

**Rachel Dacks**  
**College of Tropical Agriculture and Human Resources**  
**Department of Natural Resources and Environmental Management**  
FTE Distribution: 50% I; 50% R

**Education**

| <u>Degree</u> | <u>University</u>              | <u>Major</u>                              |
|---------------|--------------------------------|-------------------------------------------|
| PhD           | University of Hawai‘i at Mānoa | Zoology, specialization in marine biology |
| MS            | University of Hawai‘i at Mānoa | Zoology                                   |
| BA            | Boston University              | Biology, specialization in marine science |

**Professional Appointments**

| <u>Title</u>                  | <u>Employer</u>       | <u>Dates Employed</u> |
|-------------------------------|-----------------------|-----------------------|
| Assistant Professor           | University of Hawai‘i | 2024-present          |
| Assistant Researcher          | University of Hawai‘i | 2022-2023             |
| Post-Doctoral Research Fellow | University of Hawai‘i | 2019-2021             |

**Courses Taught**

| <u>Course ID and name (credits)</u> |                                                                            |
|-------------------------------------|----------------------------------------------------------------------------|
| NREM 491                            | Indigenous and Local Knowledge Systems and Natural Resource Management (3) |
| NREM 691                            | Qualitative and Participatory Methods for Natural Resource Management (3)  |
| MBIO 600                            | Kūlana Noi‘i: Introduction to Place-Based Methodologies in Hawai‘i (2)     |
| NREM 668                            | People and the Sea: Exploring Multiple Perspectives for Marine Systems (3) |
| BIOL 101                            | Biology and Society (3)                                                    |
| BIOL 101L                           | Biology and Society Laboratory (1)                                         |
| BIOL 301L                           | Marine Ecology and Evolution Lab (2)                                       |
| ZOOL 101L                           | Principles of Zoology Laboratory (1)                                       |

**Publications (reverse chronological order)**

Refereed Journal Publications

**Dacks, R.**, Yadav, S., and Mayer, A. 2025. “Emerging human dimensions research in coastal and nearshore Oceania.” *Conservation Biology* 39: e14455. <https://doi.org/10.1111/cobi.14455>

Campbell, L.K., Svendsen, E.S., Johnson, M.L., Piland, N.C., Locke, D.H., Sonti, N.F., Grove, J.M., Romolini, M., McMillen, H.L., **Dacks, R.**, ... and Flores, B. 2024. “Reflecting on Local Ecological Stewardship, Care, and Action across Two Decades of Research.” *Cities and the Environment* 17, no. 2 (November): 3. <https://doi.org/10.15365/cate.2024.170203>

Shaw, K.R., Whitney, J.L., Nalley, E.M., Schmidbauer, M.C., Donahue, M.J., Black, J., Corniuk, R.N., Teague, K., Sandquist, R., Pirkle, C., **Dacks, R.**, Sudnovsky, M., and Lynch, J.M. 2024. “Microplastics absent from reef fish in the Marshall Islands: Multistage screening methods reduced false positives.” *Marine Pollution Bulletin* 198, 115820. <https://doi.org/10.1016/j.marpolbul.2023.115820>

Nalley, E.M., C. Pirkle, M.C. Schmidbauer, C.L. Lewis, **R. Dacks**, M.D. Thompson, J.L. Whitney, and M.J. Donahue 2023. “An assessment of the risks associated with measured contaminant concentrations in reef and pelagic fishes from the Republic of the Marshall Islands.” *Chemosphere* 314, 137593. <https://doi.org/10.1016/j.chemosphere.2022.137593>

- McGuigan, A., Ticktin, T., Tora, M., Tikonavuli, V., Quazi, S. A., and **Dacks, R.** 2022. "Post-cyclone resilience of an agroforest-based food system in the Pacific Islands." *Regional Environmental Change* 22, no. 2 (April): 1-15. <https://doi.org/10.1007/s10113-022-01916-0>
- Dacks R.**, McMillen H, Heimuli P, Kahaleua K, Burgess S, Giardina CP, Francisco K, and Ticktin T. 2021. "The Important Role of Environmental Stewardship Groups in Supporting Human Health and Well-Being." *Frontiers in Sustainable Cities* 3 (2021): 710355. <https://doi.org/10.3389/frsc.2021.710355>
- Yadav, S., Fisam, A., **Dacks, R.**, Madin, J. S., and Mawyer, A. 2021. "Shifting fish consumption preferences can impact coral reef resilience in the Maldives: a case study." *Marine Policy* 134 (2021): 104773. <https://doi.org/10.1016/j.marpol.2021.104773>
- Dacks, R.**, Ticktin, T., Jupiter, S. D., and Friedlander, A. M. 2020. "Investigating the role of fish and fishing in sharing networks to build resilience in coral reef social-ecological systems." *Coastal Management* 48, no. 3 (May): 165–187. <https://doi.org/10.1080/08920753.2020.1747911>
- Sterling, E.J., P. Pascua, A. Sigouin, N. Gazit, L. Mandle, E. Betley, J. Aini, S. Albert, S. Caillon, J.E. Caselle, S.H. Cheng, J. Claudet, **R. Dacks**, ... and J. McCarter. 2020. "Creating a space for place and multidimensional well-being: lessons learned from localizing the SDGs." *Sustainability Science* 15, (2020): 1129-47. <https://doi.org/10.1007/s11625-020-00822-w>
- Lewis, S. A., Fezzi, C., **Dacks, R.**, Ferrini, S., James, P. A., Marino, L., ... and Oleson, K. L. 2020. "Conservation policies informed by food system feedbacks can avoid unintended consequences." *Nature Food* 1, no. 12, (December): 783-6. <https://doi.org/10.1038/s43016-020-00192-7>
- Dacks, R.**, Lewis, S. A., James, P., Marino, L. L., and Oleson, K. 2020. "Documenting baseline value chains of Palau's nearshore and offshore fisheries prior to implementing a large-scale marine protected area." *Marine Policy* 117 (2020): 103754. <https://doi.org/10.1016/j.marpol.2019.103754>
- Dacks, R.**, Ticktin, T., Mawyer, A., Caillon, S., Claudet, J., Fabre, P., ... and Wongbusarakum, S. 2019. "Developing biocultural indicators for resource management." *Conservation Science and Practice* 1, no. 6 (March): e38. <https://doi.org/10.1111/csp2.38>
- Dacks, R.**, Ticktin, T., Jupiter, S. D., and Friedlander, A. 2018. "Drivers of fishing at the household scale in Fiji." *Ecology and Society* 23, no. 1 (March). <https://doi.org/10.5751/ES-09989-230137>
- Delevaux, J. M. S., Jupiter, S. D., Stamoulis, K. A., Bremer, L. L., Wenger, A. S., **Dacks, R.**, ... and Ticktin, T. 2018. "Scenario planning with linked land-sea models inform where forest conservation actions will promote coral reef resilience." *Scientific Reports* 8, no. 1 (August): 12465. <https://doi.org/10.1038/s41598-018-29951-0>
- Ticktin, T., Quazi, S., Dacks, R., Tora, M., McGuigan, A., Hastings, Z., & Naikatini, A. 2018. "Linkages between measures of biodiversity and community resilience in Pacific Island agroforests." *Conservation Biology*, 32 no. 5: 1085–1095. <https://doi.org/10.1111/cobi.13152>
- Sterling, E. J., Filardi, C., Toomey, A., Sigouin, A., Betley, E., Gazit, N., Newell, J., Albert, S., Alvira, D., Bergamini, N., Blair, M., Boseto, D., Burrows, K., Bynum, N., Caillon, S., Caselle, J. E., Claudet, J., Cullman, G., **Dacks, R.**, ... and Jupiter, S. D. 2017. "Biocultural approaches to well-being and sustainability indicators across scales." *Nature Ecology & Evolution* 1, no. 12 (December): 1798–806. <https://doi.org/10.1038/s41559-017-0349-6>
- Sterling, E., Ticktin, T., Morgan, T. K. K., Cullman, G., Alvira, D., Andrade, P., Bergamini, N., Betley, E., Burrows, K., Caillon, S., Claudet, J., **Dacks, R.**, ... and Wali, A. 2017. "Culturally grounded indicators of resilience in social-ecological systems." *Environment and Society*, 8, no. 1 (September): 63–95. <https://doi.org/10.3167/ares.2017.080104>

Mora, C., Frazier, A. G., Longman, R. J., **Dacks, R.**, Walton, M. M., Tong, E. J., ... Giambelluca, T. W. 2014. "Mora *et al.* reply." *Nature* 511, E5-E6. <https://doi.org/10.1038/nature13524>

Mora, C., Frazier, A. G., Longman, R. J., **Dacks, R.**, Walton, M. M., Tong, E. J., ... Giambelluca, T. W. 2014. "The projected timing of climate departure from recent variability." *Nature* 502, no. 7470 (October), 183-7. <https://doi.org/10.1038/nature12540>

#### Creative Works (ex. Extension Videos, Websites, Blogs, Creative Designs and Exhibitions, etc.)

**Dacks, R.**, Yadav, S. 2024. Biocultural Approaches to Indicator Development: A Guidance Document.

**Dacks, R.**, Yadav, S., Innes-Gold, A. 2024. Communicating Biocultural Indicators of Wellbeing: A Visual Tool.

Pascua, P., Winter, K. B., Schloemer, J., Sterling, E.J., Rii, Y., Reppun, F., Harrauld, I., **Dacks, R.**, Ching, C., Bentz, S., Argueta, J. 2022. Methods Pilot Summary: Cultural Ecosystem Services in Estuary Stewardship and Management.

Sterling, E. J., Pascua, P., Sigouin, A., Gazit, N., Betley, E., **Dacks, R.**, Bentz, S., Argueta, J., Walker, C., Reppun, F., Rii, Y., Winter, K. 2022. Expanding and Deepening the Application of Cultural Ecosystem Services in Estuary Stewardship and Management: Relevance to the National Estuarine Research Reserve System.

Grandinetti, J., **Dacks, R.**, Francisco, K., Giardina, C., McMillen, H., Ohara, R., Parsons, E. 2021. STEW- MAP Hawai'i Island: Survey Results of the Stewardship Mapping and Assessment Project 2017. Honolulu, HI.

**Dacks, R.**, McMillen, H. and Kahaleua, K. 2021. STEW-MAP O'ahu: Survey Results of the Stewardship Mapping and Assessment Project 2019. Honolulu, HI.

Oleson, K., **Dacks, R.**, Lewis, S., Ferrini, S., Fezzi, C., & James, P. 2019. Palau National Marine Sanctuary– Socioeconomic Baseline Project (No. 19-07). PICRC Technical Report.

#### Leadership Roles (Committees, Boards, Advisory, etc.)

Member. Spring 2024-present. NREM Graduate Committee

Member. Spring 2024-present. NREM Hau'oli Mau Loa Fellowship Committee

Member. 2024-present. Hawai'i Conservation Conference Planning Committee

Mentor. 2024-present. NSF Scholarships to Support Students at Hawaiian and Pacific Island Institutions of Higher Education

Key Advisor. (2022-present). Hawaii Division of Aquatic Resources Holomua: Marine 30x30 Initiative.

Search Committee. Fall 2024-Spring 2025. Assistant Professor in Coastal Fisheries Management and Policy

Search Committee. Spring 2024. Assistant Professor of Coastal and Ocean Governance

Search Committee. Spring 2024. Indigenous Stewardship Specialist Faculty

Member. 2023-2024. NREM Ad Hoc Committee on Social Science Curriculum

Secretary. 2013-2014. Graduate Women in Science Alpha Lambda Omega Chapter

## Graduate Students

| <u>Category</u>             | <u>Current Number of Students</u> | <u>Number Graduated (Career)</u> |
|-----------------------------|-----------------------------------|----------------------------------|
| Chair of Master Committees  | 3                                 |                                  |
| Chair of PhD Committees     | 2                                 |                                  |
| Member of Master Committees | 5                                 |                                  |
| Member of PhD Committees    | 3                                 |                                  |

## Grant Support

Title of Grant: National Estuarine Research Reserve System Science Collaborative  
Source of Grant: University of Michigan  
Total Dollar Value: \$99,011  
Dates of Grant: 2022-2025  
Role: PI

Title of Grant: Nia Tero Foundation: Biocultural Monitoring Systems  
Source of Grant: Nia Tero Foundation  
Total Dollar Value: \$167,500  
Dates of Grant: 2022-2024  
Role: PI

Title of Grant: Building capacity for aina stewardship in He'eia NERR through multiple ways of knowing  
Source of Grant: University of Michigan  
Total Dollar Value: \$9,998  
Dates of Grant: 2023-2024  
Role: Co-PI

## Presentations at Conferences

Dacks R., Bentz, S., Boucher, O., Brunacini, J., Ching, C., Eguiarte, A., Feurt, C., Goodrich, K., Harrald, I., Holliday, E., Ranelli, L., Rii, S., Sato, A., Sutton, L. 2024. Assessing human relationships with estuaries: how we're doing it, what we're learning, and why it's important. *National Estuarine Research Reserve System Annual Meeting*, Oct. 21-24, Wells, ME.

Dacks R, Yadav, S., Mawyer, A.. 2024. Emerging Human Dimensions Research in Coastal and Nearshore Oceania: A Systematic Mapping Review. *American Fisheries Society Annual Meeting*, Sept. 16-19, Honolulu, HI.

Dacks R, Boucher, O., Ching, C., Reppun, F., Rii, F., Sato, A. 2024. Beyond acres and hours: how do volunteers value participation in biocultural restoration? *American Association of Geographers Annual Meeting*, April 16-19, Honolulu, HI.

Dacks R, Argueta, J., Bentz, S., Ching, C., Feurt, C., Goodrich, K., Harrald, I., Holliday, E., Rii, S., Spitzer, M. 2023. Are We Doing it Already? Celebrating Cultural Ecosystem Services in Existing NERR Activities & Building our Community of Practice. *National Estuarine Research Reserve Annual Meeting*, Nov. 13-16, Galloway, NJ.

Dacks R, Pirkle CM, Nalley EM, Sudnovsky MD, Donahue MJ. 2022. A Gap-Analysis of Fish Consumption in the Republic of the Marshall Islands. *Ocean Sciences Meeting*, Feb. 24- March 4, Virtual.

Dacks R, McMillen, H. Heimuli, P., Burgess, S., Kahaleua, K. 2021. Environmental Stewardship Groups and the Important Role They Play in Supporting Our Human Communities. *Hawaii Conservation Conference*, July 27-29, Virtual.

Dacks R, McMillen, H., Kahaleua, K., Giardina, C., Ticktin, T. 2020. Assessing Social Networks to Better Manage for Abundance. *Hawaii Conservation Conference*, Aug. 31-Sept., Virtual.

Dacks R, McMillen, H., Kahaleua, K., Giardina, C., Ticktin, T. 2019. Biocultural indicators to inform conservation and human wellbeing. 29th International Congress for Conservation Biology, July 21-25, Kuala Lumpur, Malaysia.

Dacks R, McMillen, H., Kahaleua, K., Giardina, C., Ticktin, T. 2019. Creating innovative tools to support the community of stewards who care for our lands and waters. *Hawaii Conservation Conference*, July 9-11, Honolulu, HI.

Dacks R, Ticktin, T., Jupiter, S. 2018. Resource sharing networks and implications for wellbeing in Fijian coastal communities. *7th International Conference on Environmental Future*, April 16-20, Honolulu, HI.

Dacks R, Sterling, E., Jupiter, S., Mejia, M., Ticktin, T. 2017. Exploring biocultural connections in the Pacific to better monitor the resilience of social and ecological communities. *Hawaii Conservation Conference*, July 18-20, Honolulu, HI.

Dacks R, Oleson, K., Lewis, S. 2017. Potential socioeconomic impacts of the Palau National Marine Sanctuary. *Tester Symposium*, April 26-28, Honolulu, HI.

Sterling, E., Jupiter, S., Mejia, M., Ticktin, T., Dacks, R., McCarter, J., Pascua, P. 2016. Biocultural indicators from a Pacific Perspective. *World Conservation Congress (IUCN)*, Sept. 1-10, Honolulu, HI.

Dacks R, Jupiter, S., Ticktin, T., Hunter, C., Friedlander, A. 2016. Investigating social drivers of fishing and market influences on increasingly exploited small-scale coral reef fisheries. *International Coral Reef Symposium*, July 19-24, Honolulu, HI.

Dacks R, Ticktin, T., Jupiter, S., Friedlander, A., Hunter, C. 2016. Of Markets and Middlemen: Investigating Drivers of Decline in Increasingly Exploited Small-scale Coral Reef Fisheries. *Tester Symposium*, April 6-18, Honolulu, HI.

Dacks R, Ticktin, T., Jupiter, S., Quazi, S. 2015. Investigating biocultural drivers of resilience in social-ecological systems. *Hawaii Conservation Conference*, August 4, 2015, Hilo, HI.

Dacks R, Ticktin, T., Jupiter, S., Quazi, S. 2015. Investigating social drivers of ecological resilience in Fijian coral reef systems. *Association for Tropical Biology and Conservation Conference*, July 14, 2015, Honolulu, HI.

Dacks R., 2015. Investigating social drivers of ecological resilience in Fijian coral reef systems. *Tester Symposium*, April 8-10, 2015, Honolulu, HI.

Dacks R, Ticktin, T. 2015. Understanding the links between local ecological knowledge, ecosystem services, and community resilience. *Coastal SEES PI Meeting, National Science Foundation*, January 29, 2015, Arlington, VA.

Dacks R, Ticktin, T., Jupiter, S., Friedlander, A. 2014. Characterizing market influences on fishing and implications for resilience in coral reef social-ecological systems in Fiji. *Society for Conservation Biology Oceania Chapter Meeting*, July 10-12, Suva, Fiji.

Dacks R, Deemer, B., Kennedy, F., Massaua, M., Polgar, C., Kennedy, R.S. 2007. Biodiversity Surveys of Nantucket and Madaket Harbors— Incorporating Educational Programming with Field Research. *Nantucket Biodiversity Initiative Conference*, January Sept. 22, Nantucket, MA.