Osanna Drake

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EDUCATION

Expected

- 2027 Duke University, Durham, NC (Aug. 2022 Present)
 PhD Student Marine Science and Conservation advised by Dr. Xavier Basurto
- Stanford University, Stanford, CA (coterminal degrees Sept. 2016 Mar. 2021)
 MS Earth Systems focus on Marine Social-Ecological Systems, GPA: 4.12/4.0
 BS with Honors Earth Systems Biosphere track, Minor Spanish, GPA: 3.99/4.0

SELECTED AWARDS AND FELLOWSHIPS

- 2021 Illegal Fishing & Transparency Fellowship, \$55,000, Oceana (2021-2022)
- 2021 Earth Systems Award for Outstanding Contributions as a **Teaching** Assistant, Stanford University Notation in **Science Communication** (view my portfolio at <u>osannadrake.com</u>), Stanford University
- 2020 Dean's Award for Outstanding Undergraduate Academic Achievement, Stanford University
- 2018 Ernest F. Hollings Undergraduate Scholarship, \$26,000, NOAA (2018-2020)

PUBLICATIONS

- Valentine, M., Gee, E., **Drake, O.**, O'Donnell, K. "A Survey of Fishing Activity in 19 Marine Protected Areas." Externally reviewed Oceana report (October 2022) DOI: 10.5281/zenodo.7401261
- Valentine, M., Gee, E., **Drake, O.** "Now You See Me, Now You Don't: Vanishing Vessels Along Argentina's Waters." Oceana report. (June 2021) DOI:10.5281/zenodo.4893397.
- 2019 **Drake, OV**. "Light and Temperature on Reef Herbivory: Effects of algal growth conditions on grazing intensity by juvenile and adult sea hares." SURJ: The Stanford Undergraduate Research Journal 18.1 (2019): 69-76.

ACADEMIC RESEARCH

- 2018 Student Researcher, Heron Island Research Station, Queensland, AU (Sept. Dec)
 - Conducted experiments with Station director Dr. Ward on coral reef herbivory change
 - Published findings and presented at Stanford in Australia Research Symposium

Student Researcher, **Hopkins Marine Station**, Pacific Grove, CA (Apr. – June)

- Conducted independent field research with Station director Dr. Denny on the rocky intertidal
- Described novel behavior in iconic gastropod species, completed extensive literature review

PROFESSIONAL ENVIRONMENTAL WORK

2021-22 Illegal Fishing & Transparency Fellow, Oceana, Washington, D.C. (Mar. 2021 – Apr. 2022)

- Bolstered Oceana's campaign to end illegal fishing by conducting research, analyzing big data, presenting findings, writing reports, and creating interactive maps and visualizations
- A lead author on a report garnering 63 media stories and covered by 320 news organizations including the Guardian and CNN, bringing Oceana ~\$9 million in ad value
- Developed automated alerts using R and SQL to notify 3 foreign governments (Chile, Mexico, and Belize) of illegal activity to aid in monitoring and enforcement
- First author on a policy brief used by U.S. senators to inform voting on H.R. 3075

2020 Sustainability Analyst, First Community Housing, San Jose, CA (Sept. – Nov.)

- Evaluated 12 years of water and energy usage data for affordable housing developer
- Conserved cost and resource use for over 3,300 low-income residents across 20 properties
- Analyzed utility data using R and Tableau, presented findings weekly to program director

Lead Researcher, Logbook, Newark, CA (June – Sept.)

- Developed methodology for a social enterprise empowering communities to study coral reefs
- Oversaw all matters of scientific rigor, monitoring protocol, justice, and data management
- Built relationships with over 50 diverse stakeholders to gain insight and product-market fit

2019 Phenological Species Monitoring Intern, **NOAA**, Huron, OH (June – Sept.)

- Monitored keystone species in a Great Lakes research reserve to track ecosystem changes
- Raised scientific rigor of 8 citizen science programs through interdisciplinary problem-solving
- Established resilient, powerful databases with quality assurance to address "dark data"

TEACHING ASSISTANTSHIPS

- 2021 Adaptation, Stanford University School of Earth, Stanford, CA (Jan. Apr.)
 - 3 units, graduate and undergraduate level, 29 students. Prof. Jones
- 2020 The Global Warming Paradox, Stanford University School of Earth, Stanford, CA (Sept. Dec.)
 - 3 units, undergraduate level, 18 students. Prof. Diffenbaugh

SELECTED PRESENTATIONS AND POSTERS

- 2021 **Drake, O.**, Valentine, M., Gee, E. "Leveraging Big Data to Analyze Illegal Vessel Activity in Marine Protected Areas." Sustainable Ocean Conference 2021, Sobey Fund for Oceans, September 23 25, Virtual. *Oral presentation*. Received second place, cash prize
 - **Drake, O.**, Anderson, L. "A Patchwork of Ocean Experiences: Co-Creating a Digital Quilt" V.ECOP Day, UN Decade of Ocean Science for Sustainable Development, June 1, Virtual. *Oral presentation*.
 - **Drake, O.,** 2021. "Fisheries Management on the High Seas." In Esri User Conference 2021 Virtual Map Gallery, July 12 15, Virtual. *Map presentation*
- 2020 **Drake, O.,** 2020. "Data Management and Outreach Strategies for a Sustainable Phenological Species Monitoring Program in a Great Lakes Research Reserve." In Ocean Sciences Meeting 2020, AGU, February 16 21, San Diego. *Poster presentation*.