

KELSEY C. BROCK

University of Wyoming – Plant Sciences Department
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EDUCATION

- 2021 Ph.D. Botany. School of Life Sciences. University of Hawai‘i–Mānoa.
2014 M.S. Plant Biology. Department of Biological Sciences. University of Alberta.
2010 B.S. Conservation Biology. University of Alberta.

PROFESSIONAL EMPLOYMENT

- 2022–Current Asst Professor. University of Wyoming. Plant Sciences Department, Laramie, WY.
2019–2021 Research Specialist. Bishop Museum. Department of Botany, Honolulu, HI.
2015–2018 Early Detection Botanist. Kaua‘i Invasive Species Committee, Pacific Cooperative Studies Unit. Research Corp. of the University of Hawai‘i. Kapa‘a, HI.
2013–2015 Plant Ecology Consultant. Golder Associates. Edmonton, Alberta.

PUBLICATIONS

Refereed Journal Articles

*Indicates mentored undergraduate.

Brock KC, Tangalin NT, Lorence DL, Flynn TW, Deans SM (*submitted*) New Plant Naturalization Records for Kaua‘i. *Bishop Museum Occasional Papers*.

Brock KC, Daehler CC (2021) Plant naturalization trends reflect socio-economic history and show a high likelihood of inter-island spread in Hawai‘i. *Invasive Plant Science and Management*. <https://doi.org/10.1017/inp.2021.18>

Brock KC, Daehler CC (2020) Applying an invasion and risk framework to track non-native island floras: a case study of challenges and solutions in Hawai‘i. *NeoBiota* 62: 55–79. <https://doi.org/10.3897/neobiota.62.52764>

Brock KC, Daehler CC, Imada CT, Kennedy BH, Flynn TW (2020) Recommendations for reporting records of nonnative plant species in the Hawaiian Islands. *Bishop Museum Occasional Papers* 128: 109–124. <http://hbs.bishopmuseum.org/pubs-online/pdf/op129p109-124.pdf>

Bernard J, **Brock KC**, Tonnell V, Walsh SK, Wenger JP, Wolkis D, Weiblen GD (2020) New species assemblages disrupt obligatory mutualisms between figs and their pollinators. *Frontiers in Ecology and Evolution* 8: 564653. <https://doi.org/10.3389/fevo.2020.564653>

Steinbach RS*, **Brock KC**, Daehler CC (2020) New island record for *Ochna serrulata* on O‘ahu (Ochnaceae). *Bishop Museum Occasional Papers* 137: 3–5. <http://hbs.bishopmuseum.org/pubs-online/pdf/op137p3-5.pdf>

Brock KC, Hall JC (2019) Multiple lineages of *FRUITFULL* exhibit dynamic patterns of gene evolution after genome triplication in the Brassiceae tribe (Brassicaceae). *Botany* 97: 293–310. <https://doi.org/10.1139/cjb-2018-0193>

Book Chapters

Brock KC, Daehler CC (2022) Island Plant Invasions. In: *Global Plant Invasions*, Eds. Clements DR, Joshi S, Upadhyaya M, and Shrestha A. Springer Nature, Basingstoke, UK. pp 253–278. doi: 10.1007/978-3-030-89684-3_12

Technical Reports

Brock KC, Javier C (2018) A summary of developments, findings and prioritization of plant species for control on Kaua'i from 2015 to 2017. Prepared for the Kaua'i Invasive Species Committee, University of Hawai'i–Mānoa. Kapa'a, Hawai'i. www.kauaiisc.org/kisc-plant-early-detection-program.

AWARDS AND HONORS

2021	Torrey–Degener–Rock Scholarship in Botany. University of Hawai'i–Mānoa.	\$1,650
2021	Harold and Elizabeth St. John Scholarship. University of Hawai'i–Mānoa.	\$750
2019	Charles H. Lamoureaux Scholarship in Botany. University of Hawai'i–Mānoa.	\$300
2018	Kaua'i's "Most Valuable Person" in Invasive Species Management. Hawai'i State Legislature.	
2012	Queen Elizabeth II Graduate Student Scholarship. University of Alberta.	\$10,000

GRANTS

2020	Pacific Islands Climate Adaptation Science Center (co-writer).	\$204,000
2020	Hawai'i Invasive Species Council (lead writer).	\$32,000
2019	Hawai'i Invasive Species Council (lead writer).	\$34,000
2018	Hawai'i Invasive Species Council (lead writer).	\$32,000

PRESENTATIONS

Invited Talks

2022 "When Climate Change and Invasive Species Intersect: identifying fire-promoting invasive plants and their potential to impact natural and cultural resources" Pacific Island Regional Invasive Species Climate Change Webinar Series. Honolulu, HI, March 22.

2019 "The Hawai'i Alien Plant Informatics project: informing management with interconnected data." Brown Bag Seminar. Hawai'i Department of Land & Natural Resources. Honolulu, HI. Oct 2.

Conference Talks

2022 "Time lags in biodiversity data processing create the illusion of an invasion slow-down". Digital Data Conference. Online. May 23-25.

2021 "Plant naturalization trends reflect socio-economic history and show a high likelihood of inter-island spread". Hawai'i Conservation Congress. Honolulu, HI. July 27–29.

2018 "Weighing potential impacts against control feasibility to prioritize invasive plants for eradication." Hawai'i Conservation Congress. Honolulu, HI. July 24–26.

2017 "The bedrocks of botany: using herbaria to inform early detection and prioritization of invasive plants in Hawai'i." Hawai'i Conservation Congress. Honolulu, HI. July 18–20.

Campus/Departmental Talks

2021 "The role of natural history collections in finding biosecurity solutions." Pau Hana Seminar Series. Bishop Museum, Honolulu, HI. January 8.

2011 "The origins of variable fruit morphology in the Brassicaceae." Richard E. Peter Symposium. University of Alberta, Edmonton. March 1.

Conference Posters

2015 "Towards eradication of *Miconia calvescens* from Kaua'i: a history of detection and control efforts from the past 14 years." International Conference on the Ecology and Management of Alien Plant Invasions. Waikōloa, HI. Sept. 20–24.

OUTREACH

- 2016 IUCN World Conservation Congress. Sept. 10. Invasive species information booth.
 2015–2017 Annual Kauai Farm Fair. Invasive species information booth.
 2015–2017 Annual Banana Poka Roundup Festival. Invasive species information booth.
 2011–2015 Annual Science Sunday. University of Alberta Herbarium.

MEDIA COVERAGE

- 2021 Bernard J. “Figs show that nonnative species can invade ecosystems by forming unexpected partnerships.” *The Conversation*. Waltham, MA. <https://theconversation.com/figs-show-that-nonnative-species-can-invade-ecosystems-by-forming-unexpected-partnerships-151655>
 2021 Bernard J. “Figs, wasps, and fidelity”. *The Bulletin of the National Tropical Botanical Garden*. Kalāheo, HI. <https://ntbg.org/bulletin/>
 2017 Pap R. “Early detection is key to keeping Kaua’i’s streams healthy”. For Kauai Online. Lihue, HI. <https://www.forkauaionline.com/early-detection-key-keeping-kauais-streams-healthy/>

SCIENCE COMMUNICATION

- 2019 STEM fiction contest. **Brock KC** “The Sky Window”. In: *Stories of the Nature of Cities*. Eds. Maddox D, Walker C, Lovejoy M. Publication Studios. Guelph, ON.

TEACHING AND MENTORSHIP

- 2021 Native Hawaiian Education Program. July 12, 2021. “Solving Hawai’i’s Invasive Plant Problems with Science”. Bishop Museum, Honolulu, HI.
 2020-2021 Plant Identification Workshop. June 29–30, 2020, and June 24-25, 2021 Bishop Museum, Honolulu, HI.
 2020 Ronja Steinbach, Climate Change Intern, June–October 2020, University of Hawai’i.
 2019 Freshman Seminar. Nov. 19. (Guest Lecture “Plant Invasions”). University of Hawai’i.
 2016–2017 Natural Resource Management. Oct. 25, 2016 & Feb. 27, 2017 (Guest Lecture “Managing Invasive Species”). Kauai High School.
 2011–2013 Flowering Plant Systematics, Teaching Assistant, University of Alberta.
 2010–2012 Fundamentals of Plant Biology, Teaching Assistant, University of Alberta.
 2011–2012 Introduction to Biological Diversity, Teaching Assistant, University of Alberta.

SERVICE

- 2020–2021 Hawai’i Noxious Weed Working Group, Honolulu, HI.
 2018–2021 Kaua’i Invasive Species Committee Technical Advisor, Kapa’a, HI.
 2019–present Peer Review: *Pacific Science*, *PeerJ*.
 2018–2019 Graduate Student Representative, Botany Department, University of Hawai’i.

SKILLS

Diagnostic plant identification.

Programming Languages: R, python, HTML, JavaScript.

PROFESSIONAL AFFILIATIONS

2017–present Research Associate, National Tropical Botanical Garden, Kalāheo, HI.

Society Memberships: Western Society of Weed Science, Ecological Society of America, Botanical Society of America, American Society for Plant Taxonomists.