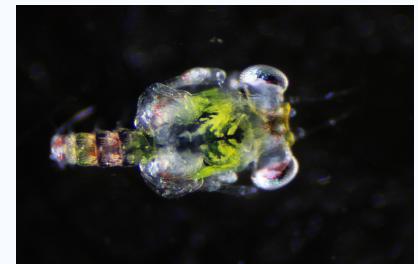


DR. SAM BASHEVKIN

I am an environmental data scientist who excels at applying data science and statistical techniques to answer pressing ecological and management questions. Using open science practices, I create tested, time-saving tools for the community with every research question I address. I am passionate about applying my skills toward solving complex problems, and making the work of our partners easier while doing so.



EDUCATION

2019
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2014

- **Ph.D., Ecology**
University of California, Davis 📍 Davis, CA
 - Dissertation: The Adaptive Arsenal of Crustacean Larvae Against Predatory and Environmental Stresses of the Plankton
 - National Defense Science and Engineering Graduate Fellow
 - Advisor: Steven Morgan
- **M.S., Ecology**
University of California, Davis 📍 Davis, CA
- **B.S., Biology**
Tufts University 📍 Medford, MA
 - Thesis: Latent effects from low salinity stress and the interactive influence of temperature and salinity on larval and juvenile growth in the marine gastropod *Crepidula fornicata*.
 - Summa Cum Laude, with Highest Thesis Honors

2017
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2014

2014
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2010

RESEARCH EXPERIENCE

2019
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2014

- **Graduate Student Researcher**
Bodega Marine Laboratory 📍 University of California, Davis
 - Researched crab larval development and morphology in relation to environmental drivers.
 - Led synthesis project on the predicted impacts of climate change on marine dispersal.
 - Responsible for managing >25 technicians and volunteers.

2016
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2015

- **Graduate Research Fellow**
Galeta Marine Laboratory 📍 Smithsonian Tropical Research Institute
 - Led international expedition to research the countervailing influences of visual fish predation and ultraviolet radiation on the coloration of crab larvae

CONTACT

- [✉ sbashevkin@gmail.com](mailto:sbashevkin@gmail.com)
[🐦 SamBashevkin](https://twitter.com/SamBashevkin)
[👤 sbashevkin](https://orcid.org/0000-0002-4700-0000)
[🔗 NA](https://orcid.org/0000-0002-4700-0000)
[🔗 sam-bashevkin](https://www.linkedin.com/in/sam-bashevkin)

LANGUAGE SKILLS



Made with [pagedown](#).

Code at
github.com/sbashevkin/cv.

Last updated on 2022-06-03.

2014
|
2011

- **Undergraduate Researcher**
Pechenik Laboratory  Tufts University
 - Led research on the desiccation, salinity, and temperature tolerance of juvenile and embryonic marine snails of the species *Crepidula fornicata* and *Crepidatella fecunda*.
- **NSF REU Undergraduate Researcher**
Friday Harbor Marine Laboratory  University of Washington
 - Researched the effects of low salinity on the swimming behavior and protein expression of larval sand dollars (*Dendraster excentricus*) and sea stars (*Pisaster ochraceus*).

2013
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2012

INDUSTRY EXPERIENCE

2022
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2019

- **Senior Environmental Scientist (Specialist)**
Delta Science Program  Sacramento, CA
 - Lead synthesis, data science, and data publication projects with interagency teams to increase our understanding of Delta ecology through transparent data practices and lend expertise to interagency colleagues.
 - Develop strategic plan for advancing the synthesis capacity of the Delta Science Program and lead cloud computing initiatives
 - Develop R packages, automated R markdown reports, and interactive R shiny applications.

JOURNAL ARTICLES

2022

- **Long-term trends in seasonality and abundance of three key zooplankters in the upper San Francisco Estuary**
in review
 - Bashevkin SM, Burdi CE, Hartman R, Barros A
- **Improving settlement success in abalone aquaculture: KCl induces stronger settlement than GABA or crustose coralline algae for red (*Haliotis rufescens*) and white (*H. sorenseni*) abalone**
in review
 - Bashevkin SM, Frederick A, Hubbard EZ, Vines CA, Magaña K, Hutton SJ, Cherr GN, Aquilino KM
- **State of Bay-Delta Science: Introduction: Ecosystem services and disservices of Bay-Delta primary producers: how plant and algae affect ecosystems and respond to management of the estuary and watershed**
in review
 - Larsen LG, Bashevkin SM, Christman M, Conrad JL, Dahm CN, Thompson J

R packages

- [deltafish: An integrated fish database](#)
- [discretewq: Integrated discrete water quality database](#)
- [zooper: Integrated zooplankton database](#)

I have peer-reviewed manuscripts for journals including Aquatic Invasions, Marine Ecology Progress Series, Journal of Crustacean Biology, Journal of Experimental Marine Biology and Ecology, Diversity and Distributions, and Climate Change Ecology.

- 2022 ● **A framework for evaluating the effects of reduced spatial or temporal monitoring effort**
San Francisco Estuary and Watershed Sciences (accepted)
• Bashevkin SM
- 2022 ● **Escape From the Heat: Thermal Stratification in a Well-Mixed Estuary and Implications for Fish Species Facing a Changing Climate**
Hydrobiologia  doi: 10.1007/s10750-022-04886-w
• Mahardja B, Bashevkin SM, Pien C, Nelson M, Davis B, Hartman R
- 2022 ● **Warming in the upper San Francisco Estuary: Patterns of water temperature change from 5 decades of data**
Limnology and Oceanography  doi: 10.1002/lo.12057
• Bashevkin SM, Mahardja B, Brown LR
- 2022 ● **Five decades (1972–2020) of zooplankton monitoring in the upper San Francisco Estuary**
PLOS one  doi: 10.1371/journal.pone.0265402
• Bashevkin, SM, Hartman R, Thomas M, Barros A, Burdi CE, Hennessy A, Tempel T, Kayfetz K
- 2022 ● **Seasonally variable relationships between surface water temperature and inflow in the upper San Francisco Estuary**
Limnology and Oceanography  doi: 10.1002/lo.12027
• Bashevkin SM, Mahardja B
- 2022 ● **Relative bias in catch among long-term fish monitoring surveys within the San Francisco Estuary**
San Francisco Estuary and Watershed Sciences  doi: 10.15447/sfewws.2022v20iss1art3
• Huntsman BM, Mahardja B, Bashevkin SM
- 2022 ● **Governing ecological connectivity in cross-scale dependent systems**
BioScience  doi: 10.1093/biosci/biab140
• Keeley ATH, Fremier AK, Goertler PAL, Huber PR, Sturrock AM, Bashevkin SM., Barbaree BA, Grenier JL, Dilts TE, Gogol-Prokurat M, Colombano D, Bush EE, Laws A, Gallo JA, Kondolf M, Stahl AT
- 2021 ● **Does a complex life cycle promote or constrain adaptation to environmental change? Genome-informed approaches and insights for characterizing selection across stages of a life cycle**
Proceedings of the Royal Society B  doi: 10.1098/rspb.2021.2122
• Albecker MA, Wilkins LGE, Krueger-Hadfield SA, Bashevkin SM, Hahn MW, Hare MP, Kindsvater HK, Sewell MA, Lotterhos KE, Reitzel AM

- 2021 ● **Food for Thought: Connecting Zooplankton Science to Management in the San Francisco Estuary**
San Francisco Estuary and Watershed Sciences
DOI: doi: 10.15447/sfews.2021v19iss3art1
• Hartman RK, Bashevkin SM, Barros A, Burdi CE, Patel C, and Sommer T
- 2020 ● **Costs and compensation in zooplankton pigmentation**
Oecologia
DOI: doi: 10.1007/s00442-020-04648-2
• Bashevkin SM, Christy JH, Morgan SG
- 2020 ● **Larval dispersal in a changing ocean with an emphasis on upwelling regions**
Ecosphere
DOI: doi: 10.1002/ecs2.3015
• Bashevkin SM, Dibble CD, Dunn RP, Hollarsmith JA, Ng G, Satterthwaite EV, Morgan SG
- 2020 ● **Predation and Competition**
in Anger K, Harzsch S, Thiel M, editors. *The Natural History of the Crustacea, Volume VII: Developmental Biology and Larval Ecology*
DOI: doi: 10.1002/9781119108200.ch1
• Bashevkin SM, Morgan SG
- 2020 ● **Adaptive specialization and constraint in morphological defences of planktonic larvae**
Functional Ecology
DOI: doi: 10.1111/1365-2435.13464
• Bashevkin SM, Christy JH, Morgan SG
- 2019 ● **Photoprotective Benefits of Pigmentation in the Transparent Plankton Community: A Comparative Species Experimental Test**
Ecology
DOI: doi: 10.1002/ecy.2680
• Bashevkin SM, Christy JH, Morgan SG
- 2017 ● **Growing safe: Acute size escape from desiccation in juvenile *Crepidatella peruviana* (Mollusca: Gastropoda)**
Biological Bulletin
DOI: doi: 10.1086/695539
• Bashevkin SM, Chaparro OR, Mardones-Toledo DA, Cubillos VM, Pechenik JA
- 2016 ● **Prior exposure to low salinity affects the vertical distribution of *Pisaster ochraceus* (Echinodermata: Asteroidea) larvae in haloclines.**
Marine Ecology Progress Series
DOI: doi: 10.3354/meps11563
• Bashevkin SM, Lee D, Driver P, Carrington E, George S

- 2015
- **The interactive influence of temperature and salinity on larval and juvenile growth in the marine gastropod *Crepidula fornicata* (L)**
 Journal of Experimental Marine Biology and Ecology
📍 doi: 10.1016/j.jembe.2015.05.004
 • Bashevkin SM, Pechenik JA
- 2015
- **Desiccation tolerance and lifting behavior of adult and juvenile *Crepidula fornicata* (Gastropoda) from intertidal and subtidal populations.**
 Marine Ecology Progress Series
📍 doi: 10.3354/meps11284
 • Diederich CM, Bashevkin SM, Chaparro OR, Pechenik JA

☰ OTHER PUBLICATIONS

- 2022
- **Fish abundance in the San Francisco Estuary (1959–2021), an integration of 9 monitoring surveys**
 Environmental Data Initiative
📍 doi: 10.6073/PASTA/0CDF7E5E954BE1798AB9BF4F23816E83
 • Bashevkin SM, Gaeta JW, Nguyen TX, Mitchell L, Khanna S. 2022
- 2022
- **Six decades (1959–2020) of water quality in the upper San Francisco Estuary: an integrated database of 11 discrete monitoring surveys in the Sacramento San Joaquin Delta, Suisun Bay, and Suisun Marsh**
 Environmental Data Initiative
📍 doi: 10.6073/pasta/c9b3da65a8c89cbfa6fc28d26f938c22
 • Bashevkin SM, Perry SE, Stumpner EB
- 2022
- **Interagency Ecological Program: Zooplankton abundance in the Upper San Francisco Estuary from 1972–2020, an integration of 5 long-term monitoring programs**
 Environmental Data Initiative
📍 doi: 10.6073/pasta/89dbadd9d9dbdfc804b160c81633db0d
 • Bashevkin SM, Hartman R, Thomas M, Barros A, Burdi CE, Hennessy A, Tempel T, Kayfetz K
- 2021
- **ESSAY: The Pilot Long-Term Monitoring Review Effort**
 Interagency Ecological Program Newsletter
 • Gaeta JW, Culberson S, Bashevkin S
- 2021
- **An Online Seasonal Monitoring Report for Major Interagency Ecological Program Surveys**
 Interagency Ecological Program Newsletter
 • Hartman R, Rasmussen N, Mitchell L, Koohafkan M, Bosworth D, Saraceno J, DuBois J, Bashevkin S, Conrad L

Shiny apps

- Delta Science Program shiny apps homepage
- Integrated zooplankton dataset Shiny App
- San Francisco Estuary Monitoring Shiny App
- Discrete water temperature app

- 2021
- **Interagency Ecological Program Long-term Monitoring Element Review: Pilot approach and methods development (2020)**
Interagency Ecological Program Technical Report 96
 - IEP Long-term Survey Review Team
- 2020
- **Zooplankton Integrated Dataset Metadata Report**
Interagency Ecological Program Technical Report 93
 - Kayfetz K, Bashevkin SM, Thomas M, Hartman R, Burdi CE, Hennessy A, Tempel T, Barros A

TEACHING EXPERIENCE

- 2018
- **Environmental Stress and Development in Marine Organisms**
Bodega Marine Laboratory  Bodega Bay, CA
 - Served as TA for an upper-level undergraduate lab/field course in ecotoxicology.
 - Delivered lectures, prepared lab experiments, mentored students through independent research projects.
- 2017
- **Wetland Ecology**
University of California, Davis  Davis, CA
 - Served as TA for an upper-level undergraduate course in wetland ecology
 - Led discussion sections, facilitate student learning, and grade
- 2014
|
2012
- **Introductory Biology Laboratory**
Tufts University  Medford, MA
 - Prepare for and assist students in an introductory biology lab

SELECTED PRESS (ABOUT)

- 2022
- **Science in Short: Daylighting Delta Data**
Estuary News
 - Story of data science in San Francisco Estuary management, based off an interview with me.

🎙 SELECTED PRESENTATIONS

- 2022
 - **Water temperature-inflow relationships in the upper San Francisco Estuary**
Talk  Interagency Ecological Program Workshop
 - Bashevkin SM, Mahardja B
- 2022
 - **Bayesian regression**
Talk  Interagency Ecological Program Workshop
 - Bashevkin SM
- 2021
 - **Climate Change Signals in Water Temperatures in the Upper San Francisco Estuary**
Talk  Bay-Delta Science Conference
 - Bashevkin SM, Mahardja B, Brown LR
- 2020
 - **Building an Integrated Dataset of Zooplankton Monitoring in the San Francisco Estuary**
Poster  Interagency Ecological Program Workshop
 - Bashevkin S, Kayfetz K, Thomas M, Hartman R, Burdi C, Tempel T, Hennessy A, Barros A
 - **Dataset integration: from water to zooplankton to fish**
Talk  Interagency Ecological Program Workshop
 - Stompe D, Bashevkin S, Pien C, Kruger A, Thomas M, Davis B
- 2018
 - **How to eat your cake and have it too: Compensatory behavioral responses to ultraviolet radiation and fish cues in crab larvae.**
Talk  Western Society of Naturalists, Tacoma, WA
 - Bashevkin SM, Armbrust AS, Howard G, Gao X, Morgan SG
- 2017
 - **Orphaned babies in a perilous ocean: How do marine larvae survive a dangerous migration**
Invited talk  Science Uncorked outreach seminar, Gourmet au Bay, Bodega Bay, CA
 - Bashevkin SM
 - **Predatory costs, behavioral compensation, and evolutionary correlation in larval pigmentation**
Talk  Western Society of Naturalists, Pasadena, CA
 - Bashevkin SM, Christy JH, Morgan SG

- 2017
- **Paradox of pigmentation in the plankton: Trade-offs in larval coloration vary with sunniness and exposure to ultraviolet radiation**
Talk International Larval Biology Symposium, Honolulu, HI
 - Bashevkin SM, Christy JH, Morgan SG
- 2016
- **Pigmentation in the plankton: Trade-offs in coloration for marine larvae**
Talk Western Society of Naturalists, Monterey, CA
 - Bashevkin SM, Christy JH, Morgan SG
- 2015
- **Interactive effects of temperature and salinity on larval and juvenile growth in the marine gastropod *Crepidula fornicata***
Poster The Society of Integrative and Comparative Biology, West Palm Beach, FL
 - Bashevkin SM, Pechenik JA
- 2014
- **The effects of fluctuating salinity on protein profiles in echinoderm larvae of *Dendraster excentricus* and *Pisaster ochraceus***
Poster The Society of Integrative and Comparative Biology, Austin, TX
 - Bashevkin S, Wessel G, George SB
- 2013
- **The ups and downs of life in a halocline: The behavior of *Pisaster ochraceus* larvae after prior exposure to low salinity**
Poster The Society of Integrative and Comparative Biology, San Francisco, CA
 - Bashevkin S, George SB
- 2013
- **Is the upward migration of *Pisaster ochraceus* larvae motivated by the presence of food at the halocline or the salinity they are acclimated to?**
Poster The Society of Integrative and Comparative Biology, San Francisco, CA
 - Bashevkin S, Driver P, George SB

PROFESSIONAL TRAININGS

- 2019
- **Google Earth Engine Training**
University of California, Merced Sacramento, CA
 - Dr. Erin Hestir
- 2019
- **Reproducible Research Techniques for Synthesis**
National Center for Ecological Analysis and Synthesis Santa Barbara, CA
- 2018
- **Story Circles Science Communication Training**
Bodega Marine Laboratory Bodega Bay, CA
 - Dr. Randy Olson

- 2018
- **Structural Equations Modeling Workshop**
Bodega Marine Laboratory
• Dr. Jarrett Byrnes
- 2016
- **Science Communications Short Course**
Bodega Marine Laboratory
• Dr. Tessa Hill