

**Rebecca Hufft**  
Denver Botanic Gardens  
909 York Street  
Denver, CO 80206

#### Education

2006 PhD, Ecology and Evolutionary Biology, University of California Santa Cruz  
2000 BA, Honors Ecology and Evolutionary Biology, Dept. of Biology, University of Chicago

#### Professional Experience

2017 – present Associate Director of Applied Conservation, Denver Botanic Gardens  
2019 – present Adjoint Assistant Professor, Dept. of Integrative Biology, U. of Colorado Denver  
2014 - 2019 Adjunct Faculty, Dept. of Integrative Biology, University of Colorado Denver  
2011 – 2016 Manager of Conservation Programs, Denver Botanic Gardens  
2011 – 2015 Ecologist, Neptune and Company  
2009 - 2013 Curator Adjoint, Entomology Section, University of Colorado Museum  
2009 - 2011 Senior Supervising Scientist, National Ecological Observatory Network, Inc.  
2008 - 2009 Affiliate Researcher, Institute for Arctic and Alpine Research, University of Colorado  
2007 - 2009 Staff Scientist, National Ecological Observatory Network, Inc.  
2006 - 2007 PRIMES Postdoctoral Research Associate, Department of Bioagricultural Sciences and Pest Management and the Program for Interdisciplinary Mathematics, Ecology, and Statistics at Colorado State University.

#### Professional Service

2023-present President, Society for Conservation Biology North America  
2022-present Advisory Council, One World One Water Center  
2021-present Editorial Committee, IUCN Seed Conservation Specialist Group Newsletter  
2016-present Society for Ecological Restoration-Rocky Mountains outreach committee  
2022-2023 President-Elect, Society for Conservation Biology North America  
2020-2023 Treasurer, Society for Conservation Biology North America  
2015-2022 HAR-CeRSER Restoration Meeting technical committee  
2018-2020 Co-chair, North American Congress for Conservation Biology 2020 planning committee  
2012-2018 NEON Plant Phenology Working Group  
2013-2016 Phenology Indicators Technical Team to develop a prototype indicator system for the US Global Change Research Program, National Climate Assessment  
2012-2016 Coordinator, Colorado Rare Plant Conservation Initiative  
2012 USA National Phenology Network Data Products Working Group  
2011-2012 Organizing Committee, iEvoBio 2012  
1994 Board of Directors, Kentucky Association for Environmental Education

#### Recent Funding

2022-2025 Tri-State Generation and Transmission Association, Transplant studies for Gore Pass-Windy Gap Right-of-Way, \$142,668  
2022-2023 Colorado Golf Association, Native plant restoration and consultation, \$30,000  
2020-2023 US BLM-CO: Colorado Plant Conservation and Restoration, \$549,300  
2020-2023 NSF Collaborative Research: Rules of Life: Using reaction norms to link genomic and phenotypic variation with regional-scale population responses to environmental change, co-PI (PI Peter Adler), \$93,461  
2019-2020 US BLM Region 6: Colorado botanical services, \$50,000  
2019-2020 US BLM Region 6: Wyoming Seeds of Success, \$163,328  
2019 Jefferson County Open Space Small Research Grant Award, \$3601  
2018-2020 US BLM Region 6: Colorado Seed Collection Technicians and Botanical Services, \$249,209  
2018-2020 Colorado Water Conservation Board, \$69,847  
2018 Denver Mountain Parks, \$9231  
2018 Jefferson County Open Space Small Research Grant Award, \$9136

- 2015-2017 National Fish and Wildlife Foundation, Denver Botanic Gardens at Chatfield Riparian Restoration (CO), \$35,000
- 2014-2019 US BLM, up to \$275,000 to support research on native plants in Colorado, including population genetics, rare plant monitoring, and restoration

### Publications

- Bueno de Mesquita CP, Solon AJ, Barfield A, Mastrangelo CF, Tubman AJ, Vincent K, Porazinska DL, **Hufft RA**, Shakelford N, Suding KN, Schmidt SK. **2023**. Adverse impacts of Roundup on soil bacteria, soil chemistry, and mycorrhizal fungi during restoration of a Colorado grassland. *Applied Soil Ecology* 185 (2023) 104778 <https://doi.org/10.1016/j.apsoil.2022.104778>
- Alba C, Levy R, **Hufft R**. **2021**. Combining botanical collections and ecological data to better describe plant community diversity. *PLOS ONE* 16(1): e0244982.
- Weltzin JF, Betancourt JL, Cook BI, Crimmins T, Enquist CAF, Gerst MD, Gross JE, Henebry GM, **Hufft RA**, Kenney MA, Kimball JS, Reed BC, Running SW. **2020**. Seasonality of Biological and Physical Systems as Indicators of Climatic Variation and Change. *Climatic Change* <https://doi.org/10.1007/s10584-020-02894-0>
- Levy R, Paces M, **Hufft R**. **2020**. Sampling event dataset for ecological monitoring of riparian restoration effort in Colorado Foothills. *Biodiversity Data Journal*. 8: e51817 doi: 10.3897/BDJ.8.e51817.
- Hufft RA**, ME DePrenger-Levin, RA Levy, MB Islam. **2018**. Using herbarium specimens to select indicator species for climate change monitoring. *Biodiversity and Conservation*. 27(6): 1487-1501. <https://doi.org/10.1007/s10531-018-1505-2>
- Elmendorf, SC, KD Jones, BI Cook, JM Diez, CAF Enquist, **RA Hufft**, MO Jones, SJ Mazer, AJ Miller-Rushing, DJP Moore, MD Schwartz, JF Weltzin. **2016**. The plant phenology monitoring design for the national ecological observatory network. *Ecosphere* 7(4): e01303. <https://doi.org/10.1002/ecs2.1303>
- Springer, Y. P., D. Hoekman, P. T. J. Johnson, P. A. Duffy, **R. A. Hufft**, et al. **2016**. Tick-, mosquito-, and rodent-borne parasite sampling designs for the National Ecological Observatory Network. *Ecosphere* 7(5): e01271. <https://doi.org/10.1002/ecs2.1271>
- Hufft, RA** and TJ Zelikova. **2016**. Ecological Genetics, Local Adaptation, and Phenotypic Plasticity in *Bromus tectorum* in the context of a changing climate. In M Germino, J Chambers, C Brown, eds., Exotic Brome Grasses in Rangeland Ecosystems of the Western US. Springer International Publishing, New York. [https://doi.org/10.1007/978-3-319-24930-8\\_5](https://doi.org/10.1007/978-3-319-24930-8_5)
- Davies, N, D Field, L Amaral-Zettler, MS Clark, J Deck, A Drummond, DP Faith, J Geller, J Gilbert, FO Glöckner, PR Hirsch, J-A Leong, C Meyer, M Obst, S Planes, C Scholin, AP Vogler, RD Gates, R Toonen, V Berteaux-Lecellier, M Barbier, K Barker, S Bertilsson, M Bicak, MJ Bietz, J Bobe, L Bodrossy, A Borja, J Coddington, J Fuhrman, G Gerdts, R Gillespie, K Goodwin, PC Hanson, J-M Hero, D Hoekman, J Jansson, C Jeanthon, **R Kao**, et al. **2014**. The founding charter of the Genomic Observatories Network. *GigaScience* 3:2. <https://doi.org/10.1186/2047-217X-3-2>
- Kao, RH**, C Gibson, R. Gallery, C Meier, D Barnett, K Docherty, Y Springer, E Azuaje, K Blevins, P Travers, K Thibault, V McKenzie, M Keller, L Alves, E Hinckley, J Parnell, D Schimel. **2012**. NEON Terrestrial Field Sampling: Designing Large-Scale, Standardized Sampling. *Ecosphere* 3(12): 115. <https://doi.org/10.1890/ES12-00196.1>
- Gibson CM, **RH Kao**, KK Blevins, PD Travers. 2012. Integrative taxonomy for continental-scale terrestrial insect observations. *PLOS ONE*. 7(5): e37528. <https://doi.org/10.1371/journal.pone.0037528>
- Davies, N, D Field, **The Genomic Observatories Network**. 2012. A genomic network to monitor earth. *Nature* 481: 145. <https://doi.org/10.1038/481145a>
- Kanarek, Ar And Rh Kao. 2011. The relationship among plant cover, density, seed rain and dispersal of bromus tectorum in high elevation populations. *Western north american naturalist*. 71(1): 131-136. <https://doi.org/10.3398/064.071.0120>
- Kao, RH** and IM Parker. **2010**. Coexisting Cytotypes of *Arnica cordifolia*: Morphological differentiation and local scale distribution. *International Journal of Plant Sciences*. 171(1): 81-89. <https://doi.org/10.1086/647924>
- Kao, RH**, C Brown, RA Huffbauer. **2008**. High Phenotypic and Molecular Variation in Downy Brome (*Bromus tectorum*). *Invasive Plant Science and Management*. 1: 216-225. <https://doi.org/10.1614/IPSM-07-045.1>

- Kao, RH. 2008.** Implications of polyploidy in the host plant of a Dipteran seed parasite. Western North American Naturalist. 68(2): 225-230. [https://doi.org/10.3398/1527-0904\(2008\)68\[225:IOPITH\]2.0.CO;2](https://doi.org/10.3398/1527-0904(2008)68[225:IOPITH]2.0.CO;2)
- Kao, RH. 2008.** Origins and widespread distribution of coexisting polyploids in *Arnica cordifolia*. Annals of Botany. 101:145-152. <https://doi.org/10.1093/aob/mcm271>
- Kao, RH. 2007.** Asexuality and the coexistence of cytotypes. New Phytologist. 175 (4): 764-772. doi: 10.1111/j.1469-8137.2007.02145.x. <https://doi.org/10.1111/j.1469-8137.2007.02145.x>
- Hufft, R. and J. Richardson. 2006.** The evolution of pink: Morphological and genetic variation among three *Lithophragma* (Saxifragaceae) species. Madroño 53 (1): 25-35. [https://doi.org/10.3120/0024-9637\(2006\)53\[25:TEOPMA\]2.0.CO;2](https://doi.org/10.3120/0024-9637(2006)53[25:TEOPMA]2.0.CO;2)
- CentTREAD Working Group. **2005.** Making Parks Work: A thought provoking argument, but not a guide. Conservation Biology 19(1): 279-281. [https://doi.org/10.1111/j.1523-1739.2005.1877\\_2.x](https://doi.org/10.1111/j.1523-1739.2005.1877_2.x)

#### Selected Reports and Datasets

- Goebel A, Clark M, **Hufft R. 2023.** Experiments to inform seed source selection for ecological restoration in grasslands. Progress report to Bureau of Land Management, US Department of Interior, Colorado State Office.
- DePrenger-Levin, M, **R Hufft. 2022.** Life history and demography of *Astragalus microcymbus* Barneby (Fabaceae). Population Monitoring 1995-2022, Technical Report to Bureau of Land Management, U.S. Department of Interior, Colorado State Office.
- DePrenger-Levin, M, **R Hufft. 2022.** Demographic monitoring of *Sclerocactus glaucus*, an endemic species of western Colorado. Population Monitoring 2007-2022, Technical Report to Bureau of Land Management, U.S. Department of Interior, Colorado State Office.
- DePrenger-Levin, M, **R Hufft. 2022.** *Eriogonum brandegeei* Demographic Monitoring Study 2004-2022. Technical Report to Bureau of Land Management, U.S. Department of Interior, Colorado State Office.
- DePrenger-Levin, M, **R Hufft 2021.** Population Monitoring of *Penstemon harringtonii* (Scrophulariaceae), an Endemic Species of Colorado, USA. Population Monitoring 1996-2021, Technical Report to Bureau of Land Management, U.S. Department of Interior, Colorado State Office.
- Ripley N, Kuich N, Neale JR, Kintgen M, **Hufft R**, Schneider A. **2020.** 2020 North American Botanic Garden Strategy for Alpine Plant Conservation. Betty Ford Botanic Gardens & Denver Botanic Gardens.
- Levy R, **R Hufft**, M Paces. **2019.** Deer Creek riparian restoration ecological monitoring. Version 1.2. Kathryn Kalmbach Herbarium (Denver Botanic Gardens). Sampling events dataset <https://doi.org/10.15468/scmp5u>
- Kenney, M.A, Janetos, A.C, et. al, National Climate Indicators System Report, National Climate Assessment and Development Advisory Committee, **2014.**
- Schimel, D, M Keller, S Berukoff, **B Kao**, H Loescher, H Powell, T Kampe, D Moore, W Gram. **2011.** 2011 Science Strategy: Enabling Continental-Scale Ecological Forecasting. [http://www.neoninc.org/sites/default/files/NEON\\_Strategy\\_2011u2.pdf](http://www.neoninc.org/sites/default/files/NEON_Strategy_2011u2.pdf)

#### Recent Presentations

- 2023 **Hufft R**, Murray R, Craft H, Peterson K. Empowering Visitors to Engage in the Climate Crisis. American Alliance of Museums, Denver, CO.
- 2023 Seglias A, **Hufft R**. Can alpine species “bank” on conservation. National Native Seed Conference, Alexandria, VA
- 2022 **Hufft R**, Alba C, Levy R. Monitoring biodiversity in urban wildlife corridors. North American Congress for Conservation Biology 2022, Reno, NV.
- 2021 **Hufft R**. A multi-trophic approach to monitoring and evaluating conservation. International Congress for Conservation Biology.
- 2021 **Hufft R**, Shakelford N, Youssef M, Miller A, Stacy A, Voss K. Enabling the study of multi-trophic responses in restoration. Society for Ecological Restoration.
- 2020 **Hufft R** and Elias N, Biophilia, Creative Mornings Denver.
- 2020 **Hufft R**, Plants in a changing world: evolving strategies for conservation and restoration. Regis University Biology Department. Denver, CO.

- 2020 **Hufft R**, Collaboration among diverse stakeholders for successful plant conservation, session organizer and moderator, North American Congress for Conservation Biology 2020.
- 2020 **Hufft R** and Shakelford N. Restoration for multiple audiences, from local results to global implications. Society of Range Management, Denver, CO.
- 2020 **Hufft R**, North American Botanic Gardens Strategy for Alpine Plant Conservation, Denver Botanic Gardens Docents, Denver, CO.
- 2019 Vickerman L and **Hufft R**, Creek restoration to support riparian habitat and extended flow, Society for Ecological Restoration, Cape Town, South Africa.
- 2019 **Hufft R**, Using beavers and community partnerships for restoration, Conservation Optimism, Oxford, UK.
- 2019 **Hufft R**, Building restoration capacity: The Ecological Restoration Alliance of Botanic Gardens, Ecological Society of America, Louisville, KY.
- 2019 **Hufft R**, Ecological Stewardship: Restoration at Denver Botanic Gardens and Beyond. Open Space Research Symposium, Lakewood, CO.