GOV. MSG. NO. **839** 

## **CURRICULUM VITAE**

18 May 2020

### **Donald R. Drake**

## **Education:**

Ph.D., Botany, University of Hawai'i,

M.S., Botany, Ohio University,

B.S. summa cum laude, Biology, Florida Institute of Technology,

## **Positions held:**

- 2020-present: Associate Director, School of Life Sciences, University of Hawai'i at Mānoa.
- 2019-present: Professor, School of Life Sciences, University of Hawai'i at Mānoa.

2012-2015: Associate Chair, Botany Dept., University of Hawai'i at Mānoa.

- 2002-2019: Professor (2013-2019), Associate Professor (2005-2013), Assistant Professor (2002-2005), Botany Dept., University of Hawai'i at Mānoa.
- 1996-2001: Senior Lecturer (2001), Lecturer (1996-2000), School of Biological Sciences, Victoria University of Wellington.
- 1993-1996: Assistant Professor, Biology Dept., Georgia Southern University.
- 1989-1993: Graduate Scholar, Program on Environment, East-West Center
- 1987-1989: Teaching Assistant, Botany Dept., University of Hawai'i at Mānoa.

1985-1987: Teaching Assistant, Botany Dept., Ohio University.

- 1984: Counsellor, Eckerd Foundation Wilderness Camp, Lowgap, NC.
- 1981-1983: Head of Science Department, Kolisi Mailefihi-Siu'ilikutapu (high school), Neiafu, Vava'u, Tonga, (U. S. Peace Corps).

### Academic honors and awards:

Gerrit Parmile Wilder Endowed Chair, Botany Dept., University of Hawai'i at Mānoa, 2018 National Academies Education Fellow in the Life Sciences, 2013-2014 Senior Scholar in Biology, Florida Institute of Technology, 1980-81 The Outstanding Senior in Biology, Florida Institute of Technology, 1980-81 The Outstanding Junior in Biology, Florida Institute of Technology, 1979-80 The Outstanding Sophomore in Biology, Florida Institute of Technology, 1978-79

#### Papers in refereed journals:

- Drake, D. R., K. A. Postelli, S. M. Plentovich, and J. Jeffrey. *In preparation*. Patterns of visitation at lobeliad flowers by nectar-feeding birds in Hawaiian montane forest.
- Drake, D. R., and K. R. McConkey. *In preparation*. Novel diplochory: native bats and alien rats combine to disperse seeds of a tropical tree. Journal of Tropical Ecology.
- Sperry, J. H., D. J. O'Hearn, A. M. Hruska, S. Case, C. Arnett, T. Chambers, C. E. Tarwater, and D. R. Drake. *In preparation*. Fruit and seed traits of native and non-native plant species in Hawai'i: implications for seed dispersal by non-native birds. Biological Invasions.
- Carpenter, J. K., J. M. Wilmshurst, K. R. McConkey, J. P. Hume, D. M. Wotton, A. B. Shiels, O. R. Burge, and D. R. Drake. *In review*. The forgotten fauna: native vertebrate seed predators on islands. Functional Ecology.
- Gleditsch, J. M., J. P. Kelley, D. R. Drake, J. T. Foster, A. M. Hruska, C. E. Tarwater, R. C. Wilcox, & J. H. Sperry. *In review*. Drivers of avian diversity and habitat relationships of novel bird communities in Hawaiian forests. Ecology.
- Muscarella, R., ... D. R. Drake, ... (65th of 221 authors). *In press*. Global variation of tree palm abundance. Global Ecology and Biogeography.
- Ainsworth, A., and D. R. Drake. 2020. Classifying plant species along a habitat generalistspecialist continuum: Implications for species conservation under climate change. PLOS ONE 15:e00228573.
- Vizentin-Bugoni, J., C. E. Tarwater, J. T. Foster, D. R. Drake, J. M. Gleditsch, A. M. Hruska, J. P. Kelley, and J. H. Sperry. 2019. Structure, spatial dynamics, and stability of novel seed dispersal mutualistic networks in Hawai'i. Science 364: 78-82.
- Shay, K., and D. R. Drake. 2018. Pollination biology of the Hawaiian coastal vine *Jacquemontia* sandwicensis (Convolvulaceae). Pacific Science 72: 485-499.
- Hays, B. R., J. Sperry, D. R. Drake, and A. M. Hruska. 2018. Husking stations provide insight into seed predation and possible dispersal by non-native rodents of O'ahu. Pacific Science 72: 335-344.
- Slik, F., ... D. R. Drake, ... (42nd of 187 authors). 2018. Phylogenetic classification of the world's tropical forests. Proceedings of the National Academy of Sciences of the USA 115: 1837-1842.
- Enoki, T., and D. R. Drake. 2017. Alteration of litter decomposition by the invasive tree *Psidium cattleianum* along a precipitation gradient on O'ahu Island, Hawai'i. Plant Ecology 218: 947-955.
- Shay, K., D. R. Drake, A. D. Taylor, H. F. Sahli, M. Euaparadorn, M. Akamine, J. Imamura, D. Powless, and P. Aldrich. 2016. Alien insects dominate the plant-pollinator network of a Hawaiian coastal ecosystem. Pacific Science 70: 409-429.
- Sahli, H. F., P. D. Krushelnycky, D. R. Drake, and A. D. Taylor. 2016. Patterns of floral visitation to native Hawaiian plants in the presence and absence of invasive Argentine ants. Pacific Science 70: 309-322.
- Wotton, D. M., D. R. Drake, R. G. Powlesland, and J. M. Ladley. 2016. The role of lizards as seed dispersers in New Zealand revisited. Journal of the Royal Society of New Zealand 46: 40-65.

- Traveset, A., J. M. Fernández-Palácios, C. Kueffer, P. Bellingham, C. Morden, and D. R. Drake. 2016. Advances in island plant biology since Sherwin Carlquist's Island Biology. AoB PLANTS 8: plv148; doi:10.1093/aobpla/plv148.
- McConkey, K. R., and D. R. Drake. 2015. No redundancy in the seed dispersal function of flying foxes on a Pacific Island. AoB PLANTS 7: plv088; doi:10.1093/aobpla/plv088.
- Shiels, A. B., and D. R. Drake. 2015. Barriers to seed and seedling survival of once-common Hawaiian palms: the role of invasive rats and ungulates. AoB PLANTS 7: plv057; doi:10.1093/aobpla/plv057.
- Fernández-Palácios, J. M., C. K. Kueffer, and D. R. Drake. 2015. A new golden era in island biology. Frontiers of Biogeography 7: 14-20.
- Kueffer, C. K., D. R. Drake, and J. M. Fernández-Palácios. 2014. Island Biology—looking toward the future. Biology Letters 10: 20140719.
- Franklin, J., G. Keppel, E. L. Webb, J. O. Seamon, S. J. Rey, D. W. Steadman, S. K. Wiser, and D. R. Drake. 2013. Dispersal limitation, speciation, environmental filtering and niche differentiation influence forest tree communities in West Polynesia. Journal of Biogeography 40: 988-999.
- Shiels, A. B., C. A. Flores, A. Khamsing, P. D. Krushelnycky, S. M. Mosher, and D. R. Drake. 2013. Dietary niche differentiation among three species of invasive rodents (*Rattus rattus, R. exulans, Mus musculus*). Biological Invasions 15: 1037-1048.
- Krushelnycky, P. D., L. L. Loope, T. W. Giambelluca, F. Starr, K. Starr, D. R. Drake, A. D. Taylor, and R. Robichaux. 2013. Climate associated population declines reverse recovery and threaten future of an iconic high-elevation plant. Global Change Biology 19: 911-922.
- Vitousek, P. M., and D. R. Drake. 2012. In appreciation of Professor Dieter Mueller-Dombois. Pacific Science 66: 117-118.
- Chimera, C. G., and D. R. Drake. 2011. Could poor seed dispersal contribute to predation by rodents in a Hawaiian dry forest? Biological Invasions 13: 1029-1042.
- Shiels, A. B., and D. R. Drake. 2011. Are introduced rats (*Rattus rattus*) both seed predators and dispersers in Hawaii? Biological Invasions 13: 883-894.
- Adkins, E., S. Cordell, and D. R. Drake. 2011. The role of fire in the germination ecology of fountain grass (*Pennisetum setaceum*), an invasive African bunchgrass in Hawaii. Pacific Science 65: 17-26.
- Chimera, C. G., and D. R. Drake. 2010. Effects of pulp removal on seed germination of five invasive plants in Hawaii. Plant Protection Quarterly 25: 137-140.
- Chimera, C. G., and D. R. Drake. 2010. Patterns of seed dispersal and dispersal failure in a Hawaiian dry forest having only introduced birds. Biotropica 42: 493-502.
- Drake, D. R., and T. L. Hunt. 2009. Invasive rodents on islands: integrating historical and contemporary ecology. Biological Invasions 11: 1483-1487.
- Perez, H. E., A. B. Shiels, H. M. Zaleski, and D. R. Drake. 2008. Germination after simulated rat damage in seeds of two endemic Hawaiian palm species. Journal of Tropical Ecology 24: 555-558.
- McConkey, K. R., and D. R. Drake. 2007. Indirect evidence that flying foxes track food resources among islands in a Pacific Archipelago. Biotropica 39: 436-440.
- Franklin, J., S. K. Wiser, D. R. Drake, L. E. Burrows, and W. R. Sykes. 2006. Environment, disturbance history and rain forest composition across the islands of Tonga, Western Polynesia. Journal of Vegetation Science 17: 233-244.

- McConkey, K. R., and D. R. Drake. 2006. Flying foxes cease to function as seed dispersers long before they become rare. Ecology 87: 271-276.
- Meehan, H. J., K. R. McConkey, and D. R. Drake. 2005. Early fate of *Myristica hypargyraea* seeds dispersed by *Ducula pacifica* in Tonga. Austral Ecology 30: 374-382.
- McConkey, K. R., H. J. Meehan, and D. R. Drake. 2004. Seed dispersal by Pacific Pigeons (*Ducula pacifica*) in Tonga, Western Polynesia. Emu 104: 369-376.
- McConkey, K. R., D. R. Drake, J. Franklin, and F. Tonga. 2004. Effects of Cyclone Waka on flying fox populations in Tonga. Journal of Tropical Ecology 20: 555-561.
- Franklin, J., D. R. Drake, K. McConkey, F. Tonga, and L. B. Smith. 2004. The effects of Tropical Cyclone Waka on the structure of lowland rain forest in Vava'u, Tonga. Journal of Tropical Ecology 20: 409-420.
- McAlpine, K. G., and D. R. Drake. 2003. The effects of small-scale environmental heterogeneity on seed germination in treefall gaps. Plant Ecology 165: 207-215.
- McConkey, K. R., D. R. Drake, H. J. Meehan, and N. Parsons. 2003. Husking stations provide evidence of seed predation by introduced rodents in Tongan rain forests. Biological Conservation 109: 221-225.
- Drake, D. R., C. P. H. Mulder, D. R. Towns, and C. H. Daugherty. 2002. The biology of insularity: an introduction. Journal of Biogeography 29: 563-569.
- Meehan, H. J., K. R. McConkey, and D. R. Drake. 2002. Potential disruptions to seed dispersal mutualisms in Tonga, Western Polynesia. Journal of Biogeography 29: 695-712.
- Wiser, S. K., D. R. Drake, L. E. Burrows, and W. R. Sykes. 2002. The potential for long-term persistence of forest fragments on a large island in western Polynesia. Journal of Biogeography 29: 767-787.
- Drake, D. R., and L. W. Pratt. 2001. Seedling mortality in Hawaiian rain forest: the role of smallscale physical disturbance. Biotropica 33: 319-323.
- Steadman, D. W, J. Franklin, D. R. Drake, H. B. Freifeld, L. A. Bolick, D. S. Smith, and T. J. Motley. 1999. Conservation status of forests and vertebrate communities in the Vava'u Island Group, Tonga. Pacific Conservation Biology 5: 191-207.
- Moles, A. T., and D. R. Drake. 1999. Post-dispersal seed predation on eleven large-seeded species from the New Zealand flora: a preliminary study in secondary forest. New Zealand Journal of Botany 37: 679-685.
- Ferguson, R., and D. R. Drake. 1999. Influence of vegetation structure on spatial patterns of birddispersed seeds. New Zealand Journal of Botany 37: 671-677.
- Franklin, J., D. R. Drake, L. A. Bolick, D. S. Smith, and T. J. Motley. 1999. Rain forest composition and patterns of secondary succession in the Vava'u Island Group, Kingdom of Tonga. Journal of Vegetation Science 10: 51-64.
- Moles, A. T., and D. R. Drake. 1999. Potential contributions of the seed rain and seed bank to regeneration of native forest beneath plantation pine. New Zealand Journal of Botany 37: 83-93.
- Drake, D. R. 1998. Relationships among the seed rain, seed bank, and vegetation of a Hawaiian forest. Journal of Vegetation Science. 9: 103-112.
- Kitayama, K., E. A. G. Schuur, D. R. Drake, and D. Mueller-Dombois. 1997. Fate of a wet montane forest during soil ageing. Journal of Ecology 85: 669-679.
- Orava, C., and D. R. Drake. 1997. Effects of salinity on germination and growth of *Solidago sempervirens* (L.). Castanea 62: 272-277.

- Drake, D. R., W. A. Whistler, T. J. Motley, and C. T. Imada. 1996. Rain forest vegetation of 'Eua Island, Tonga. New Zealand Journal of Botany 34: 65-77.
- Alpha, C. G., D. R. Drake, and G. Goldstein. 1996. Morphological and physiological responses of *Scaevola sericea* (Goodeniaceae) to salt spray and substrate salinity. American Journal of Botany 83: 86-92.
- Goldstein, G., D. R. Drake, C. G. Alpha, P. Melcher, J. Heraux, and A. Azocar. 1996. Growth and photosynthetic responses of *Scaevola sericea*, a Hawaiian coastal shrub, to substrate salinity and salt spray. International Journal of Plant Sciences 157: 171-179.
- Goldstein, G., D. R. Drake, P. Melcher, J. Heraux, and T. W. Giambelluca. 1996. Photosynthetic gas exchange and temperature-induced damage in seedlings of the tropical alpine species *Argyroxiphium sandwicense*. Oecologia 106: 298-307.
- Drake, D. R., and D. Mueller-Dombois. 1993. Population development of rain forest trees on a chronosequence of Hawaiian lava flows. Ecology 74: 1012-1019.
- Drake, D. R. 1993. Germination requirements of *Metrosideros polymorpha*, the dominant tree of Hawaiian lava flows and rain forests. Biotropica 25: 461-467.
- Drake, D. R. 1992. Seed dispersal of *Metrosideros polymorpha* (Myrtaceae): a pioneer tree of Hawaiian lava flows. American Journal of Botany 79: 1224-1228.
- Drake, D. R., and I. A. Ungar. 1989. The effects of salinity, nitrogen level, and population density on the survival, growth, and reproduction of *Atriplex triangularis* (Chenopodiaceae). American Journal of Botany 76: 1125-1135.

## Chapters in books:

- Drake, D. R., T. Bodey, J. C. Russell, D. R. Towns, M. Nogales, and L. Ruffino. 2011. Direct impacts of seabird predators on island biota other than seabirds. Pp. 91-132 *in* Mulder, C.P.H., W.B. Anderson, D.R. Towns and P.J. Bellingham (Eds). Seabird Islands: Ecology, Invasion and Restoration. Oxford University Press.
- Drake D. R. 2009. Tonga. Pp. 918-921 *in* R. Gillespie and D. Clague (Eds.), Encyclopedia of Islands. University of California Press, Berkeley.
- McConkey, K. R., and D. R. Drake. 2002. Extinct pigeons and declining bat populations: are large seeds still being dispersed in the tropical Pacific? Pp. 381-395 *in* D. Levey, W. Silva, and M. Galetti (Eds.), Frugivory and Seed Dispersal: Evolutionary and Conservation Perspectives. CAB International, Wallingford, UK.

### Invited book reviews:

- Quarterly Review of Biology 80: 374-375 (2005): van der Maarel, E. (Ed.). 2005. Vegetation Ecology. Blackwell Publishing, Malden, MA, USA, 395 pp.
- New Zealand Journal of Botany 40: 523-524 (2002): Webb, C. J., and M. J. A. Simpson. 2001. Seeds of New Zealand Gymnosperms and Dicotyledons. Manuka Press, Christchurch, New Zealand, 428 pp.

#### Selected other publications and reports:

- Kueffer C. K, D. R. Drake, and J. M. Fernández-Palácios. 2016. Island Biology. Oxford Bibliographies in Ecology. Ed. David Gibson. New York: Oxford University Press, 26 May 2016. DOI: 10.1093/OBO/9780199830060-0149.
- McConkey, K. R., and D. R. Drake. 2007. Essential squabbles: flying foxes need discord to regenerate forests. BATS 25: 8-10.
- Wiser, S. K., L. E. Burrows, W. S. Sykes, D. R. Drake, and T. J. Savage. 1999. Kingdom of Tonga: NZODA 1998-99 forestry project: a natural forest inventory of Tongatapu and nearby islands. Landcare Research New Zealand Ltd. Christchurch.
- Drake D. R. 1992. Rain forest development on the lava flows of Mauna Loa. 'Elepaio 52: 31.
- Drake, D. R., L. Hamilton, and P. Thomas. 1990. Report on a biological survey of 'Eua Island, Tonga, and a proposal for a national park. East-West Center, Honolulu.

# Research support, contracts and awards:

- Principal Investigator: Seed dispersal networks and novel ecosystem functioning in Hawaii. Department of Defense Strategic Environmental Research and Development Program (subcontract through University of New Hampshire), 2014-2018 (\$212,758 to UH of original \$2,399,236 grant, on which I am a Co-PI).
- Principal Investigator: Impacts of alien rodents on Hawaiian plant communities. US Army Natural Resources Program (Oahu), 2006-2009 (\$142,392).
- Principal Investigator: Monitoring flying fox populations in American Samoa. US National Park Service, 2007-2009 (\$74,635).
- Project Coordinator (with T. Fukami, E. Stacy, & A. Taylor; PI on \$800,000 award was VP for Research J. R. Gaines): Pollination webs: building ecological infrastructure in Hawai'i for the study of community structure and function. NSF EPSCoR, 2006-2009 (\$242,166).
- Principal Investigator (with H. Sahli): Identification of pollination syndromes across the Hawaiian Islands. NSF EPSCoR, 2007-2008 (\$24,000).
- Principal Investigator: Quantifying and predicting ecological meltdown of a unique Hawaiian forest ecosystem by an invasive alien. National Aeronautics and Space Administration, 2005-2008 (\$72,000).
- Principal Investigator: Rats, Humans, and their Impacts on Islands, an Interdisciplinary Conference, Honolulu, HI. Hawaii State Division of Lands and Natural Resources, 2007 (\$5,000).
- Principal Investigator: Rats, Humans, and their Impacts on Islands, an Interdisciplinary Conference, Honolulu, HI. The Nature Conservancy of Hawaii, 2007 (\$1,000).
- Principal Investigator (with C. Morden & D. Duffy): Are honeycreepers still pollinating lobelioids, and does it matter? Hawaii Department of Land and Natural Resources, Division of Forestry and Wildlife, 2004-2006 (\$37,763).
- Principal Investigator: Kukui 'Ula Development. Bernice P. Bishop Museum, 2003-2004 (\$31,019).
- Principal Investigator: Investigating seed bank dynamics and limitations to seed availability in Hawaiian mesic forest communities. Hawaii Conservation Alliance, 2003-2004 (\$4000).

- Co-Investigator: Seed germination ecology of Hawaiian montane species: a continuation of efforts to acquire, organize, and share data to facilitate propagation and restoration efforts. Hawaii Conservation Alliance, 2003-2004 (\$5,000).
- Co-Investigator: Seed germination ecology of Hawaiian montane species: organizing, acquiring, and sharing data to facilitate propagation and restoration efforts. Secretariat for Conservation Biology, 2002-2003 (\$5,500).
- Principal Investigator (with K. McConkey): Flying foxes and rain forest: maintaining forest regeneration as bat populations diminish. Wildlife Conservation Society, 2000-2001 (\$5,152).
- Principal Investigator: Relationships among seed size, seed dormancy, and seedling shade tolerance: a test using phylogenetically-independent contrasts. Victoria University of Wellington Science Faculty Grants Committee, 1999-2000 (NZ\$4,200).
- Principal Investigator: Flying foxes, rodents, and trees: seed fate pathways in rain forest regeneration. Victoria University of Wellington Internal Grants Committee, 1999-2001 (NZ\$89,673).
- Principal Investigator: Restoration of native forest in the Karori Wildlife Sanctuary: treefall gap manipulation as a conservation tool. Victoria University of Wellington Science Faculty Grants Committee, 1998 (NZ\$3,800).
- Contract: Survey of native forests of Tongatapu, Tonga. Manaaki Whenua, Landcare Research New Zealand, Ltd., 1997 (NZ\$6,405).
- Principal Investigator: Seed predation as a potential limiting factor in forest regeneration in the Karori Wildlife Sanctuary. Victoria University of Wellington Science Faculty Grants Committee, 1997 (NZ\$3,648).
- Principal Investigator: Seed dormancy and germination of plant species of importance in conservation. Victoria University of Wellington Internal Grants Committee, 1996 (NZ\$14,000).
- Principal Investigator: Seed dispersal by New Zealand lizards. Victoria University of Wellington Science Faculty Grants Committee, 1996. (NZ\$3,557).
- Principal Investigator: Effects of disturbance on the biodiversity of Tongan rain forests and birds. Georgia Southern University Faculty Research Fellowship, 1995 (\$7,500).
- Project manager: Evaluation of the effects of military training on wiregrass (*Aristida stricta*). U. S. Army, Fort Stewart, Georgia 1994-96. (\$33,144).
- Principal Investigator (with J. Franklin & D. Steadman): Effects of disturbance on biogeography of Tongan plants and birds. National Geographic Society, 1993-95 (\$28,401).
- Co-principal Investigator: Ecological and environmental requirements of *Argyroxiphium sandwicense* seedlings. U. S. Fish and Wildlife Service, 1992-93 (\$5,242).
- Principal Investigator: Effects of substrate salinity and salt spray on growth of the endangered Hawaiian plant *Scaevola coriacea*. U. S. Fish and Wildlife Service, 1992-93 (\$5,186).
- Principal Investigator: Forest development on Hawaiian lava flows of different ages. East-West Center, 1990-91 (\$11,300).
- Principal Investigator: A biological survey of 'Eua Island, Tonga. East-West Center, 1990 (\$12,693).
- Principal Investigator: The development of pioneer *Metrosideros polymorpha* ('ohi'a lehua) forests on recent lava flows in the montane rain forest zone on Mauna Loa, Hawaii. Hawaii Audubon Society, 1989 (\$400).

## Presentations at scientific meetings (as presenter):

- Carpenter, J., J. Wilmshurst, J. Hume, K. McConkey, A, Shiels, D. Wotton, and D. R. Drake (presenter). 2019. The forgotten fauna: native seed predators on islands. Invited talk. Island Biology 2019. St. Denis, Réunion.
- Drake, D., J. Vizentin-Bugoni, J. Gleditsch, J. Sperry, J. Foster, A. Hruska, P. Kelley, and C. Tarwater. 2018. Seed dispersal networks in O'ahu's forests are dominated by novel interactions involving non-native species. Contributed talk. Hawai'i Native Seed Conference, Honolulu.
- Drake, D.R., Akamine, M., Chimera, C., Graham, R. Kroessig, T., Krushelnycky, P., Reynolds, L., Shay, K., Watanabe, K. 2017. Insect visitation to flowers of common native Hawaiian plants: are there any consistent patterns across vegetation zones? Invited talk. Pacific Entomology Conference. Honolulu.
- Drake D. R., V. Caraway, M. Keir, R. Kennedy, M. Sporck-Koehler, N. Sugii, L. Weisenberger, C. Wichman, and J. Yoshioka. 2017. The State of Hawaii's plants. Poster. 2017 State of the World's Plants Symposium. Royal Botanic Gardens, Kew, UK. Abstract accepted.
- Drake, D. R., and K. A. P. Thompson. 2016. Patterns of flower visitation and nectar feeding in Hawaiian honeycreepers and lobeliads. Island Biology 2016. Contributed talk. Angra do Heroismo, Azores.
- Drake, D. R., A. Ainsworth, C. Morden, L. Young, E. VanderWerff, K. Shay, and C. Dong. 2015. Complex relationships among substrate, vegetation and seabirds at Ka'ena Point, a recovering Hawaiian ecosystem. Contributed talk. Association for Tropical Biology and Conservation, Honolulu.
- Drake, D. R., K. R. McConkey, C. G. Chimera, A. B. Shiels, and K. Thompson. 2014. How might the loss of native seed dispersers and their replacement by novel species affect Polynesian forests? Contributed talk. Island Biology 2014, Honolulu.
- Drake, D. R. 2014. Why we need research on the reproductive ecology of Hawaiian plants. Invited talk. Hawaiian Botanical Forum, Honolulu.
- Drake D. R., and K. R. McConkey. 2013. How might Pacific Island forests be affected by the loss of native seed dispersers and their replacement by novel species? Invited Talk. Ecological Society of America, Minneapolis.
- Drake, D. R. 2012. The complex roles of alien animals as pollinators, seed dispersers, and seed predators. Invited talk. Nahelehele Dry Forest Symposium. Kona.
- Drake, D. R. 2011. The complex roles of alien animals as pollinators, seed dispersers, and seed predators: examples from Hawaiian forests. Invited talk. Reconstructing the Past to Better Understand the Present and Plan for the Future. French Polynesia Palaeo- and Neo-Ecology Symposium and Workshop. Mo'orea, French Polynesia.
- Drake, D. R., and K. R. McConkey. 2011. Large-seeded tree species may decline as seed dispersers cease to play a functional role in island forests: an example from Tonga. Plenary talk. Reconstructing the Past to Better Understand the Present and Plan for the Future. French Polynesia Palaeo- and Neo-Ecology Symposium and Workshop. Mo'orea, French Polynesia.
- Drake, D. R. 2011. The complex roles of alien animals as plant pollinators, seed dispersers, and seed predators in Hawaiian forests. Invited talk. Hawaii Conservation Conference, Honolulu.

- Drake, D. R., L. C. Young, E. A. VanderWerf, and C. W. Morden. 2011. Relationships among substrate, seabirds, and vegetation at Ka'ena Point, a recovering Hawaiian ecosystem. Poster. Hawaii Conservation Conference, Honolulu.
- Drake, D. R., L. C. Young, E. A. VanderWerf, and C. W. Morden. 2011. Relationships among substrate, seabirds, and vegetation in a recovering Hawaiian ecosystem. Poster. Evolution of Life on Pacific Islands and Reefs: Past, Present, and Future. Honolulu.
- Drake, D. R., T. Bodey, J. Russell, D. Towns, L. Ruffino, and M. Nogales. 2010. Direct impacts of seabird predators on island biota other than seabirds. Invited talk. World Seabird Conference, Victoria, Canada.
- Drake, D. R., L. C. Young, E. A. VanderWerf, and C. W. Morden. 2010. Relationships among substrate, seabirds, and vegetation in a recovering Hawaiian ecosystem. Poster. World Seabird Conference, Victoria, Canada.
- Drake, D. R., Sahli, H. F., Aldrich, P., and Taylor, A. T. 2009. Assessing the importance of native and alien animals in Hawaiian pollination webs. Invited talk. International Congress of Ecology, Brisbane, Australia.
- Drake, D. R., and C. W. Morden. 2009. Reproductive biology of rare Hawaiian plants: what do we know and how can we learn more? Symposium introduction. Hawaii Conservation Conference, Honolulu.
- Drake, D. R., and C. W. Morden. 2008. Reproductive biology of Hawaii's endangered flora: prioritizing research needs for conservation. Invited talk. Botanical Society of America, Vancouver, Canada.
- Drake, D. R., K. A. Postelli, S. M. Plentovich, and T. L. Thompson. 2008. Patterns of nectar feeding by birds on Lobeliad flowers in montane forests in Hawaii. Poster. Botanical Society of America, Vancouver, Canada.
- Drake, D. R., and K. R. McConkey. 2007. Flying fox abundance thresholds are critical for seed dispersal on Pacific Islands. Invited talk. International Bat Research Conference, Mérida, Mexico.
- Drake, D. R. 2007. Impacts of alien rats on plant recruitment: positive, negative, direct, and indirect. Contributed talk. Rats, Humans, and their Impacts on Islands, an Interdisciplinary Conference, Honolulu.
- Drake, D. R., K. A. Postelli, S. M. Plentovich, and T. L. Thompson. 2006. Patterns of visitation to lobelioid flowers by birds in montane forest on Kaua'i. Poster. Hawaii Conservation Conference, Honolulu.
- Drake, D. R., K. R. McConkey, and H. J. Meehan. 2004. Seed dispersal by flying foxes: evidence for a threshold effect in Polynesia. Contributed talk. International Association for Vegetation Science, Kona.
- Drake, D. R., and K. R. McConkey. 2002. Seed dispersal by flying foxes: evidence for a threshold effect in a Polynesian rain forest. Contributed talk. Ecological Society of America, Tucson.
- Drake, D. R., and K. R. McConkey. 2001. Does seed predation by introduced rats threaten or enhance the recruitment of *Pandanus tectorius* trees in Tonga? Contributed talk. Ecological Society of America, Madison.
- Drake, D. R., and K. R. McConkey. 2001. Does seed predation by introduced rats threaten or enhance the recruitment of *Pandanus tectorius* trees in Tonga? Contributed talk. International Conference on the Ecology of Insular Biotas, Wellington, New Zealand.

- Drake, D. R., and K. G. McAlpine. 2000. Regeneration from seed in artificial treefall gaps: replacing plantation pine with native forest in New Zealand. Contributed talk. Ecological Society of America, Snowbird.
- Drake, D. R., J. Franklin, L. Bolick, D. Smith, T. Motley, and D. Steadman. 1997. Indigenous forests of 'Eua and the Vava'u Group, Tonga: community composition and conservation implications. Contributed talk. Pacific Science Inter-Congress, Suva, Fiji.
- Drake, D. R. 1995. The role of seed ecology in the population dynamics of *Metrosideros polymorpha* in Hawaii. Invited talk. XVIIIth Pacific Science Congress, Beijing, China.
- Drake, D. R., G. Goldstein, and C. G. Alpha. 1993. Effects of substrate salinity and salt spray on the growth and physiology of *Scaevola sericea*. Contributed Talk. Ecological Society of America, Madison.
- Drake, D. R. 1992. Population development of rain forest trees on a 3000 yr chronosequence of Hawaiian lava flows. Invited talk. Ecological Society of America, Honolulu.
- Drake, D. R. 1992. Relationships among the vegetation, seed rain, and seed bank in a Hawaiian forest. Poster. Botanical Society of America, Honolulu.
- Drake, D. R. 1992. Seed ecology of the Hawaiian rain forest tree *Metrosideros polymorpha*. Contributed talk. Botanical Society of America, Honolulu.
- Drake, D. R. 1991. Forest vegetation of a potential national park on the island of 'Eua, Tonga. Invited talk. XVIIth Pacific Science Congress, Honolulu.
- Drake, D. R. 1991. Development of populations of the pioneer tree *Metrosideros polymorpha* on Hawaiian lava flows. Poster. XVIIth Pacific Science Congress, Honolulu.

## Presentations at scientific meetings (as co-author):

- Nogales, M., K. McConkey, T. A. Carlo, D. Wotton, P. Bellingham, A. Traveset, A. González-Castro, R. Heleno, K. Watanabe, H. Ando & and D. R. Drake 2020. A global review of frugivory and seed dispersal on islands. Contributed talk. 7<sup>th</sup> Frugivores & Seed Dispersal Symposium, Corbett Landscape, India.
- McConkey, K., J. Carpenter, J. Wilmshurst, J. Hume, D. Wotton, A. Shiels, and D. R. Drake. 2020. The forgotten fauna: native seed predators on islands. Contributed talk. 7<sup>th</sup> Frugivores & Seed Dispersal Symposium, Corbett Landscape, India.
- Carpenter, J., J. Wilmshurst, J. Hume, K. McConkey, A, Shiels, D. Wotton, and D. R. Drake. 2019. The forgotten fauna: native seed predators on islands. Contributed talk. New Zealand Ecological Society, Lincoln, New Zealand.
- Nogales, M., K. McConkey, T. Carlo, D. Wotton, P. Bellingham, A. Traveset, A. González-Castro, R. Heleno, K. Watanabe, H. Ando, and D. R. Drake. 2019. A global review of frugivory and seed dispersal on islands. Invited talk. Island Biology 2019. St. Denis, Réunion.
- Watanabe, K., A. Williams, S. Perlman, W. Kishida, D. Lorence, and D. R. Drake. 2019. Evolution of dioecism in Hawaiian *Psychotria* species. Poster. Island Biology 2019. St. Denis, Réunion.
- Grave, E., C. Wichman, M. Keir, and D. Drake. 2019. Laukahi Plant Conservation Network's Research Agenda and Applicative Research Question Design. Forum. Hawaii Conservation Conference, Honolulu.

- Hruska, A. M., and D. R. Drake. 2018. Recruitment limitation in intact and mixed Hawaiian montane forest communities. Poster. North American Congress for Conservation Biology, Toronto.
- Hruska, A. M., M. Shimada, and D. R. Drake. 2018. Recruitment limitation in intact and mixed montane forest communities on O'ahu. Contributed talk. Hawai'i Native Seed Conference, Honolulu.
- Ainsworth, A., and D. R. Drake. 2017. Anticipating sensitivity to climate change: the importance of temperature and moisture in explaining variance in Hawaiian subalpine plant communities. Contributed talk, Hawai'i Botanical Forum, Honolulu.
- Ainsworth, A., and D. R. Drake. 2017. Anticipating effects of climate change in Hawaiian national parks: defining plant community and climatic variation across the treeline ecotone. Contributed talk. Ecological Society of America, Portland.
- Hruska, A. M., and D. R. Drake. 2017. Recruitment limitation of native and invasive species in Hawaiian upland forests. Contributed talk. Ecological Society of America, Portland.
- Shay, K., and D. R. Drake. 2017. Pollination biology of *Jacquemontia sandwicensis*. Contributed talk. Botanical Society of America. Fort Worth.
- Ainsworth, A., and D. R. Drake. 2017. Defining plant community and climatic variation across the Hawaiian treeline ecotone. Invited talk. American Association for the Advancement of Science Pacific Division, Waimea.
- Hruska, A.M., J. P. Kelley, J. M. Gleditsch, C. E. Tarwater, J. T. Foster, J. H. Sperry, and D. R. Drake. 2016. Frugivory networks of nonnative birds across Hawaiian forest communities. Invited talk. Island Biology 2016. Angra do Heroismo, Azores.
- Ainsworth, A., and D. Drake. 2016. Anticipating effects of climate change in the Hawaiian Islands: defining plant community and climatic variation across the treeline ecotone. Contributed talk. Island Biology 2016. Angra do Heroismo, Azores.
- Krushelnycky, P. D., K. Kawelo, S. Plentovich, C. King, L. Young, and D. R. Drake. 2016. Conserving native insect communities on islands: insights from management projects in Hawaii. Island Biology 2016. Contributed talk. Angra do Heroismo, Azores.
- Ainsworth, A., and D. Drake. 2015. Anticipating effects of climate change: characterizing plants as habitat generalists and specialists. Poster. Hawai'i Conservation Conference, Hilo.
- Ainsworth, A., and D. Drake. 2015. Anticipating effects of climate change in the Hawaiian Islands: characterizing plants as habitat generalists and specialists. Contributed talk. Association for Tropical Biology and Conservation, Honolulu.
- Hruska, A. J. P. Kelley, D. Drake, J. Foster, J. Sperry, C. Tarwater, and J. Gleditsch. Frugivory networks of Hawaiian nonnative birds and their role as potential seed dispersers in Oahu forests. Contributed talk. Association for Tropical Biology and Conservation, Honolulu.
- Gleditsch, J., J. P. Kelley, D. Drake, A. Hruska, J. Sperry, and C. Tarwater. 2015. The bird community composition and the factors that influence the distribution of bird species in Oahu forests. Contributed talk. Association for Tropical Biology and Conservation, Honolulu.
- Wotton, D. M., R. G. Powlesland, J. J. Ladley, and D. R. Drake. 2015. The role of lizards as seed dispersers in New Zealand revisited. Invited talk. Society for Reptile and Amphibian Research in New Zealand, Nelson, New Zealand.
- Shay, K., D. R. Drake, H. F. Sahli, and A. D. Taylor. 2014. The pollination network of a native Hawaiian coastal plant community is dominated by non-native insects. Poster. Ecological

Society of America, Sacramento.

- Ainsworth, A., and D. R. Drake. 2014. Predicting effects of climate change: Ecosystem drivers in the tropical subalpine shrubland of Hawaii. Contributed talk. Island Biology 2014, Honolulu.
- Krushelnycky, P. D., L. L. Loope, T. W. Giambelluca, F. Starr, K. Starr, D. R. Drake, A. D. Taylor, and R. Robichaux. 2014. Climate-associated population declines reverse recovery and threaten future of the iconic Haleakalā silversword. Contributed talk. Island Biology 2014, Honolulu.
- Shay, K., D. R. Drake, H. F. Sahli, and A. D. Taylor. 2014. The pollination network of a native Hawaiian coastal plant community is dominated by non-native insects. Poster. Island Biology 2014, Honolulu.
- Shiels, A. B., C. A. Flores, A. Khamsing, P. D. Krushelnycky, S. M. Mosher, and D. R. Drake. 2102. Niche differentiation based on diet analysis of three introduced rodents in tropical montane forest. Contributed talk. Ecological Society of America, Portland.
- Sahli, H. F., D. R. Drake, and A. B. Taylor. 2011. Contributed talk. Assessing the roles of native and alien animals in Hawaiian pollination webs. Evolution of Life on Pacific Islands and Reefs: Past, Present, and Future. Honolulu.
- Shiels, A. B., and D. R. Drake. 2010. High potential for seed dispersal by an introduced predator (*Rattus rattus*) in Hawaiian Montane rain forest. Contributed talk. Association for Tropical Biology and Conservation, Bali.
- Shiels, A. B., and D. R. Drake. 2009. Small seeds may be less vulnerable to rat (*Rattus rattus*) predation in Hawaiian forests. Contributed talk. Ecological Society of America, Albuquerque.
- Wegmann, A. S., and D. R. Drake. 2008. Impacts of introduced rats on plant recruitment at Palmyra Atoll. Contributed talk. Botanical Society of America, Vancouver, Canada.
- Sahli, H. F., D. R. Drake, A. T. Taylor, T. Fukami, and E. A. Stacy. 2008. Changes in pollination webs across an elevation gradient on Hawai'i Island. Contributed talk. Ecological Society of America, Milwaukee.
- Elmore, M., and D. R. Drake. 2008. Altered plant-pollinator interactions among *Scaevola* species in Hawai'i. Contributed talk. Ecological Society of America, Milwaukee.
- Sahli H., D. R. Drake, A. Taylor, T. Fukami, and E. Stacy. 2008. Changes in pollination across a gradient in elevation on the island of Hawai'i. Contributed talk. Hawaii Conservation Conference, Honolulu.
- Elmore, M., and D. R. Drake. 2008. Flower visitation among Hawaiian *Scaevola*. Contributed talk. Hawaii Conservation Conference, Honolulu.
- Chimera, C. G., and D. R. Drake. 2007. Lack of seed dispersal contributes to predation in a Hawaiian dry forest. Poster. Rats, Humans, and their Impacts on Islands, an Interdisciplinary Conference, Honolulu.
- Sahli, H., D. Drake, T. Fukami, A. Taylor, and E. Stacy. 2007. Characterizing plant-pollinator interaction webs in the Hawaiian Islands. Poster. Hawaii Conservation Conference, Honolulu.
- Shiels, A., and D. R. Drake. 2007. Fruit/seed vulnerability to introduced rats in Hawaiian forest. Contributed talk. International Society for Seed Science. Perth, Australia.
- Shiels, A., A. Wegmann, D. Drake, and T. Hunt. 2007. Impacts of rats on islands: integrating contemporary and historical ecology. Contributed talk. Hawaii Conservation Conference,

Honolulu.

McDowell, W., F. G. Howarth, and D. R. Drake. 2006. The endangered Kaua'i cave amphipod returns to restored habitat. Poster. Hawaii Conservation Conference, Honolulu.

- Postelli, K. A., D. R. Drake, T. K. Pratt, and D. Hu. 2006. Kalij pheasants fill a vacated ecological niche and create new perturbations in Hawaiian forests. Poster. Hawaii Conservation Conference, Honolulu.
- Chimera, C. G., and D. R. Drake. 2005. Dispersal failure contributes to seed predation in a Hawaiian dry forest. Contributed talk. Hawaii Conservation Conference, Honolulu.
- Gamage H. K., L. K. Jesson, and D. R. Drake. 2005. Influence of leaf form on photosynthetic carbon gain and growth of heteroblastic seedlings to light. Poster, International Union of Forest Research Organizations, World Congress, Brisbane, Australia.
- Chimera, C. G., Bakutis, A. C. L., and Drake, D. R. 2005. Alien birds facilitate the invasion of alien plants in dry and mesic forests in Hawaii. Contributed talk. Ecological Society of America, Montreal, Canada.
- Postelli, K. A., T. K. Pratt, and D. R. Drake. 2005. Seed dispersal by the Kalij Pheasant: implications for Hawaiian forests. Contributed talk. Ecological Society of America, Montreal, Canada.
- Franklin, J., S. Wiser, D. R. Drake, L. Burrows, and W. R. Sykes. 2004. Environmental gradients and secondary succession affect forest composition in Tonga, Western Polynesia. Contributed talk. International Association for Vegetation Science, Kona.
- Gamage H. K., L. K. Jesson, and D. R. Drake. 2003. Leaf anatomy and stomatal conductance. Do foliar responses determine the shade-tolerance of homoblastic and heteroblastic seedlings? Contributed talk, New Zealand Ecological Society Annual Meeting, Auckland, New Zealand.
- McConkey, K. R., and D. R. Drake. 2002. Does seed predation by introduced rats threaten or enhance the recruitment of *Pandanus tectorius* trees in Tonga? Invited talk, Association for Tropical Biology Annual Meeting, Panama City, Panama.
- Gamage, H., L. Jesson, and D. R. Drake. 2002. Why are there so many heteroblastic plants in the New Zealand flora: shade-tolerance or shade-avoidance? Contributed talk. Ecological Society of Australia and New Zealand Ecological Society, Cairns, Australia.
- McConkey, K. R., and D. R. Drake. 2001. Extinct pigeons and declining bat populations: are large seeds still being dispersed in the tropical Pacific? Contributed talk. International Conference on the Ecology of Insular Biotas, Wellington, New Zealand.
- Meehan, H. J., K. R. McConkey, and D. R. Drake. 2001. Pigeons and rain forest trees: their interdependence in shrinking forest remnants in Tonga. Poster. International Conference on the Ecology of Insular Biotas, Wellington, New Zealand.
- Wiser, S. K., L. E. Burrows, D. R. Drake, and W. R. Sykes. 2001. Forest fragments on Tongatapu, Kingdom of Tonga. Contributed talk. International Conference on the Ecology of Insular Biotas, Wellington, New Zealand.
- Drake, M. T., D. R. Drake, and B. Hendry. 2001. Heritage plants of the Vava'u Group, Tonga. Contributed talk. Summit Meeting: Building Bridges with Traditional Knowledge, Honolulu.
- McAlpine, K. G., and D. R. Drake. 2000. The effects of small-scale environmental heterogeneity on seed germination in treefall gaps. New Zealand Ecological Society, Hamilton, New Zealand.

- McConkey, K., and D. R. Drake. 2000. Extinct pigeons and declining bat populations: are large seeds still being dispersed in the tropical Pacific? Invited talk. Third International Symposium on Frugivores and Seed Dispersal, São Paulo, Brazil.
- Moles, A. T., and D. R. Drake. 1998. Seed rain, seed bank, and vegetation under plantation pine in the Karori Wildlife Sanctuary, Wellington. Contributed talk. Society for Conservation Biology, Sydney, Australia.
- Franklin, J., L. Bolick, D. Smith, D. R. Drake, and T. Motley. 1998. The conservation value of primary and secondary rain forest in the Vava'u Island Group, Kingdom of Tonga. Contributed talk. Association of American Geographers, Boston.
- Drake, M. T., D. R. Drake, and B. Hendry. 1997. Heritage plants of the Vava'u Group, Tonga. Contributed talk. Pacific Science Inter-Congress, Suva, Fiji.
- Helton, R. C., D. J. Drapalik, H. Cantrell, and D. R. Drake. 1996. The flora and vegetation of sandhill and bog habitats along a powerline in Tatnall County, Georgia. Contributed talk. Association of Southeastern Biologists, Statesboro, Georgia.
- McGee, A. J., and D. R. Drake. 1996. Seed bank and vegetation dynamics in a longleaf pine wiregrass flatwood. Contributed talk. Association of Southeastern Biologists, Georgia.
- Helton, R. C., D. J. Drapalik, H. Cantrell, and D. R. Drake. 1995. A floristic study and vegetation analysis of powerline vegetation in Tatnall county, Georgia. Contributed talk. Georgia Academy of Sciences.
- Kitayama, K., D. Mueller-Dombois, and D. R. Drake. 1995. Development of a floristically depauperate montane forest along a long-term soil chronosequence in Hawaii. Invited talk. XVIIIth Pacific Science Congress, Beijing, China.
- Goldstein, G., D. R. Drake, C. Alpha, P. Melcher, J. Heraux, and A. Azocar. 1994. Lack of physiological acclimation as a component of species extinction in tropical islands. Contributed talk. Association for Tropical Biology, Guadalajara, Mexico.
- Motley, T. J, and D. R. Drake. 1994. Seed germination of native Hawaiian and invasive alien plants in a treefall gap and forest understory. Contributed talk. Hawaii Conservation Conference, Honolulu.
- Motley, T. J., and D. R. Drake. 1994. Seed germination of native Hawaiian plants in a treefall gap and forest understory. Poster. Botanical Society of America, Knoxville.

### Invited research seminars:

Australian National University, Australia; Beijing Forestry University, China; Bernice P. Bishop Museum, USA; Bowling Green State University, USA; Georgia Southern University, USA; Institute of Applied Ecology, Chinese Academy of Sciences, China; Kyoto University, Japan; Massey University, New Zealand; Kew Millennium Seed Bank, Wakehurst Place, UK; Missouri University of Science and Technology, USA; Northeast Forestry University, China; Ohio University, USA; Otago University, New Zealand; Tokyo Metropolitan University, Japan; U. S. Forest Service, Hilo, USA; University of Hawai'i, USA; University of New England, Australia; Victoria University of Wellington, New Zealand

#### **Public outreach presentations:**

Beijing Forestry University; Cleveland Metropolitan Parks; Georgia Southern University Museum; Hawaii Volcanoes National Park; Hawai'i Botanical Society; Institute of Applied Ecology, Chinese Academy of Sciences; Te Papa Tongarewa, National Museum of New Zealand; Wellington Botanical Society

#### **Professional service, editorial:**

Subject Editor, *Biotropica*, 2013-2019.
Handling Editor, *Conservation Biology*, 2012-present.
Guest Editor, *AoB PLANTS*. 2015. Island plant biology: celebrating Carlquist's legacy.
Guest Editor, *Biological Invasions* 11(7), 2009. Pp. 1483-1754, Invasive rodents on islands.
Guest Editor, *Journal of Biogeography* 29(5 & 6), 2002. Pp. 561-834, Ecology of insular biotas.

# Professional service, referee for journals:

Acta Oecologica; American Fern Journal; American Journal of Botany; American Midland Naturalist; American Naturalist; AoB PLANTS; Austral Ecology; Biodiversity and Conservation; Biological Conservation; Biological Journal of the Linnean Society; Biological Reviews of the Cambridge Philosophical Society; BioScience; Biotropica; Botanical Journal of the Linnean Society; Conservation Biology; Diversity and Distributions; Ecography; Ecological Management & Restoration; Folia Geobotanica; Forest Ecology and Management; Frontiers in Ecology and Evolution; Functional Ecology; Global Ecology and Biogeography; Global Ecology and Conservation; Integrative Zoology; Journal of Biogeography; Journal of Ecology; Journal of Evolutionary Biology; Journal of the Torrey Botanical Society; Journal of Tropical Ecology; Journal of Vegetation Science; New Zealand Journal of Botany; New Zealand Journal of Ecology; Oikos; Pacific Science; PeerJ; Perspectives in Plant Ecology, Evolution and Systematics; Plant Ecology; Proceedings of the National Academy of Sciences USA; Proceedings of the Royal Society B Biological Sciences; Restoration Ecology; Science; Weed Research; Wetlands

### Professional service, referee for books:

Blackwell Scientific; Cambridge University Press

#### Professional service, scientific meetings:

Member, Scientific Committee: Island Biology 2019, St. Denis, Reunion. Member, Organizing Committee: Hawai'i Native Seed Conference, 2018, Honolulu. Member, Scientific Advisory Committee: Island Biology 2016, Angra do Heroísmo, Azores. Member, Organizing Committee: Hawai'i Native Seed Conference 2016, Honolulu.

Member, Organizing Committee: Association for Tropical Biology and Conservation, Annual Meeting, 2015, Honolulu.

Chair: Island Biology 2014, Honolulu. (435 participants.)

Co-Chair: symposium on Reproductive Biology of Hawaii's Endangered Flora: the Role of Research in Conservation, Hawaii Conservation Conference, Honolulu, 2009.

- Co-Chair: Rats, Humans, and their Impacts on Islands, an Interdisciplinary Conference, Honolulu, 2007. (151 participants).
- Member, Organizing Committee: International Association for Vegetation Science, Annual Meeting, Kona, 2004.

Co-Chair: Seed Dormancy Workshop, Honolulu, 21-22 May 2003. (ca. 90 participants).

Co-Chair: International Conference on the Ecology of Insular Biotas, Wellington, New Zealand, 2001 (197 participants; reviewed in Trends in Ecology and Evolution 16: 423-424, 2001).

# **Professional service, other:**

Member, Advisory Council, Laukahi, The Hawai'i Plant Conservation Network, 2017-pres. Member, Board: Society for Island Biology, 2016-pres.

Member, Board of Directors, Hawai'i Audubon Society, 2014-2016.

Member, Commission, IUCN SSC Hawaiian Plant Specialist Group 2013-pres.

Member, Hawai'i Rare Plant Restoration Group, 2003-present.

Advisory Trustee, Karori Wildlife Sanctuary Trust (since renamed Zealandia), 1997-2001.

Member, Pacific Science Association Committee on Ecology, Conservation, and Environmental Protection, 1991-1997.

Member, Scientific Advisory Committee, The Nature Conservancy of Georgia, 1993-1996.

Georgia Representative, Membership Committee, Southern Appalachian Botanical Society, 1995-1996.

Member, Board of Advisors, Georgia Southern University Botanical Garden, 1995-1996. Vice-president, Hawai'i Botanical Society, 1990.

### Membership in professional societies:

Aldo Leopold Foundation; American Chestnut Foundation; Fauna and Flora International (Life Member); Hawai'i Botanical Society (Life Member); Linnean Society (elected Fellow, 2017-pres.); Society for Conservation Biology; Society for Island Biology

### **Teaching experience:**

Botany Department and School of Life Sciences, University of Hawai'i, 2002-present: *undergraduate courses:* Biodiversity: Evolution, Ecology, and Conservation (and lab); Conservation Ethics; General Botany (and lab); Field Botany (field course); Inside Tropical Ecosystems (and lab); Plant Ecology and Environmental Measurements; Vegetation

Ecology; *graduate courses:* Advanced Botanical Problems (Seed Ecology; Plants, Animals, and Islands; Ecological Impacts of Invasive Rodents on Islands; Ecology and Restoration of Coastal Ecosystems; Plant-animal Interactions on Islands—past, present, and future); Advances in Plant Ecology (Pollination Ecology; Plant-animal Interactions; Plant Reproductive Ecology); Botanical Seminar; Foundations of Current Botany II.

- School of Biological Sciences, Victoria University of Wellington, 1996-2001: *undergraduate courses:* Introductory Plant Biology; Plant Conservation Ecology; Conservation Ecology; Field Ecology and Landscape Evolution (field course); Introduction to Physical and Biological Processes in Ecology; Plants and Algae, Function and Diversity; Plant Ecology; *graduate courses:* Plant Ecology.
- Biology Department, Georgia Southern University, 1993-1996: *undergraduate courses:* General Botany; Principles of Ecology; Plant Physiology.
- Botany Department, University of Hawaii, 1987-1989: Mycology (lab); General Botany (lab); Vegetation Ecology (lab); Plant Ecology and Environmental Measurements (25% lecture).
- Botany Department, Ohio University, 1985-1987: General Botany (lab); General Biology (lab); Biology of Fungi (lab); Plant Physiology (lab).
- Science Department, Kolisi Mailefihi-Siu'ilikutapu (high school), Tonga, 1982-1983: Tongan
   Syllabus Form 4 General Science; and New Zealand Syllabus Form 5 Mathematics; Form 5
   Biology; Form 6 Physics; Form 6 Chemistry.

## Students supervised or co-supervised, current:

PhD: Alison Ainsworth (UH) MS: Elizabeth Conlon (UH)

### Students supervised or co-supervised, completed:

- BScHons: Reuben Ferguson (VUW), Kate McAlpine (VUW), Angela Moles (VUW), Matthew Prebble (VUW), Justine Wilson (VUW)
- MS: Edith (Nonner) Adkins (UH), Ane Bakutis (UH), Chuck Chimera (UH), Michelle (Elmore) Akamine (UH), Richard Fitzjohn (VUW), Anna Franklin (GSU), Nōweo Kai (UH), Timothy Kroessig (UH), Alison McGee (GSU), Hayley Meehan (VUW), Katherine Postelli (UH), Lara Reynolds, (UH), Kimberly Shay (UH), Mio Shimada (UH), Debra Wotton (VUW)
- PhD: Harshi Gamage (VUW), Amy Hruska (UH), Kate McAlpine (VUW), Aaron Shiels (UH), Alex Wegmann (UH)

Post-Doctoral: Kim McConkey (VUW), Heather Sahli (UH)