

# Jordan A. Hollarsmith

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## EDUCATION

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- Ph.D. Ecology**, 2014-2019 **University of California, Davis**  
Advisor: Edwin D. Grosholz
- B.A. Ecology, Evolution and Environmental Biology** **Columbia University, New York**  
2008-2012  
Advisor: Sean Griffin (NOAA NMFS)

## PROFESSIONAL APPOINTMENTS

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- Research Biologist**, 09/2020 – present **NOAA Alaska Fisheries Science Center**  
Research focus: macroalgae and mariculture in Alaska, including ecological impacts of mariculture and mariculture best practices.
- Postdoctoral Fellow**, 07/2019 – 09/2020 **Simon Fraser University, Fisheries and Oceans Canada**  
Research focus: strategies for sustainable marine resource management given cumulative and non-linear effects, with a case study using semi-quantitative models to collaboratively assess multiple stressor impacts on Salish Sea kelp ecosystems.  
Collaborators: Drs. Isabelle Côté and Thomas Therriault

## PUBLICATIONS

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- Velasco-Lozano, M. F., G. Ramírez-Ortiz, H. Reyes-Bonilla, **J. A. Hollarsmith**. (In press). Ensamblajes de peces en ecosistemas mesofóticos insulares del Pacífico mexicano. *Ciencias Marinas*.
- Hollarsmith, J. A.**, G. Ramírez-Ortiz, T. Winkvist, M. Velasco-Lozano, K. DuBois, H. Reyes-Bonilla, K. C. Neumann, E. D. Grosholz. (2020). Habitats and fish communities at mesophotic depths in the Mexican Pacific. *Journal of Biogeography*.  
<https://doi.org/10.1111/jbi.13842>
- Hollarsmith, J. A.**, C. Camus, A. Buschmann, E. D. Grosholz. (2020) Varying reproductive success under ocean warming and acidification across giant kelp (*Macrocystis pyrifera*) populations. *Journal of Experimental Marine Biology and Ecology*, 522, 151247.  
<https://doi.org/10.1016/j.jembe.2019.151247>  
*Featured on [Globe and Mail](#) | [Forbes](#) | [CBC radio](#) | [Global News](#) | [Jefferson public radio](#)*
- Bashevkin, S., C. Dibble, R. Dunn, **J. A. Hollarsmith**, G. Ng, E. Satterthwaite, S. Morgan. (2020). Larval dispersal in a changing ocean with an emphasis on upwelling regions. *Ecosphere*, 11(1), e03015. <https://doi.org/10.1002/ecs2.3015>
- Hollarsmith, J. A.**, J. Sadowski, M. Picard, B. Cheng, J. Farlin, A. Russell, E. D. Grosholz. 2019. Effects of seasonal upwelling and runoff on water chemistry and growth and survival of native and commercial oysters. *Limnology and Oceanography*, Ino.11293.  
<https://doi.org/10.1002/lno.11293>  
*Featured on [KOED Science](#) | [SF Chronicle](#) | [The Tribune](#) | [Marin Independent Journal](#)*

Williams, S. L., C. Sur, N. Janetski, **J. A. Hollarsmith**, S. Rapi, L. Barron, L., S. J. Heatwole, A. M. Yusuf, S. Yusuf, J. Jompa, F. Mars. 2019. Large-scale coral reef rehabilitation after blast fishing in Indonesia. *Restoration Ecology*, 27(2), 447–456. <https://doi.org/10.1111/rec.12866>  
Feature on [Forbes](#) | [UC Davis News](#)

**Hollarsmith, J. A.**, S. P. Griffin, T. D. Moore. 2012. Success of outplanted *Acropora cervicornis* colonies in reef restoration. Proceedings of the 12<sup>th</sup> International Coral Reef Symposium, Cairns, Australia, 9-13 July 2012.

*In Submission or Preparation*

**Hollarsmith, J. A.**, T. Therriault, I. M. Côté. Practical implementation of cumulative effects management of marine ecosystems in western North America. *In revision at Conservation Biology*.

**Hollarsmith, J. A.** K. S. Andrews, N. Naar, S. Starko, M. Calloway, A. Obaza, J. Selleck, D. Tonnes, E. Buckner, I. M. Côté, T. W. Therriault. Towards a conceptual framework for managing and conserving kelp forests in future oceans: a case study in the Salish Sea. *In prep.*

**Hollarsmith, J. A.**, T. Winquist, A. Korabik. Reproductive response of bull kelp (*Nereocystis luetkeana*) to temperature and pH. *Dataset*.

## FUNDING & AWARDS

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2019	Canadian Healthy Oceans Network 2.2.4 Postdoctoral Fellowship
2019	The University of California Institute for Mexico and the United States (UC MEXUS) and Mexico's National Council for Science and Technology (CONACYT) Postdoctoral Fellowship (declined)
2018	University of California Institute for Mexico and the United States (UC MEXUS) Small Grants Program (\$1,500).
2018	American Philosophical Society Lewis and Clark Fund for Exploration and Field Research (\$4,800).
2018	The Explorer's Club Exploration Fund Grant (\$1,200).
2017	National Science Foundation Graduate Research Internship Program (NSF GRIP) in collaboration with the NOAA National Marine Fisheries Service, Seattle, WA (\$5,000).
2017	National Geographic Society Committee for Research and Exploration, grant number CP-095ER-17 (\$5,189).
2017	Western Society of Naturalists – Best Student Paper, Organismal Biology
2016	National Science Foundation Graduate Research Opportunities Worldwide (NSF GROW) and Chile's National Commission for Scientific and Technological Research (CONICYT) (\$10,000).
2016	Point Reyes National Marine Sanctuary Neubacher Fund (\$2,967.27).
2016	University of California Henry A. Jastro Research Fellowship. (\$2,100).
2015	The Explorer's Club Exploration Fund Grant (\$1,600).
2014	National Science Foundation Graduate Research Fellowship Program (NSF GRFP)
2014	Graduate Group in Ecology Fellowship, University of California-Davis
2010	National Oceanic and Atmospheric Administration Ernest F. Hollings Scholarship
2010	National Science Foundation Research Experience for Undergraduates (NSF REU)

## TEACHING & MENTORING EXPERIENCE

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### Instructor

- 2019 *¿Qué nos puede enseñar el océano sobre el espacio exterior?* Clubes de Ciencia, Ensenada, Mexico. August 4-10.
- 2018 *Biodiversidad y cambios climáticos en el mar: de arrecifes a microbios.* Clubes de Ciencia, La Paz, Mexico. July 30-August 3.
- 2015 *Graduate Group in Ecology NSF GRFP Workshop.* University of California-Davis.

### Teaching Assistant

- 2015 *Population Dynamics and Modeling.* University of California-Davis. Spring quarter.

### Supervisor/Mentor

- 2020 Juanita Martis (SFU undergraduate honors student)
- 2018 Alexia Uribe (Universidad Autónoma de Baja California Sur intern), Jennifer Ocegüera (UC-Davis intern), Manuel Velasco (Dissertation Committee; Universidad Autónoma de Baja California Sur)
- 2017 Haley Stott (paid laboratory and field assistant)
- 2016 Aanisah Houston (Santa Rosa Junior College intern), Chad Martin (Santa Rosa Junior College intern), Mariah Dorado (Santa Rosa Junior College intern)

### Guest Lecturer

- 2020 “Kelp ecology and conservation.” Phycology. Tarleton University. April 17.
- 2017 “Climate change in the ocean.” Climate Change, Water, and Society. University of California-Davis. November 20.
- 2016 “The ecology of upwelling zones.” Oceanography. Antarctic Circumnavigation Expedition Maritime Academy. R/V Akademik Tryoshnikov. November 26.
- 2015 “Tropical field work.” Ecology of Tropical Latitudes. University of California-Davis. April 15.

## SELECTED PRESENTATIONS

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- Hollarsmith, J.A.,** K. S. Andrews, N. Naar, S. Starko, M. Calloway, A. Obaza, J. Selleck, D. Tonnes, E. Buckner, I. M. Côté, T. W. Therriault. Towards a conceptual framework for managing and conserving kelp forests in future oceans: a case study in the Salish Sea. Western Society of Naturalists virtual conference. 5 – 7 November.
- Hollarsmith, J.A.** Conservation complications in a changing sea. Biology Seminar Series, Western Washington University. 13 November 2019. **(Invited seminar)**
- Hollarsmith, J.A.** Gradients in the sea: causes and consequences for biodiversity. Les Ecologistes, Simon Fraser University. 24 October 2019. **(Invited seminar)**
- Hollarsmith, J.A.** Mesophotic ecosystems of the Revillagigedo Archipelago. Sea Shepherd Conservation Society: Operation Treasured Islands M/V Sharpie. 20 December 2018. **(Invited seminar)**
- Hollarsmith, J.A.,** G. Ramírez Ortiz, T. Winqvist, K. DuBois, H. Reyes Bonilla, E. D. Grosholz. Kelp in the Gulf of California? Maybe in the deep! Western Society of Naturalists, Tacoma, WA. 8 – 11 December 2018.
- Hollarsmith, J.A.** The ecology of gradients. Explorer’s Club, Northern California Chapter Meeting. San Francisco, CA. 25 May 2018. **(Invited seminar)**
- Hollarsmith, J.A.,** B. Rubinoff, E. D. Grosholz. Biodiversity gradients in the Tomales Bay kelp beds. California Shore and Beach Preservation Association conference "Coastal Conditions - Strategies for the Present and Future", Bodega Bay, CA. 17-19 April 2018.

- Hollarsmith, J.A.**, C. Camus Torres, A. Bushmann, E. D. Grosholz. Local adaptation in giant kelp (*Macrocystis pyrifera*) to temperature and pH. Western Society of Naturalists, Pasadena, CA. 16-19 November 2017. (**Winner of best student paper in organismal biology**)
- Hollarsmith, J.A.**, C. Camus Torres, A. Bushmann, E. D. Grosholz. Local adaptation in giant kelp (*Macrocystis pyrifera*) to temperature and pH. Ecological Society of America, Portland, OR. 6-11 August 2017.
- Hollarsmith, J.A.**, Chile vs. California: whose kelp will survive the hot and sour seas? Science Uncorked at Gourmet Au Bay. Bodega Bay, CA. 27 September 2017. (**Invited seminar**)
- Hollarsmith, J.A.**, Adaptaciones locales en *Macrocystis*. Instituto Marino de la Universidad de Los Lagos. Puerto Montt, Chile. 31 March 2017. (**Invited seminar**)
- Hollarsmith, J.A.**, M. Picard, J. Farlin, H. Stott, B. Rubinoff, A. Russell, E.D. Grosholz. 2016. Short-term estuarine acidification: Spatially complex impacts of upwelling and run-off on oyster growth and water chemistry in a Northern California estuary. Ecological Society of America. Fort Lauderdale, FL. 7-12 August 2016.
- Hollarsmith, J.A.**, S.P. Griffin, T.D. Moore. Success of outplanted *Acropora cervicornis* colonies in reef restoration. International Coral Reef Symposium. Cairns, Australia. 9-13 July 2012. (poster)

## RESEARCH & PROFESSIONAL EXPERIENCE

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- Research Advisory Council Member** **Puget Sound Restoration Fund, Washington**  
Provide expertise for Bull kelp (*Nereocystis luetkeana*) conservation and restoration activities, participate in dive operations to survey beds. 07/2017 – present
- Kelp Recovery Plan Consultant** **NOAA, Northwest Straights Commission, Washington**  
Provide expertise, including ecological and demographic knowledge and satellite maps of Bull kelp, serve as a peer reviewer of the Puget Sound Kelp Recovery Plan. 11/2017 to present
- ROV Consultant** **Sea Shepherd Conservation Society, Canada**  
Led operations using a remotely operated vehicle (ROV) to survey benthic impacts of salmon farms in the Discovery Islands, British Columbia, with Chief Quocksister Jr. (Laichkwiltach Nation) on the R/V Martin Sheen. 07/2019
- Volunteer Diver** **California Academy of Sciences, California**  
Maintained aquarium tanks on SCUBA, provided surface support to divers and scientists, gave coral reef presentations on surface-supply with full face mask to the public. 10/2013 – 05/2017
- Project Leader** **Fundación Ecológica de Punta Cana, Dominican Republic**  
Led coral gardening and restoration efforts as part of the Inter-American Development Bank Coral Gardening Initiative. Coordinated interns, trained volunteers, and conducted outreach to local school and university groups. 01/2014 – 06/2014
- Research Technician and Scientific Diver** **Australian Institute of Marine Science, Australia**  
Conducted aquarium experiments on growth and survival of Pacific coral (*Porites* sp., *Pocillopora* sp., *Acropora* sp.) under thermal and acidification stress. Scientific diver and small boat operator in remote Great Barrier Reef sites from the R/V Cape Ferguson. 09/2012 – 05/2013

## RELEVANT SKILLS

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Statistics (R): ordination (PCA, CCA, NMDS); generalized linear mixed models using frequentist and Bayesian methods; Bayesian belief networks

Dive operations: AAUS/CAUS Scientific Diver (100 ft. certification); NAUI Dive Master; Buceador Deportivo Autónomo (Chilean Navy certification); PADI Enriched Air Diver; DAN Diving First Aid for Professional Divers; experience in dry-suit, full face mask, surface-supply, hazmat suit; 350+ logged dive hours

Boat operations: USFW Motorboat Operator Certificate; Marine Boating License (Queensland, Australia)

ROV operator: BlueRobotics BlueROV2; Sofar Ocean Trident

Drone operator: FAA Licensed Unmanned Aerial Vehicle Pilot

## PROFESSIONAL SERVICE & ASSOCIATIONS

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### **Service and Outreach**

Skype a Scientist (2020)

Society for the Advancement of Chicanos and Native Americans in Science (SACNAS) conference abstract reviewer (2019)

UC Davis, Graduate Group in Ecology Admissions Reviewer (2018-2019)

UC Davis, Bodega Marine Laboratory Seminar Series Organizer (2017-2018)

Sonoma County Sherriff Department Search and Recovery Dive Team (2017-2018)

Marine science educator: Bodega Bay Elementary School (2017), Sonoma County Día del Niño (2017), UC Davis Picnic Day (2016), Monterey Bay Aquarium Day of Discovery for Kids with Exceptional Challenges (2015)

### **Professional Associations:**

Western Society of Naturalists, Ecological Society of America, Society for Advancement of Chicanos/Hispanics and Native Americans in Science, American Academy of Underwater Sciences

### **Research Associations:**

National Geographic Young Explorer, The Explorer's Club Term Fellow, Lewis and Clark Field Scholar

### **Peer review:**

Ecology and Evolution, Journal of Phycology, Oecologia, Puget Sound Kelp Recovery and Conservation Plan (NOAA), Revista de Biología Marina y Oceanografía, Simon Fraser University Undergraduate Science Journal.