Easton R. White

Research Associate

Department of Biology, University of Vermont

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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	PI: PADI Foundation Grant: Comparison of approaches to estimate underwater biodiversity
2019-2024	(CO-PIs) Baker-Medard Merrill, **White Easton R.**, and Elizabeth Fairchild. Socio-Ecological Feedbacks of Marine Protected Areas: Dynamics of Small-Scale Fishing Communities and Inshore Marine Ecosystems. *National Science Foundation 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	National Science Foundation Graduate Research Fellow
2013-2014	Canada Fulbright Awardee

Publications

Google Scholar link ResearchGate link

*Indicates undergraduate or graduate student mentee

Published

11 **White, Easton R.**,*Kyle Cox, Brett Melbourne, and Alan Hastings. In press. Ecological management depends strongly on stochasticity: an experimental test. *Proceedings of the National Academy of Sciences*. (link)

10 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*. **Editors' Choice article** (link)

7 **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)

6 **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)

5 **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)

4 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)

3 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)

2 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)

1 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)

In the pipeline (preprint and/or in review)

4 **White, Easton R.** and Christie A. Bahlai. Experimenting with the Past to Improve Environmental Monitoring Programs. EcoEvoRxiv. In review. (link)

3 **White, Easton R.**, Marissa L. Baskett, and Alan Hastings. Catastrophes, connectivity, and Allee effects in the design of marine reserve networks. bioRxiv. In Reivew (link)

2 **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 6:e27435v1. (link)

1 **White, Easton R.** and Alan Hastings. Seasonality in ecology: Progress and prospects in theory. PeerJ Preprints 6:e27235v1. In review. (link)

Teaching Experience

University of Vermont

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

University of California, Davis

2017-2018 Instructor, BIS2B Ecology and Evolution Bridge Program (Bootcamp), Biology Undergraduate Scholars Program

2018 Instructor, Science Education and Outreach.

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

2017 Guest Lecturer, Mathematical methods in population biology (graduate-level PBG231)

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	PI on coupled socio-ecological systems project focused on Madagascar coral reef fisheries
2014-2018	Graduate Research and Teaching Assistant, University of California, Davis, Advisor: Alan 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

- Site-selection bias and species monitoring programs. Carleton University. Fall 2019, Ottawa, ON, Canada.
- Experimenting with the past to improve species monitoring programs. CSEE Meeting. Fall 2019, Fredericton, NB, Canada.
- *Rappel, Charlotte and Easton R. White. April 2019. Spatial dynamics and extinction risk of a small mammal population. University of California Undergraduate Research Conference.
- *Kono, Erica, *Schweibold, Reece, and Easton R. White. April 2019. Sex-biased dispersal in a model invasive species. University of California Undergraduate Research Conference.
- Managing populations in a chaging world. University of Vermont Biology Department seminar series. Spring 2019, Burlington, VT.
- Ecological and evolutionary dynamics in an increasingly variable world. Center for Population Biology series. Fall 2018. Davis, CA.
- Designing marine protected areas for catastrophic events. Canadian Society for Ecology and Evolution. Summer 2018. University of Guelph, Guelph, Ontario.
- Minimum time required to detect populations trends. Ecological Society of America. Summer 2018. New Orleans, LA.
- Evolution of reproductive timing in the collared Pika. Population Biology Graduate Group Symposium. Fall 2016. Davis, CA.
- Metapopulation dynamics and extinction in the American pika. Mathematics of Planet Earth group, Society for Industrial and Applied Math, Philadelphia, PA, Fall 2016.
- Evolution of reproductive timing in variable environments. Young Scientist Summer Program. International Institute for Applied Systems Analysis. Vienna, Austria. August 2016.
- Spatial structure and stochasticity in small mammal communities. University of Kansas, Lawrence, Kansas. April 2016.
- The inevitable partial collapse of an American pika metapopulation. Ecological Society of America. Baltimore, Maryland. August 2015.
- Shifting elasmobranch community assemblage at a marine protected area. Genomes to Biomes Meeting, Canadian Society for Ecology and Evolution. Montreal, Quebec, Canada, May 2014.
- Population declines of six elasmobranch species at a protected marine reserve in the eastern tropical Pacific. Pacific Ecology and Evolution Conference. Bamfield, British Columbia, Canada, March 2014.

Mentoring

University of Vermont

Fall 2019 - Present	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 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, University of Vermont
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

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
2015-2018	Graduate Teaching Community 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)
2018	Population Biology Travel Grant ($800)
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)
2014	Fulbright student mobility award ($800)
2013	NSF Travel Award ($1,300)
2013	Outstanding Graduating Senior ($500)
2010-2012	All-Arizona Academic Team Tuition Waiver ($20,000)

Reviewer

Bulletin of Mathematical Biology, Communications Biology, Ecography, Ecological Modelling, Ecology, Ecology Letters, Environmental Monitoring and Assessment, Journal of Applied Ecology, PeerJ, PLoSONE, Proceedings of the National Academy of Sciences, NOAA Grant Review, Science, Theoretical Ecology

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)