

Hampton University ETS STEM Innovation Virtual Academy: 2021, developed and co-taught a workshop on the history of harvesting methods in the eastern oyster fishery

VIMS Graduate Student Association Involvement

Academic Council Student Representative: 2021–present

Queer Grads Co-coordinator [LGBTQ+ graduate student group]: 2021–present

Writing Sub-committee Co-lead: 2020–present

Graduate Student Association Treasurer: 2020–2021

Scientist Walks into a Bar Sub-committee Co-lead: 2020–2021

Awards Committee Member: 2019–2021

Volunteer Activities

Symbiotic Inc. Treasurer and Board Member [animal rescue group]: 2021–present

Chesapeake Bay Governor’s School Science Symposium Judge: 2021

National Ocean Sciences Blue Crab Bowl Volunteer: 2020–2022

VIMS Marine Science Day Session Moderator: 2020

River Herring Ladder Restoration on Mount Desert Island, ME: 2016–2019

Professional Memberships

National Shellfisheries Association: 2019–present

American Fisheries Society: 2019–present

Tidewater Chapter of the American Fisheries Society: 2019–present

American Institute of Fishery Research Biologists: 2019–present

REFERENCES

David Rudders, Ph.D.

Associate Director of the Marine Advisory Program

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