

Dominique G. Maucieri, M.Sc.

Email: dominiquemaucieri@gmail.com

Web: dominiquemaucieri.com



University
of Victoria



UNIVERSITY OF
CALGARY

Education

- 2021 – Present **Doctor of Philosophy** in Marine Biology, Biological Sciences, University of Victoria, BC, Canada, Senior Advisor: Dr. Amanda Bates
Thesis: *How local environmental conditions combine with changes in temperature to shape the resilience and physiological responses of marine invertebrates.*
- 2019 – 2021 **Master of Science** in Marine Biology, Biological Sciences, University of Victoria, BC, Canada, Senior Advisor: Dr. Julia K. Baum
Thesis: *Impacts of local and global stressors on coral biodiversity.*
- 2014 – 2019 **Bachelor of Science (Honors)** in Ecology and Zoology, Biological Sciences, University of Calgary, AB, Canada
Ecology Honors Advisor: Dr. Robert M.R. Barclay
Zoology Honors Advisor: Dr. Jessica M. Theodor
Awarded First Class Honors for GPA and Research Excellence
Ecology Thesis: *Consumption of spiders by Albertan bats.*
Zoology Thesis: *Sexual dimorphism in bat wing morphology – variation among foraging styles*

Publications (ORCID: 0000-0003-1849-2472)

1. **Maucieri, D.G.**, D.J. Kushner, and A.E. Bates. Enduring a major marine heatwave: The role of local cool refugia and kelp forests in the resilience of marine invertebrates. *Diversity and Distributions* 31(6):1-13. DOI: <https://doi.org/10.1111/ddi.70044>
2. Starko, S., G. Epstein, L. Chalifour, K. Bruce*, D. Buzzoni*, M. Csordas*, S. Dimoff*, R. Hansen*, **D.G. Maucieri***, J. McHenry*, K.L. Tietjen*, B. Timmer* and J.K. Baum. 2025. Ecological responses to extreme climatic events: a systematic review of the 2014-2016 Northeast Pacific marine heatwave. *Oceanography and Marine Biology - An Annual Review*. 63. *Author order alphabetical
3. Shaffer, J. A., Oxborrow, B., Parks, D. S., **Maucieri, D.G.**, & Michel, J. 2024. Linking Marine Ecosystem Response to Shoreline Armor Removal and Large Dam Removals in the Elwha River and Nearshore, Washington, USA. *Journal of Coastal Research*. 113: 890-895.
4. **Maucieri, D.G.**, S. Starko, and J.K. Baum. 2023. Tipping points and interactive effects of chronic human disturbance and acute heat stress on coral diversity. *Proceedings of the Royal Society B: Biological Sciences* 290:20230209. DOI: [10.1098/rspb.2023.0209](https://doi.org/10.1098/rspb.2023.0209).
5. Baum, J.K., D.C. Claar, K.L. Tietjen, J.M.T. Magel, **D.G. Maucieri**, K.M. Cobb, and J.M. McDevitt-Irwin. 2023. Transformation of coral communities subjected to an unprecedented heatwave is modulated by local disturbance. *Science Advances* 9(14):1-14. DOI: [10.1126/sciadv.abq5615](https://doi.org/10.1126/sciadv.abq5615).
6. **Maucieri, D.G.** 2022. quadcleanR: An R Package for the Cleanup and Visualization of Quadrat Data. *Journal of Open Source Software* 7(79): 4674. DOI: [10.21105/joss.04674](https://doi.org/10.21105/joss.04674).
7. **Maucieri, D.G.**, and J.K. Baum. 2021. Impacts of heat stress on soft corals, an overlooked and highly vulnerable component of coral reef ecosystems, at a central equatorial Pacific atoll. *Biological Conservation* 262: 1-10. DOI: [10.1016/j.biocon.2021.109328](https://doi.org/10.1016/j.biocon.2021.109328)

8. **Maucieri, D.G.**, A.J. Ashbaugh, and J.M. Theodor. 2021. Sexual dimorphism in bat wing morphology – variation among foraging styles. Canadian Journal of Zoology 99(11): 953-960. DOI: [10.1139/cjz-2021-0035](https://doi.org/10.1139/cjz-2021-0035)
9. **Maucieri, D.G.**, and R.M.R. Barclay. 2021. Consumption of spiders by the little brown bat (*Myotis lucifugus*) and the long-eared bat (*Myotis evotis*) in the Rocky Mountains of Alberta, Canada. Canadian Journal of Zoology. 99(3): 221-226. DOI: [10.1139/cjz-2020-0160](https://doi.org/10.1139/cjz-2020-0160)

In Review

1. Bruce, K.A., J.H.R. Burns, **D.G. Maucieri**, K. Pascoe, J.K. Baum. Prolonged heatwave – induced mass coral mortality influences the structural complexity of reef habitats. *In Review*.
2. Hansen, R.L.G., A. Halford, **D.G. Maucieri**, and J.K. Baum. Spatial variation in benthic community composition on a minimally disturbed coral reef after a prolonged marine heatwave. *In Review*.

Peer Review

Publons/Web of Science Researcher ID: AAA-6115-2022

- Global Ecology and Biography (2 Reviews)
- Journal of Integrative Biology (3 Reviews)
- Biological Conservation (2 Review)
- Oecologia (2 Reviews)
- Conservation Biology (1 Review)
- Acta Chiropterologica (1 Review)

Research Experience

- **Contract Coder with the United Nations Population Fund** (2023 – 2024), developing small area estimation models to analyze family planning indicators within Sub-Saharan African countries. I generated heatmaps aggregated to regional levels that visualized models to allow for future decision-making regarding access to family planning.
- **Intern at the South African Shark Conservancy** (2019), contributing to research focused on monitoring the local endemic catshark population and outreach with local schools. Tasks included shark measuring and tagging, analysis of baited remote underwater videos (BRUV), quantitative analysis of recapture data, and dive surveys.
- **Research Assistant at the University of Calgary** (2019) in Dr. Robert Barclay's Lab, tasks including the capture of bats using mist nets and harp traps, morphometric measurements, fecal analysis, and the mentorship and training of undergraduate researchers.
- **Research Assistant at the University of Calgary** (2017) in Dr. Leland Jackson's Lab, and with the Advancing Canadian Wastewater Assets (ACWA) project at the Pine Creek Wastewater Treatment Plant. Key responsibilities included conducting chlorophyll pigment extractions and ash-free dry mass analyses on biofilm collections, performing water and depth measurements in small southern Albertan lakes, and conducting comprehensive water sample analyses, including assessments of total suspended solids, chlorophyll content, phosphorus content, and zooplankton density/community composition.
- **Research Assistant at the University of British Columbia** (2016) within Dr. Kathy Martin's Lab on Hudson's Bay Mountain in Smithers, BC. Responsibilities included banding and measuring nestlings, conducting predation experiments, observing bird population behavior, and the retrieval of last

season's geo-locators, plus deploying new geo-locators. This work focused on studying the impact of predation on the nestling development of the Horned Lark (*Eremophila alpestris*).

Teaching and Advising

Course Instruction

- 2024 **Applied Data Analysis**, Bamfield Marine Sciences Center, 24 students, Fall Program 2024
- 2024 **Directed Studies**, Bamfield Marine Sciences Center, 24 students, Fall Program 2024

Curriculum Development

- 2023 & 2024 **Marine Ecology**. Assisted in planning field trips, assignments, and quizzes while the teaching assistant for this course at Bamfield Marine Sciences Center.
- 2022 **Study Design and Data Analysis**. Assisted creating lab R assignments and quizzes while the teaching assistant for this course at Bamfield Marine Sciences Center.
- 2019 – 2020 **Frontiers in Marine Biology**. Employed as a course developer where I designed labs and assignments, including six R tutorials and two R Assignments.

Teaching Assistant

While working as a teaching assistant I have fulfilled a multifaceted role which has included delivering prelab presentations, facilitating student projects, grading assignments and papers, demonstrating lab procedures and experiments and facilitating discussions. Additionally, I have been able to mentor my students in their academic careers.

- **Marine Ecology**, Bamfield Marine Sciences Center, 21 students (Summer 2024)
- **Study Design and Data Analysis**, University of Victoria, approx. 45 students (Spring 2021 to 2024).
- **Marine Ecology**, Bamfield Marine Sciences Center, 22 students (Summer 2023)
- **Frontiers in Marine Biology**, University of Victoria, 29 students (Spring 2021)
- **Intro to Ecology**, University of Victoria, approx. 45 students (Fall 2019 to 2021)
- **Principle of Genetics**, University of Victoria, approx. 45 students (Spring 2020)
- **Energy Flow in Biological Systems**, University of Calgary, approx. 25 students (Fall 2018)

Guest Lecturer

- Marine Ecology**, BMSC, Summer 2024, 1 lecture (1.5 hours)
- Marine Ecology**, University of Victoria, Spring 2024, 1 lecture (50 min)
- Study Design and Data Analysis**, University of Victoria, Spring 2024, 1 lecture (50 min)
- Survey of Invertebrates**, University of Victoria, Fall 2023, 1 lecture (50 min)
- Marine Ecology**, BMSC Summer 2023, 1 lecture (2 hours)
- Community & Ecosystem Ecology**, University of Victoria, Spring 2023, 3 lectures (2.5 Hours)

Advising Experience

- 2024 – 2025 **Alec Jones**, University of Victoria (Honours, Supervisor: Dr Amanda E. Bates).
- 2023 – 2025 **Ashley Mickens**, University of Victoria (MSc Student, Supervisor: Dr Rana El-Sabaawi).
- 2023 – 2025 **Agnes Djioua**, University of Victoria (Honours, Supervisor: Dr Amanda E. Bates & Women in Science Mentorship Program).
- 2017 – 2024 **Bamfield Marine Science Center Ambassador**, University of Calgary (2017-2019) and University of Victoria (2019 – present).
- 2023 **Nerissa Kassis**, University of Victoria (Directed Studies, Supervisor: Dr Amanda E. Bates).
- 2022 – 2023 **Rebecca Krohman**, University of Victoria (Honours, Supervisor: Dr Amanda E. Bates).
- 2020 – 2021 **Rebecca Hansen**, University of Victoria (Honours, Supervisor: Dr. Julia K. Baum).

2022 – 2023	Caity Sayers , University of Victoria (Women in Science Mentorship Program).
2019 – 2020	Maggie Brenneman , University of Victoria (Women in Science Mentorship Program).
2018 – 2019	Natalie Dong , University of Calgary (Science Mentorship Program).
2017 – 2018	Teagan Fulton , University of Calgary (Science Mentorship Program).
2017 – 2018	Sustainability Ambassador with the Sustainability Resource Center, University of Calgary
2018	Advisor , Faculty of Science Research Nights, University of Calgary.
2018	Peer Mentor , University of Calgary (Energy Flow in Biological Systems, approx. 450 students)

Facilitated Workshops and Training

Mar 2025	Introduction to R. Offered at the University of Victoria in collaboration with the Biology Undergraduate Society (in person, 2hrs).
Sep 2023	Introduction to R. Offered at the University of Victoria in collaboration with the Biology Undergraduate Society (in person, 1.5hrs).
July 2023	Map Making in R. Offered at BMSC during the Marine Ecology course (in person, 1hr)
Apr 2022	How to create an R Package. Offered at the University of Victoria (virtual, 1hr).
Summer 2020	Coral Identification Training , University of Victoria, four undergraduate students. (weekly 1hr meeting for two months)

Pedagogical Training

Graduate Teaching Assistant Workshop, University of Victoria, 2019
Graduate Teaching Assistant Workshop, University of Calgary, 2018
Communication and Culture (CMCL 507) at the University of Calgary, 2017

Conferences

Jul 2025	Maucieri, D.G. , R.D. Stuart-Smith, G.J. Edgar, and A.E. Bates. <i>The energetic cost of warming: Predicting fish consumption and invertebrate abundance under ocean warming.</i> – 10-minute talk, Australian Marine Sciences Association (AMSA) in Melbourne Australia.
Jun 2025	Maucieri, D.G. , R.D. Stuart-Smith, G.J. Edgar, and A.E. Bates. <i>The energetic cost of warming: Predicting fish consumption and invertebrate abundance under ocean warming.</i> – Poster, International Congress for Conservation Biology (ICCB) in Brisbane Australia.
Jun 2024	Maucieri, D.G. , D. Kushner, and A.E. Bates. <i>Enduring a major heatwave: the role of kelp forests and cold refugia in promoting marine invertebrate community resilience.</i> – 12-minute talk, North American Congress for Conservation Biology in Vancouver BC
Jun 2023	Maucieri, D.G. , and A.E. Bates.* <i>Impacts of Multiple Stressors on Temperate Marine Invertebrate Communities and the Role of Local Refugia in Community Resilience.</i> – 12-minute talk, Coastal Zone Canada in Victoria BC
Mar 2022	Maucieri, D.G. , and A.E. Bates. <i>Impacts of multiple stressors on temperate marine invertebrate communities and the role of local refugia in community resilience</i> – 3-minute talk, Pacific Ecology and Evolution Conference in Victoria BC
Aug 2021	Maucieri, D.G. , Samuel Starko, and J.K. Baum. <i>Disentangling the impacts of multiple stressors on coral reef diversity</i> – 12-minute talk, Canadian Society for Ecology and Evolution.
July 2021	Maucieri, D.G. , Samuel Starko, and J.K. Baum. <i>Impacts of local and global stressors on the structure and beta diversity of coral communities</i> - poster presentation, International Coral Reef Symposium.

Nov 2020	Maucieri, D.G. <i>Impacts of heat stress on soft corals, an overlooked, but fundamental component of coral reef ecosystems</i> - 5-minute talk, Western Society of Naturalists Conference, https://youtu.be/tVeY2Er2ljk
July 2020	Maucieri, D.G. <i>Impacts of local and global stressors on the structure and diversity of coral reef communities</i> – 15-minute talk, Global Coral Reef Week, https://youtu.be/0MgfzmjCZoE
Feb 2019	Maucieri, D.G. <i>Sexual dimorphism in bat wing morphology – variation among foraging styles</i> – 12-minute talk, Prairie University Biology Symposium in Winnipeg, Canada.
Oct 2018	Maucieri, D.G. <i>Spider consumption by bats</i> – poster presentation, North American Symposium for Bat Research in Puerto Vallarta, Mexico.

*presenting author

Grants, Fellowships and Awards

PhD (Total: \$158,465)

2024	Student International Activities Fund (\$500)
2024	W. Gordon Fields Memorial Fellowship (\$1,575)
2024	NSERC Michael Smith Foreign Study Supplement (\$6,000)
2024	Fisheries and Oceans Canada Aquatic Science Supplement (\$10,000)
2024	Bamfield Marine Science Center Teaching Assistant Scholarship (\$2,000)
2022 – 2025	NSERC Canada Graduate Scholarship–Doctoral (CGS D; \$105,000)
2022 – 2024	President's Research Scholarship (\$15,000)
2023	Bamfield Marine Science Center Teaching Assistant Scholarship (\$2,000)
2023	Fisheries and Oceans Canada Aquatic Science Supplement (\$10,000)
2022	Randy Baker Memorial Scholarship (\$390)
2021 – 2022	VNHS Alice M. Hay Scholarship (\$1,000)

MSc (Total: \$41,949)

2021	Most viewed paper for the Canadian Journal of Zoology (DOI: 10.1139/cjz-2020-0160)
2020 – 2021	University of Victoria Fellowship (\$15,000)
2019 – 2020	NSERC CGS-M (\$23,333)
2020	Advanced Dive Training Grant - Professional (\$1,000)
2020	The Maureen De Burgh Memorial Scholarship (\$2,616)

BSc (Total: \$35,900)

2014 – 2018	Dean's List
2017 & 2018	Hisao P. & Mary Needler Arai Marine Field Studies Scholarship (\$2,500)
2018	PURE award (\$4,500)
2018	NSERC USRA award (awarded but not accepted due to PURE also being received; \$4,500)
2017	Bamfield Tuition Scholarship (\$700)
2017	Upland Birds Alberta Scholarship (\$1,000)
2016 & 2017	Louise McKinney Scholarship (\$5,000)
2015 & 2017	University of Calgary Undergraduate Merit Awards (\$3,000)
2016	University of Calgary General Undergraduate Scholarship (\$5,000)
2016	Grace LeBel Bursary (\$900)
2015	Jason Lang Scholarship (\$1,000)
2015	President's Admission Scholarship (\$2,000)
2014 & 2015	Gerald Roberts Mortimer and Victor Emanuel Mortimer Scholarship (\$2,500)
2014	Royal Canadian Legion (Branch 288) Scholarship (\$800)
2014	Alexander Rutherford Scholarships (\$2,500)

Professional Service

Organizing Committees

- 2024 Abstract Committee Chair for the University of Victoria Graduate Student Symposium
- 2021 – 2022 Registration and Communications Chair for the Pacific Ecology and Evolution Conference 2022. <https://peec2022.wordpress.com/>
- 2022 Social Committee member for the University of Victoria Graduate Student Symposium
- 2019 Abstract Committee member for the University of Victoria Graduate Student Symposium

Educational Outreach

- 2025 Elementary school outreach, speaking to students at A.E. Bowers Elementary School (Gr 4)
- 2025 Scientist at World Ocean Day Celebration hosted by the Shaw Center for the Salish Sea
- 2022 – 2025 Webmaster for UVic Women in Science
- 2021 – 2025 Judge for the Annual BC/Yukon Regional Science Fair (Annually)
- 2023 – 2024 Graduate Student Society co-representative for Biology, University of Victoria.
- 2023 – 2024 Graduate Student Society Finance Committee member, University of Victoria.
- 2022 – 2024 Participating Scientist with Letters To A Pre-Scientist (1 pen pal per academic year)
- 2019 – 2024 Participating Scientist with Skype a Scientist program, 11 classes total ranging from kindergarten to 12th grade
- 2019 – 2022 Oceaneer with the Shaw Center for the Salish Seas.
- 2022 High school outreach, speaking to students at École Georges P. Vanier (Gr 9) and Bert Church High School (Gr 12)
- 2022 3-minute thesis competitor.
- 2019 Participating Scientist with with the South African Shark Conservancy, educating the public about shark biology and conservation.
- 2019 Bat expert with the Alberta Community Bat Program
- 2018 – 2019 Elementary school presentations on the diversity and biology of bats.

Research Facilitation

- 2022 – 2024 Ecostats Meetings, University of Victoria. Ecostats, is a graduate-run group at UVic that was established in 2012. Since fall 2022, I have been leading weekly Ecostats tutorials where I teach graduate student peers coding in R and work with them through statistical analyses on ecological data.
- 2023 – 2024 Animal Care Committee Graduate Student Representative, University of Victoria.
- 2021 – 2022 Lab meeting coordinator for the Bates lab
- 2018 Researcher for the Alberta Community Bat Program Bat Blitz in Castle Provincial Park
- 2016 – 2017 Volunteer with the Calgary Wildlife Rehabilitation Society

Media

- 2024 Interview with UVic Women in Science
- 2024 Interviewed for Anthro-Scene Podcast.
<https://open.spotify.com/episode/7u6PC3lehKuYhGXXHqR5oJL?si=zs-eFqHtSuOrBZoEZvUvIQ>
- 2023 Interview with Oceanbites Out Loud Podcast.
<https://oceanbitesorg.podbean.com/e/an-interview-with-dominique-maucieri/>
- 2021 Interviewed on Impostor Syndrome for the Graduate Matters blog at University Affairs.
<https://www.universityaffairs.ca/career-advice/graduate-matters/you-arent-the-only-one-suffering-from-imposter-syndrome/>

Software

Aut. & Cre.
quadcleanR



Coding Languages

R – Intermediate to advanced proficiency (>9 years of experience)
SQL – Beginner proficiency (~1 year of experience)
HTML – Beginner proficiency (~2 year of experience)
Python – Beginner proficiency (~1 year of experience)

Professional Certifications

- Canadian Association for Underwater Science Scientific Diver (CAUS Level I)
- PADI Rescue Diver and Dry Suit Diver
 - Nitrox & Peak Performance Buoyancy specialties
- Dive Accident Management (DAM)
- DAN Oxygen Provider
- Standard First Aid and CPR-C with AED (SFA) - Lifesaving Society
- Pleasure Craft Operators Card (PCOC)
- Small Vessel Operator Proficiency (SVOP)
- Small Domestic Vessel Basic Safety (SDV-BS)
- Restricted Operator Certificate – Maritime (ROC-M)

References

Dr. Amanda Bates

Professor, Department of Biology
University of Victoria
amandabates@uvic.ca

Dr. Julia Baum

Professor, Department of Biology
University of Victoria
250.858.9349
baum@uvic.ca

Dr. Sara Smith

Assistant Professor, Department of Biology,
Mount Royal University
403.440.6639
ssmith6@mtroyal.ca