## Easton R. White

Assistant Professor

Department of Biological Sciences

University of New Hampshire

Spaulding Hall, 38 Academic Way, Durham, NH 03824

Easton.White@unh.edu | https://eastonwhite.github.io/

### Education

| 2018 | Ph.D. in Population Biology        | University of California, Davis |
|------|------------------------------------|---------------------------------|
| 2013 | B.S. in Biology, Minor Mathematics | Arizona State University        |
| 2010 | Associate of Science               | Scottsdale Community College    |

### Research Interests

Quantitative ecology, coupled natural-human systems, ecosystem management, conservation science, marine ecology, fisheries, protected areas, decision theory, species monitoring, biology education, active learning

## Major Awards and Grants

| In review              | Easton R. White (PI), Olaf Jensen (co-PI), Victoria Ramenzoni (co-PI), and Sarah Smith (co-PI). DISES: Dynamics of socio-environmental systems in the face of shocks: coastal marine ecosystems and fishing communities. <i>National Science Foundation:</i> Dynamics of Integrated Socio-Environmental Systems. \$1,599,715        |
|------------------------|---|
| 2020                   | PI: Effects of a human pandemic on fisheries. Gund Institute for Environment COVID-19 Rapid Research Fund. \$7,100  |
| 2019-2025              | Merrill Baker-Medard (PI), <b>Easton R. White</b> (co-PI), and Elizabeth Fairchild (co-PI). Socio-Ecological Feedbacks of Marine Protected Areas: Dynamics of Small-Scale Fishing Communities and Inshore Marine Ecosystems. <i>National Science Foundation:</i> CNH2 Dynamics of Integrated Socio-Environmental Systems. \$602,320 |
| 2018                   | Graduate Teaching Award, University of California, Davis  |
| 2017-2018              | Professor for the Future fellow   |
| 2014-2017<br>2013-2014 | National Science Foundation Graduate Research Fellow<br>Canada Fulbright Awardee  |

### **Publications**

## Google Scholar link ResearchGate link

## In the pipeline (preprint and/or in review)

- 9 †Easton R. White, †Zachary A. Schakner, Amber Bellamy, Mridula Srivasanan. Detecting population trends in United States marine mammals. In review.
- 8 Merrill Baker-Medard, Courtney Gantt\*, **Easton R. White**. Classed Conservation: Socio-economic drivers of participation in marine resource management. In review.
- 7 Emily Beasley\*, Natalia Aristizabal\*, Erika Bueno\*, **Easton R. White**. Spatially explicit models predict coffee rust spread in fragmented landscapes. (link)

<sup>\*</sup>Indicates undergraduate or graduate student mentee, †Indicates equal co-authorship

- Joshua S. Stoll, Hannah L. Harrison, Emily De Sousa, Debra Callaway, Melissa Collier, Kelly Harrell, Buck Jones, Jordyn Kastlunger, Emma Kramer, Steve Kurian, M. Alan Lovewell, Sonia Strobel, Tracy Sylvester, Brett Tolley, Andrea Tomlinson, Easton R. White, Talia Young and Philip A. Loring. Alternative seafood networks during COVID-19: Implications for resilience and sustainability. EcoEvoRxiv preprints. In review at Frontiers in Sustainable Food Systems. (link)
- 5 Christine A. Ward-Paige, **Easton R. White**, Elizabeth MP Madin, and 25 others. A framework for mapping and monitoring human-ocean interactions in near real-time during COVID-19 and beyond. OSF Preprints. In review at Marine Policy. (link)
- 4 Benjamin M. Althouse, Brendan Wallace, Brendan Case, Samuel V. Scarpino, Andrew M. Berdahl, **Easton R. White**, and Laurent Hebert-Dufresne. The unintended consequences of inconsistent pandemic control policies. medRxiv. In revision. (link)
- 3 Christie A. Bahlai, **Easton R. White**, Julia D. Perrone, Sarah Cusser, and Kaitlin Stack Whitney. An algorithm for quantifying and characterizing misleading trajectories in ecological processes. bioRxiv. In review. (link)
- Osgood, Geoffrey, **Easton R. White**, and Julia K. Baum. Effects of climate-change driven gradual and acute temperature changes on shark and ray species. In revision at Journal of Animal Ecology.
- White, Easton R., Kalle Parvinen, and Ulf Dieckmann. Environmental variability and phenology evolution: impacts of climate change and spring onset on reproductive timing in a small mammal. PeerJ Preprints. In revision at Theoretical Ecology. (link)

#### Published

- White, Easton R., Marissa L. Baskett, and Alan Hastings. Catastrophes, connectivity, and Allee effects in the design of marine reserve networks. In press at *Oikos*. (link)
- Froehlich Halley E., Rebecca Gentry, Sarah E. Lester, Richard S. Cottrell, Gavin Fay, Trevor A. Branch, Jessica A. Gephart, **Easton R. White**, and Julia K. Baum. 2021. Securing a sustainable future for US seafood in the wake of a global crisis. In press at *Marine Policy*. (link)
- White, Easton R., Halley Froehlich, Jessica A. Gephart, Richard S. Cottrell, Trevor Branch, Rahul Agrawal Bejarano, Julia Baum. 2021. Early effects of COVID-19 on US fisheries and seafood consumption. Fish and Fisheries. (link)
  - In the top 1% Altmetric scores of all articles ever tracked
  - Picked up by over 200 news outlets
  - Referenced in a US Congressional Report
- †Bruel, Rosalie and †**Easton R. White**. 2021. Sampling requirements and approaches to detect ecosystem shifts. In press at *Ecological Indicators*. (link)
- White, Easton R. and Christie A. Bahlai. 2021. Experimenting with the Past to Improve Environmental Monitoring Programs. In press at Frontiers in Ecology and Evolution. (link)
- White, Easton R. and Laurent Hebert-Dufresne. 2020. State-level variation for initial COVID-19 dynamics in the United States. In press at *PLoSOne*. (link)
  - In the top 1% Altmetric scores of all articles ever tracked
  - Picked up by 12 news outlets
- White, Easton R. and Alan Hastings. 2020. Seasonality in ecology: Progress and prospects in theory. In press at *Ecological Complexity*. (link)
- White, Easton R.,\*Kyle Cox, Brett Melbourne, and Alan Hastings. 2019. Ecological management depends strongly on stochasticity: an experimental test. *Proceedings of the National Academy of Sciences*. (link)
  - In the top 3% Altmetric scores of all articles ever tracked
  - Picked up by 4 news outlets

- Rodriguez-Caro, Roberto C., Thorsten Wiegand, **Easton R. White**, Ana Sanz-Aguilar, Andres Gimenez, Eva Gracia, and Jose D. Anadon. 2019. A low cost approach to estimate demographic rates using inverse modelling. *Biological Conservation*. (link)
- 9 Fournier, Auriel, **Easton R. White**, and Stephen Heard. 2019. Site-selection bias can drive apparent population declines in long-term studies. *Conservation Biology*. (link)
- 8 White, Easton R. 2019. Minimum time required to detect population trends: the need for long-term monitoring programs. *BioScience*. (link)
  - In the top 3% Altmetric scores of all articles ever tracked
  - Selected as Editor's Choice Article and featured on BioScience Podcast
- White, Easton R. and Andrew T. Smith. 2018. The role of spatial structure in the collapse of regional metapopulations. *Ecology* 99(2): 2815-2822. (link)
- White, Easton R. Mark C. Myers, Joanna Mills Flemming, and Julia K. Baum. 2015. Shifting elasmobranch community assemblage at Cocos Island an isolated marine protected area. *Conservation Biology* 29(4): 1186-1197. (link)
  - In the top 3% Altmetric scores of all articles ever tracked
  - Referenced in FAO Policy documents
- White, Easton R. John D. Nagy, and Samuel H. Gruber. 2014. Modeling the population dynamics of lemon sharks. *Biology Direct* 9(1): 1-23. (link)
- Kessel S. T., Chapman D. D., Franks B. R., Gedamke T., Gruber S. H., Newman J. M., White E. R. and Perkins R. G. 2014. Predictable temperature regulated residency, movement and migration in a large, highly-mobile marine predator. *Marine Ecology Progress Series* 514. (link)
- Robinson, James P.W., **Easton R. White**, Logan D. Wiwchar, Danielle C. Claar, Justin P. Suraci, Julia K. Baum. 2014. The limitations of diversity metrics in directing marine global marine conservation. *Marine Policy* 48:123-125. (link)
- Gerber, Leah R. and **Easton R. White**. 2014. Two-sex matrix models in assessing population viability: when do male dynamics matter? *Journal of Applied Ecology* 51(1): 270-278. (link)
- Senko, Jesse, **Easton R. White**, Sellina S. Heppell, and Leah R. Gerber. 2014. A comparison of fishery management strategies for mitigating bycatch of vulnerable marine megafauna species. *Animal Conservation* 17(1): 5-18. (link)

## Teaching Experience

### **Hood College**

2021 Instructor, Natural Resource Management (ENSP 407)

### University of Vermont

2019-2020 Instructor, Foundations of Quantitative Reasoning (BIO381, PhD-level).

## University of California, Davis

2017-2018 Instructor, Introductory Biology: Ecology and Evolution, Biology Undergraduate Scholars Program (Summer bridge program)

2018 Instructor, Science Education and Outreach.

2018 Instructor, Building your personal baloney detection kit, First Year Seminar program

2015 Teaching Assistant, Introduction to Biology (BIS2B)

#### Software Carpentry

2014-2019 Instructor for nine two-day workshops in North America (R, shell, and version control)

### University of Victoria

2014 Teaching Assistant, Advanced Ecology (BIO470)

# Research Experience

| 2019-2024<br>2014-2018 | PI on coupled socio-ecological systems project focused on Madagascar coral reef fisheries<br>Graduate Research and Teaching Assistant, University of California, Davis, Advisor: Alan |
|------------------------|---|
| 2014 2010              | Hastings  |
| 2016                   | Intern, Young Scientist Summer Program, Institute for Applied Systems Analysis, Vienna, Austria   |
| 2013-2014              | Canada Fulbright Awardee, University of Victoria, Canada, Advisor: Julia Baum   |
| 2012-2013              | Researcher, Gerber Lab: Marine Population Biology, Arizona State University, Advisor: Leah Gerber   |
| 2009-2013              | Researcher, SCC/ASU Evolutionary Dynamics Laboratory, Advisor: John Nagy  |
| 2011-2012              | Intern, Bimini Biological Field Station, Bimini, Bahamas, Supervisor: Samuel Gruber   |

## **Selected Presentations**

## \*Indicates undergraduate mentee

| 2021 | The effect of COVID-19 on US seafood and fisheries. Online, NH Shellfish Farmers Initiative.  |
|------|---|
| 2020 | Ecology, conservation, and sustainability in a variable world. Online, The University of New Hampshire.   |
| 2020 | Careers in STEM: imposter syndrome and winding career paths. Online, Biology Undergraduate Scholars Program, UC Davis.  |
| 2019 | Managing populations in a changing world. Middlebury College, Middlebury, VT.   |
| 2019 | Ecology and conservation in an uncertain world. Stony Brook University, Stony Brook, NY.  |
| 2019 | Site-selection bias and species monitoring programs. Carleton University, Ottawa, Canada.   |
| 2019 | Experimenting with the past to improve species monitoring programs. CSEE Meeting, Fredericton, NB, Canada.  |
| 2019 | Teaching case study: Socio-ecological modeling of coral reef fisheries. National Socio-Environmental Synthesis Center, Annapolis, MD.                                   |
| 2019 | Interdisciplinary summer bridge programs to improve student outcomes. Biology Education Gordon Conference, Bates College, Lewiston, ME.                                 |
| 2019 | Managing populations in a changing world. Biology Department Seminar Series, University of Vermont, Burlington, VT.   |
| 2019 | *Rappel, Charlotte and Easton R. White. Spatial dynamics and extinction risk of a small mammal population. University of California Undergraduate Research Conference.  |
| 2019 | *Kono, Erica, *Schweibold, Reece, and Easton R. White. Sex-biased dispersal in a model invasive species. University of California Undergraduate Research Conference.    |
| 2018 | Designing marine protected areas for catastrophic events. Canadian Society for Ecology and Evolution, University of Guelph, Guelph, ON.                                 |
| 2018 | Minimum time required to detect populations trends. Ecological Society of America Annual Meeting, New Orleans, LA.  |
| 2016 | Metapopulation dynamics and extinction in the American pika. Mathematics of Planet Earth group, Society for Industrial and Applied Math, Philadelphia, PA.              |
| 2016 | Evolution of reproductive timing in variable environments. Young Scientist Summer Program. International Institute for Applied Systems Analysis, Vienna, Austria.       |
| 2016 | The inevitable partial collapse of an American pika metapopulation. Ecological Society of America. Baltimore, Maryland.   |
| 2014 | Shifting elasmobranch community assemblage at a marine protected area. Genomes to Biomes Meeting, Canadian Society for Ecology and Evolution, Montreal, Quebec, Canada. |

### Mentoring

### Middlebury College (in collaboration with Dr. Merrill Baker-Médard) Spring 2021 - Present

| Spring 2021 - Present | Jiaqi Li, Contributed to research project       |
|-----------------------|---|
| Spring 2020 - Present | Katherine Concannon Independent Research Projec |

Spring 2020 - Present Katherine Concannnon, Independent Research Project

Spring 2020 - Present Valeriia Vakhitova, Contributed to research project and publication Spring 2020 - Present Courtney Gantt, Contributed to research project and publication

### University of Vermont

Spring 2021 - Present Jill Levine, Independent Research Project Summer 2020 - Present Rose Pfeiffer, Independent Research Project Summer 2020 - Fall 2020 Caroline Guilfoyle, Contributed to research project Fall 2019 - Summer 2020 Amanda Jones, Independent Research Project

### University of California, Davis

| Summer $2018$ - Spring $2019$ | Erica Kono, Independent Research Project       |
|-------------------------------|--|
| Summer $2018$ - Spring $2019$ | Reece Schweibold, Independent Research Project |
| Summer $2018$ - Spring $2019$ | Charlotte Rappel, Independent Research Project |
| Spring 2018 - Summer 2018     | Ivan Reas Honors Thesis                        |

Spring 2018 - Summer 2018 Ivan Beas, Honors Thesis

Spring 2017 - Summer 2018 Kyle Cox, Contributed to research project and publication

Winter 2016 - Summer 2016 Jeni Boyer, Independent Research Project Winter 2016 - Summer 2016 Annie Maliguine, Independent Research Project

### University of Victoria

Fall 2013 - Winter 2014 Mitra Nikoo, Contributed to research project Winter 2014 Jessica Holden, Contributed to research project Winter 2014 Michael Sullivan, Contributed to research project

### Scottsdale Community College

Spring 2012 - Spring 2013 Andrew Nemecek, Independent Research Project Spring 2012 - Spring 2013 Sabrina Jones, Independent Research Project

### Service

| 2018-     | Leadership Team, National Science Foundation PhD traineeship, University of Vermont |
|-----------|---|
| 2018-     | Instructor, computational skills workshops, Software Carpentry                      |
| 2019      | Organizer, Research Derby Event, University of Vermont                              |
| 2016-2018 | Founder, Population Biology Diversity Committee, University of California, Davis    |
| 2017-2018 | Instructor, Skype a Scientist program, University of California, Davis              |
| 2015      | Volunteer tutor, STEM Cafe , University of California, Davis                        |
| 2012-2014 | Cofounder and educator, Mathematics without Boundaries, Arizona State University    |

### Additional Academic Training

| 2020      | Teaching Effectively Online Course, University of Vermont          |
|-----------|--|
| 2017-2018 | Professors for the Future Program, University of California, Davis |
| 2018      | University Ethics and Professionalism                              |
| 2017      | Seminar on College Teaching  |
| 2017      | Center for Educational Excellence Workshop Series                  |
| 2014      | Software Carpentry Instructor Course                               |
| 2014      | Mathematics Teaching Workshop, University of Victoria              |

## Other Funding and Awards

| 2014-2019 | Various Software Carpentry travel awards                          |
|-----------|---|
| 2019      | Canadian Institute for Ecology and Evolution honorarium (\$1,200) |
| 2018      | UC Davis Graduate Teaching Award (\$500)                          |
| 2018      | UC Davis Graduate Studies Travel Grant (\$1,000)                  |
| 2016      | SIAM Travel Grant (\$650)   |
| 2016      | Population Biology Research Grant (\$1,666)                       |
| 2016      | National Academy of Science Travel Grant (\$4,400)                |
| 2015      | Mathematical Biosciences Institute traval grant (\$750)           |
| 2014      | NSF Travel Award (\$1,700)  |

## Reviewer

Bulletin of Mathematical Biology, Biological Conservation, Communications Biology, Conservation Biology, Ecography, Ecological Complexity, Ecological Modelling, Ecology, Ecology Letters, Environmental Monitoring and Assessment, Journal of Applied Ecology, NOAA Grant Review, NSF GRFP program, PeerJ, PLoSONE, Proceedings of the National Academy of Sciences, Science, Theoretical Ecology, Trends in Ecology and Evolution

## **Professional Memberships**

American Association for the Advancement of Science (AAAS)

Canadian Society for Ecology and Evolution (CSEE)

Ecological Society of America (ESA)

Society for Industrial and Applied Mathematics (SIAM)

Society for Mathematical Biology (SMB)

Society for the Advancement of Biology Education Research (SABER)