Frankie Gerraty

fgerraty@ucsc.edu www.frankiegerraty.com

EDUCATION

University of California, Santa Cruz — **Santa Cruz, California**
Ph.D. Candidate, Ecology and Evolutionary Biology — *September 2021-Present*
Dissertation: Social-Ecological Connectivity Between Land and Sea
Advisor: Peter Raimondi

Whitman College — **Walla Walla, Washington**
B.A. in Biology — Environmental Studies — *August 2015-May 2019*
Thesis: Anthropogenic Impacts on Mangrove Crab Abundance, Zonation, and Diversity in Bocas del Toro, Panamá
GPA: 3.901/4.00 - *summa cum laude*

School for Field Studies — **Turks and Caicos / Panamá**
Marine Resource Studies / Tropical Island Biodiversity Studies — *August-December 2017*
GPA: 3.920/4.00

PUBLICATIONS **Student*

In the Pipeline

3. **FD Gerraty**, CA Braman, JE Dugan, K Elder, KA Emery, BS Halpern, WN Heady, EHT Hiroyasu, GB Lewin, ES Nielsen, RY Oliver, M Reynolds, A Wegmann, RC Williams, R Wynn-Grant, HS Young, ZL Zilz. Historical and potential future importance of marine megafauna subsidies to terrestrial ecosystems. (*In Press at Frontiers in Ecology and the Environment*). Preprint.

2. M Westover, EA Beever, AB Smith, P Billman, **FD Gerraty**, FA Smith. Contrasting predictions from trailing-edge range dynamics and the theory of island biogeography: climate drives patterns. (*In Revision*).

1. EA Beever, M Westover, AB Smith, **FD Gerraty**, P Billman, FA Smith. Investigating patterns of density and distributional decline in a habitat specialist not experiencing physical-habitat loss, to inform conservation decisions. (*In Review*).

Peer-Reviewed Publications

12. B Rooney *et al.* [including **FD Gerraty** and G. Gott*] (2025). SNAPSHOT USA 2024: Year 6 of the coordinated national camera trap survey of the United States. **Global Ecology and Biogeography**. 35, 4: e70229. https://doi.org/10.1111/geb.70229.

11. **FD Gerraty**, K Ammann, MA Douglas, M George, DP Lohse, CM Miner, PT Raimondi (2026). Marine heatwave and keystone predator loss drive broad-scale decline and hinder recovery of a rocky intertidal kelp. **Ecological Applications**. 36(2): e70215. https://doi.org/10.1002/eap.70215.

10. **FD Gerraty** (2026). The *Fucus* flow: wide intertidal zones amplify rockweed wrack subsidies to shoreline invertebrates. **Estuaries and Coasts**. 49(67). https://doi.org/10.1007/s12237-026-01680-y.

9. EA Beever, AB Smith, D Wright, T Rickman **FD Gerraty**, J Stewart, A Gill, K Klinger, M Robinson (2025). Expanding barriers: Impassable gaps interior to distribution of an isolated mountain-dwelling species. **Ecosphere**. 16(6):e70223. https://doi.org/10.1002/ecs2.70223.

8. **FD Gerraty**, S Grimes, S Pemberton, S Allen, S Codde (2025). Coyotes hunt harbor seal pups on the California Coast. **Ecology**. 106(2):e70031. https://doi.org/10.1002/ecy.70031.

7. B Rooney *et al.* [including **FD Gerraty**] (2025). SNAPSHOT USA 2019-2023: The first five years of data from a coordinated camera trap survey of the United States. **Global Ecology and Biogeography**. 34:e13941. https://doi.org/10.1111/geb.13941.

6. AA Ellis *et al.* [including **FD Gerraty**] (2024). Coalition-building for labor actions in life sciences departments: lessons from the largest academic strike in history. **BioScience**. biae123. https://doi.org/10.1093/biosci/biae123.

5. EA Beever, ML Westover, AB Smith, **FD Gerraty**, PD Billman, FA Smith (2024). Combining past and contemporary species occurrences with ordinal species distribution modeling to investigate responses to climate change. **Ecography**. e07382. https://doi.org/10.1111/ecog.07382.

4. **FD Gerraty**, A Gobei-Bacaylan*, K Diel* (2024). Urbanization alters sandy beach scavenging assemblages and dogs suppress ecosystem function. **Ecosphere**. 15(10):e70016. https://doi.org/10.1002/ecs2.70016.

3. **FD Gerraty**, T Carroll, S Williams*, M Isadore (2024). Recovering predators link aquatic and terrestrial ecosystems: River otters subsidize coyotes with carrion. **Ecology and Evolution**. 14, e11444. https://doi.org/10.1002/ece3.11444.

2. EA Beever *et al.* [including **FD Gerraty**] (2023). Geographic and taxonomic variation in adaptive capacity among montane small mammals: implications for conservation status and actions. **Biological Conservation**. 282, 109942. https://doi.org/10.1016/j.biocon.2023.109942.

1. **FD Gerraty** (2023). The carrion connection: Marine mammal carcasses provide an indirect subsidy to insectivorous birds. **Food Webs**. 35,e00278. https://doi.org/10.1016/j.fooweb.2023.e00278.

Non-Refereed Publications

3. **FD Gerraty**, A Gobei-Bacaylan*, K Diel*. (2024) Urban scavengers: Human activities underpin sandy beach scavenging dynamics. **Bulletin of the Ecological Society of America**. 0(0):e02210 https://doi.org/10.1002/bes2.2210.

2. **FD Gerraty**. *"Range Edges of Northeast Pacific Marine Life,"* ArcGIS Storymap (updated monthly, 2021-2023)

1. **FD Gerraty**. *"Anthropogenic Impacts on Mangrove Crab Abundance, Zonation, and Diversity in Bocas del Toro, Panamá,"* Whitman College Thesis Repository (2019)
   - Jan Mejer Award for Best Essay in Environmental Studies at Whitman College

Creative Nonfiction

6. **FD Gerraty** (2021). *"Ochre Sea Star,"* Objeta: *becoming-feral*.

5. **FD Gerraty** (2021). *"Tube Feet on Skin,"* Loam: Living Through Liminality.

4. **FD Gerraty** (2021). *"Frogs and Fungi: Caring for Microbial Worlds,"* New Farmers Almanac Vol. V.

3. **FD Gerraty** (2020). *"Intertidal Entanglements,"* Center for Humans and Nature.

2. **FD Gerraty** (2020). *"An Owl Limpet's Garden,"* The Urban Field Naturalist Project.

1. **FD Gerraty** (2020). *"Pandemic Planet,"* Mangoprism.

GRANTS, AWARDS AND HONORS *total: $392,094*

Fellowships

- UCSC Dissertation Quarter Fellowship, 2026 (*$11,000*)
- National Science Foundation Graduate Research Fellowship, 2021-2026 (*$138,000*)
- UCSC Dissertation Year Fellowship, 2025-2026 (*$55,000*)
- National Science Foundation INTERN, 2025 (*$37,802*)
- Achievement Rewards for College Scientists Fellowship, 2024-2025 (*$11,428*)
- UCSC Regents Fellowship, 2021 (*$2,500*)
- Paul Garrett Leadership Scholarship, awarded to 1% of applicants, 2015-2019 (*$30,950*)
- Alexander J Anderson Scholarship, 2015-2019 (*$42,000*)

Research Grants

- UCSC Ecology and Evolutionary Biology Summer Fellowship, 2025 (*$6,120*)
- UCSC Ecology and Evolutionary Biology Summer Fellowship, 2025 (*$1,200*)
- Tomales Bay Foundation, 2024 (*$3,500*)
- UCSC Ecology and Evolutionary Biology Summer Fellowship, 2024 (*$1,200*)
- Rebecca and Steve Sooy Graduate Fellowship, 2023 (*$5,749*)
- Point Reyes National Seashore Neubacher Fund, 2023 (*$5,000*)
- The Explorers Club Exploration Fund, 2023 (*$3,800*)
- Tomales Bay Foundation, 2023 (*$3,000*)
- Myers Oceanographic and Marine Biology Trust, 2023 (*$2,745*)
- PADI Foundation, 2023 (*$2,485*)
- Western Society of Naturalists Rafe Sagarin Fund for Innovative Ecology, 2023 (*$2,000*)
- International Women's Fishing Association Scholarship, 2023 (*$1,000*)
- UCSC Institute for Marine Sciences Student Research and Education Award, 2023 (*$650*)
- American Philosophical Society Lewis and Clark Fund, 2022 (*$4,800*)
- American Museum of Natural History Lerner-Gray Marine Research Grant, 2022 (*$3,265*)
- Rebecca and Steve Sooy Graduate Fellowship, 2022 (*$2,500*)
- Phycological Society of America Grant in Aid of Research, 2022 (*$1,970*)
- Otter Bay Wetsuit Award, 2022 (*In Kind: $700*)
- UCSC Graduate Division Travel Grant, 2022, 2023, 2024 (*$500, $50, $400*)
- DroneCamp Scholarship, 2021 (*In Kind: $50*)
- Whitman Internship Grant, 2018-2019 (*$1,680*)

Honors and Awards

- Best Student Talk in Community Ecology, Western Society of Naturalists, 2025 (*$250*)
- Jan Mejer Award for Best Essay in Environmental Studies, 2019 (*$500*)
- Cynthia Ann Lechner Prize, for "outstanding potential in biology," 2019 (*$350*)
- Academic Distinction (Every Semester), 2015-2019
- Dipsea Footrace Scholarship, 2015 (*$5,000*)
- Marin Garden Club Scholarship, 2015 (*$1,500*)
- ELKS Club Scholarship, 2015 (*$800*)
- Redwoods Scholarship, 2015 (*$750*)

PROFESSIONAL APPOINTMENTS

Graduate Researcher **May - July, 2022-2026**

Gulf Watch Alaska *Katmai NP, Kenai Fjords NP, Kachemak Bay, and Prince William Sound, Alaska*

- Project: Long-term nearshore ecosystem monitoring.
- Responsibilities: Survey rocky intertidal, mussel bed, and soft sediment infaunal communities; conduct sea otter foraging observations; conduct marine bird and mammal surveys; band and survey black oystercatchers; collect carnivore scat and fish samples.

Coastal Connections Intern **April - September 2025**
The Nature Conservancy + NCEAS *Santa Barbara, California*

- Project: "Conserving Connectivity: Integrating Land-Sea Linkages into California Coast Conservation Approaches." Funded by the National Science Foundation (INTERN).
- Responsibilities: Lead two synthetic literature reviews assessing human impacts to land-sea connectivity, and associated conservation implications.

Data Specialist **February 2020 - 2023**
U.S. Geological Survey | Supervisor: Dr. Erik Beever *Bozman, Montana*

- Project: American pika (*Ochotona princeps*), porcupine (*Erethizon dorsatum*), and vegetation responses to global environmental change.
- Responsibilities: Data collection, QA/QC, dataset management and analysis, manuscript preparation.

Scientific Diver **May - August 2021**
PISCO | Supervisor: Dr. Mark Carr *Santa Cruz, California*

- Project: Long-term monitoring of California's kelp forest ecosystems.
- Responsibilities: Conduct SCUBA surveys of kelp forest fishes, invertebrates, and algae.

Research Technician **September - December 2019**
The Guppy Project | Supervisor: Dr. David Reznick *Trinidad, West Indies*

- Project: Eco-evolutionary dynamics in Trinidadian montane stream communities.
- Responsibilities: Execute guppy mark-recapture experiment in remote tropical rainforest streams.

Field Technician **May - September 2019**
U.S. Geological Survey | Supervisor: Dr. Erik Beever *Bozman, Montana*

- Project: Climate-driven changes to American pika (*Ochotona princeps*) population density and habitat occupancy across the American West.
- Responsibilities: Survey mammalian communities at >500 montane talus patches. Data entry, QA/QC, and analysis. Perform literature review on climate change effects on Great Basin pikas.

Aquatic Propagation Lab Technician **August 2018 - May 2019**
Confederated Tribes of Umatilla Indian Reservation | Supervisor: A Maine *Walla Walla, Washington*

- Project: Holistic approaches to watershed restoration using artificial propagation of Pacific lamprey and freshwater mussels.
- Responsibilities: Animal husbandry, aquaculture system design/construction, assist experiments.

Undergraduate Researcher **August - December 2017**
School for Field Studies | Supervisor: Dr. Cinda Scott *Bocas del Toro, Panamá*

- Project: Anthropogenic impacts on mangrove crab abundance, diversity, and distribution in Bocas del Toro, Panamá.
- Responsibilities: Design and conduct mangrove crab trapping experiment, build study equipment, lead 6-person expedition team, collect and analyze data. Prepare and present posters (2), presentations (2), and undergraduate thesis (Jan Mejer Award).

Citizen Science Program Leader **August 2014 - May 2015**
NOAA LiMPETS | Supervisor: Kathy Soave *Bolinas, California*

- Sea level rise induced zonation shifts in rocky intertidal invertebrates.
- Organize and lead 20+ person citizen science expeditions, teach rocky intertidal species ID.

PRESENTATIONS **Student †Invited*

Talks

FD Gerraty. *"Pinnipeds connect land and sea at Año Nuevo State Park,"* Año Nuevo Elephant Seal Docent Enrichment Speaker Series. (2026) †

FD Gerraty. *"Getting to know seaweeds,"* San Mateo County MPA Collaborative Network. (2026) †

FD Gerraty *et al.* [16 co-authors]. *"Historical and Potential Future Importance of Marine Megafauna Subsidies to Terrestrial Ecosystems,"* The Nature Conservancy Point Conception Institute Science Symposium. (2026) †

FD Gerraty, K Ammann, MA Douglas, M George, DP Lohse, CM Miner, PT Raimondi. *"Marine heatwave and keystone predator loss drive broad-scale decline and hinder recovery of a rocky intertidal kelp,"* Multi-Agency Rocky Intertidal Network Annual Meeting. (2026) †

FD Gerraty. *"Coastal Carnivores Connect Land and Sea,"* Elephant Seal Docent Day, Point Reyes National Seashore. (2025) †

FD Gerraty, K Ammann, MA Douglas, M George, DP Lohse, CM Miner, PT Raimondi. *"Marine heatwave and keystone predator loss drive broad-scale decline and hinder recovery of a rocky intertidal kelp,"* UCSC-Stanford Species Interactions Workshop. (2025)

FD Gerraty, K Ammann, MA Douglas, M George, DP Lohse, CM Miner, PT Raimondi. *"Marine heatwave and keystone predator loss drive broad-scale decline and hinder recovery of a rocky intertidal kelp,"* Western Society of Naturalists. (2025) ⋆ Awarded Best Student Talk in Community Ecology

FD Gerraty. *"Coastal Carnivores Connect Land and Sea,"* Noyo Center for Marine Science. (2025) †

FD Gerraty. *"Coastal Carnivores Connect Land and Sea,"* UCSC Institute for Marine Sciences Community Meeting. (2025) †

FD Gerraty *et al.* [16 co-authors]. *"Historical and Potential Future Importance of Marine Megafauna Subsidies to Terrestrial Ecosystems,"* UCSC-Stanford Species Interactions Workshop. (2025)

FD Gerraty. *"Coastal Carnivores Connect Land and Sea in Point Reyes National Seashore,"* Tomales Bay Foundation Annual Meeting. (2024) †

FD Gerraty *et al.* [16 co-authors]. *"Historical and Potential Future Importance of Marine Megafauna Subsidies to Terrestrial Ecosystems,"* Western Society of Naturalists. (2024)

FD Gerraty. *"California Coast Coyotes Connect Land and Sea,"* ARCS Foundation Northern California Chapter General Meeting. (2024) †

FD Gerraty. *"California Coast Coyotes Connect Land and Sea,"* Explorers Club Annual Dinner Grantee Symposium. (2024) †

FD Gerraty, A Gobei-Bacaylan*, K Diel*. *"Does Urbanization Alter Vertebrate Scavenging Assemblages and Ecosystem Functions on California Beaches?"* Western Society of Naturalists. (2023)

FD Gerraty. *"Marine Mammal Subsidies Along the Marin County Coast,"* State of Tomales Bay Conference. (2023) †

FD Gerraty. *"Coastal Coyotes and Land-Sea Connectivity in Point Reyes National Seashore,"* Point Reyes National Seashore Association's Party on the Pacific Plate. (2023) †

FD Gerraty. *"Urbanization Effects on Shoreline Scavenging Assemblages,"* Monterey Area Research Institutions' Network for Education Spring Colloquium. (2023)

FD Gerraty. *"Pacific Lamprey: A Case Study of Collaboration, Extinction, and Life in the Anthropocene,"* Whitman Undergraduate Conference. (2019)

FD Gerraty. *"Anthropogenic Impacts on Mangrove Crab Diversity, Relative Abundance, and Zonation,"* Whitman Undergraduate Senior Seminar. (2019)

FD Gerraty. *"MPA Efficacy and Anthropogenic Impacts on Mangrove Ecosystems in Bocas del Toro,"* School for Field Studies Symposium. (2017)

Posters

FD Gerraty. *"Marine Megafauna Subsidies to Terrestrial Ecosystems,"* ARCS Foundation Scholar Symposium. (2025) Presentation link

FD Gerraty. *"Fucus Wrack Subsidies to Shoreline Invertebrate Assemblages in Southeast Alaska,"* Alaska Marine Science Symposium. (2024)

FD Gerraty. *"Anthropogenic Impacts on Mangrove Crab Diversity, Relative Abundance, and Zonation,"* Whitman Undergraduate Conference. (2019)

FD Gerraty. *"MPA Efficacy and Anthropogenic Impacts on Mangrove Ecosystems in Bocas del Toro,"* School for Field Studies Symposium. (2017)

FD Gerraty. *"Sea Level Rise Driven Zonation Shifts in Rocky Intertidal Invertebrates,"* American Geophysical Union Fall Meeting. (2014)

Co-authored Presentations and Posters

E Ickin, et al. (including **FD Gerraty**).*"Six decades of monitoring provide critical context for an avian influenza outbreak in marine mammals,"* Ecological Society of America. (2026)

H Coletti, et al. (including **FD Gerraty**).*"Where the land meets the sea: Linkages between nearshore and terrestrial ecosystems,"* Alaska Marine Science Symposium. (2024)

A Gobei-Bacaylan*, **FD Gerraty**.*"Temporal Dynamics of Coastal Vertebrate Scavenging Activity on California Beaches,"* Western Society of Naturalists. (2023)

A Gobei-Bacaylan*, **FD Gerraty**.*"Coastal Connections: Assessing Vertebrate Scavenger Assemblages Across an Urbanization Gradient,"* UCSC Koret Research Slam. (2023)

D Wright, EA Beever, J Stewart, **FD Gerraty**, T Rickman, and AB Smith.*"An Impassable Gap Dividing Pika Distribution in Northern California,"* North American Pika Consortium. (2023)

EA Beever, ML Westover, **FD Gerraty**, P Billman, F Smith, AB Smith. *"Drought and Climate Impact on American Pika in New Mexico,"* Pajarito Environmental Education Center. (2022)

D Wright, EA Beever, J Stewart, A Gill, **FD Gerraty**, M Robinson, J Fitzgerald, T Rickman, K Klingler, and AB Smith.*"An Impassable Gap Dividing Pika Distribution in Northern California,"* California Department of Fish and Wildlife Science Symposium. (2022)

Panels

FD Gerraty.*"Careers in Science,"* UC Santa Cruz Field Biology in Practice. (2025, 2026 *x2*)

FD Gerraty.*"Preparing a Competitive Fellowship Application,"* UC Santa Cruz PBSci. (2024)

FD Gerraty.*"Pathways to Graduate School,"* Younger Lagoon Reserve. (2024)

FD Gerraty.*"The Role of Citizen Science in Intertidal Ecological Research,"* Citizen Science Conference. (2015)

SELECTED MEDIA COVERAGE

SFGate. *"New footage shows unexpected culprit decapitating baby seals in Bay Area"* (2025)

UCSC News. *"New study documents California coyotes eating harbor seal pups"* (2025)

CBS News Bay Area. *"Northern California coyotes are hunting harbor seals. Here's why"* (2025)

The Mercury News. *"How a series of gruesome seal deaths on the California coast led researchers to a surprise predator"* (2023)

Los Angeles Times. *"California seal pups were turning up headless. Experts finally confirmed the culprit"* (2023)

SFGate. *"An unexpected culprit is decapitating baby seals along the California coast"* (2023)

TEACHING

Courses

Field Biology in Practice (Teaching Assistant) *2025*

Biology of Large Marine Vertebrates (Teaching Assistant) *2024*

Guest Lectures

UC Santa Cruz Marine Ecology Field Quarter *2025*
Branson High School Marine Ecology (x2) *2023*
UC Santa Cruz Marine Ecology Field Quarter *2023*
Scotts Valley High School Marine Biology (x2) *2022*

NON-ACADEMIC EMPLOYMENT

Podcast Host *2022-Present*
Central Coast Naturalist

Freelance Writer *2020-Present*
Written work appeared in Loam: Living through Liminality, The New Farmers Almanac, The Center for Humans and Nature, The Urban Field Naturalist Project, Mangoprism, others.

Blog Manager *2020-2021*
Free Radicals (Science and Justice Activist Collective)

Grant Writer and Executive Assistant *2020-2021*
National Marine Sanctuary Foundation

MENTORSHIP **Manuscript Coauthor, †Koret Scholarship*

Undergraduate Mentorship

Remie Nguyen, Daniel Hohl, Selah Hyson *2025-Present*
Gabriel Gott*, Megan Ireland, AK Manivannan *2024-Present*
Skylar Sidensol-Denero
Theresa Burgos, Valeria Cuevas *2024-2025*
Ashley Rogers, Hannah Cassidy, Karla Vaca *2023-2024*
Mia Laskan, Isabella Turner, Georgina Stewart *2023*
Ann Gobei-Bacaylan* †, Kaia Diel*, Skyler Williams* *2022-2024*
Grace Suh, Zoe Reiss *2022-2023*

Graduate Mentorship

UCSC EEB Peer-to-Peer Mentor *2022-2025*

LEADERSHIP AND SERVICE

Service

Manuscript Peer Reviewer: Ecology, Oikos, Ecology and Evolution, Food Webs *2025-Present*
Grant Reviewer: UCSC Koret Scholarship *2022*
UCSC Marine Ecology Faculty Hire Sub-Committee *2025*
Science Fair Judge: Westlake Elementary School *2021*

Working Groups

NCEAS / TNC Coastal Consumers Working Group *2023-2024*

Permits Authored

California Department of Fish and Wildlife (PI: Gerraty, # GW-222860005-22292-001) *2025-2026*
National Park Service (Point Reyes NS) (PI: Gerraty, # PORE-2022-SCI-0032) *2022-Present*
National Park Service (Point Reyes NS) Wilderness MRA (PI: Gerraty) *2025-2027*
San Mateo County Parks (Fitzgerald Marine Reserve)(PI: Gerraty) *2024*
California State Parks (Mendocino County)(PI: Gerraty, Raimondi) *2023, 2024, 2025, 2026*

California State Parks (Santa Cruz County)(PI: Gerraty, Raimondi) *2023*
Alaska Department of Fish and Game (PI: Gerraty, # CF-22-101) *2022*
National Park Service (Sitka NHP) (PI: Gerraty, # SITK-2022-SCI-0007) *2022*

SKILLS AND CERTIFICATIONS

- AAUS Scientific Diver (Moss Landing Marine Labs); NAUI Master, Rescue, Nitrox, Advanced Open Water; PADI Open Water Diver [50+ SCUBA dives, subtidal research and surveying (kelp forest, coral reef, seagrass bed, mangrove forest)]
- NOLS Wilderness First Responder, Red Cross Lifeguard, DAN FAPro
- Camera trapping, eDNA
- Programming: R, Git/Github
- Mapping: R, QGIS, ArcGIS, Google Earth Pro, CalTopo
- Remote Sensing: Onset HOBO and HOBOware, Maxim iButton sensors
- English (fluent), Spanish (intermediate)