

## SHARON JAE HALL

School of Life Sciences, Arizona State University, Tempe, AZ 85287-4501

Email: [sharonjhall@asu.edu](mailto:sharonjhall@asu.edu); Web: <http://halllab.asu.edu/>

### EDUCATION

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Ph.D. **University of California, Berkeley**, Dept. of Env. Science, Policy & Management, 1998.

Ed.M. **Harvard University**, Graduate School of Education, 1992.

B.S. **Stanford University**, Department of Biological Sciences, 1990.

### HONORS & AWARDS

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- 2022 President's Professor, ASU.
- 2021 Zebulon Pearce Distinguished Teaching Award, College of Liberal Arts and Sciences
- 2020 Dean's Fellow for Institutional Transformation, College of Liberal Arts and Sciences.
- 2017 Founders Day Faculty Teaching Achievement Award, ASU Alumni Association.
- 2003-98 John D. and Catherine T. MacArthur Professorship (2003); Gresham Riley Postdoctoral Fellowship (1998), The Colorado College.
- 1996-93 NASA Earth Systems Science Doctoral Fellow (1996); NSF Graduate Research Fellow (1994); Doctoral Fellowship, Dept. of Soil Science, UC Berkeley (1993).

### CURRENT LEADERSHIP AND ADVISORY POSITIONS

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- **College Promotion & Tenure Committee** (Dean's Faculty Advisory Council), Review and recommendation on personnel matters involving faculty promotion, tenure and retention.
- **Co-PI of ASU ADVANCE-Institutional Transformation**. Working with the provost to transform hiring, promotion, and tenure policies and practices to increase the number, visibility, and success of women and faculty of color in STEM fields at all levels of ASU. NSF #1824260.
- **Special Advisor to the Director for Diversity, Equity & Inclusion**, School of Life Sciences.
- **Undergraduate Professional Development and Faculty Advisor:**
  - Faculty Lead, Environmental career preparedness, School of Life Sciences (SOLS).
  - Founding Director and Faculty Advisor, Nature at ASU Undergraduate Professional Development Program.
  - Faculty Advisor, Central Arizona Chapter of the Society for Conservation Biology.
  - Faculty Advisor, Barrett Honors College, Conservation Biology & Ecology concentration.

### FORMER POSITIONS

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- **Faculty Lead**, Conservation Biology & Ecology major (2016-2022; growth from ~250 to ~700 students in the major). <https://vimeo.com/164337919>
- **Chair of the DEI Committee**, School of Life Sciences.
- **Director, Environmental Life Sciences Ph.D. Program** (2013-2019).
- **Science, Governing, and Editorial Boards**

- Executive Boards: Central Arizona–Phoenix Long-term Ecological Research Program (CAP LTER; 2016-2020); and ASU Global Drylands Center (2017-2019).
- Governing Board, Ecological Society of America, elected Member-At-Large (2016-18).
- Science Advisory Boards: McDowell Sonoran Conservancy Field Institute (2016-2019); Center for Biodiversity Outcomes (2016-2017); Life Sci. Ethics Program (2017-2019).
- Science Lead, CAP LTER (Residential Landscapes; Biogeochem. Fluxes; 2016-2020).
- Journal Editorial Boards: Landscape and Urban Planning (Elsevier; 2015-2019)
- **MacArthur Assistant Professor of Environmental Science**, The Colorado College, 2003-2005, and Assistant Professor, 2001-03.
- **Post-Doctoral Research Associate**, Dept. of Geol. Sci. and Env. Studies, University of Colorado at Boulder, 1999-2001.
- **Visiting Assistant Professor**, Environmental Science, The Colorado College, 1998-2000.
- **Teaching Assistant**, UC Berkeley and Stanford University.
- **Biology Research Assistant**, Stanford University, 1987-92.
- **Biology/Ecology Instructor**, Grades 7-Adult, Monterey Bay Aquarium; Keystone Science School, 1990-93.

## EXTERNAL FUNDING

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### Current

- NASA – Ecological Forecasting  
Co-Investigator/Institutional PI. *Biodiversity, connectivity, and ecological forecasting: Applying NASA earth observation data to conservation management in the Greater Kruger National Park region, South Africa* (\$19,257 to ASU; \$749,723 total). #20-ECOF20-0014. 5/21-4/25.
- NSF – Macrosystems Biology  
Principal Investigator. Collaborative Research: *Alternative Futures for the American Residential Macrosystem*. (\$549,185 to ASU; \$3,571,724 total). #1638725. 2017-20; 2020 Graduate supplement (\$91,854); 2019 Graduate INTERN supplement (\$27,332); 2018 REU supplement (\$17,223).

### Former

- NSF – Division of Environmental Biology  
Co-Principal Investigator. *LTER CAP IV: "Design with nature" infrastructure in Phoenix: A research framework for exploring urban ecology and sustainability* (\$6.8M). 12/16-11/22.
- NSF – Dynamics of Coupled Natural and Human Systems. #DEB-1026865  
Co-Principal Investigator. *Feedbacks between human community dynamics and socio-ecological vulnerability in a biodiversity hotspot*. (\$1.45M). #1211498, 9/12-9/18.
- Central Arizona Conservation Alliance (CAZCA)  
Principal Investigator. *The Community Wildflower Survey*. (\$5,400). 2/15-6/15.
- NSF – Macrosystems Biology  
Principal Investigator. Collaborative Research: *Ecological homogenization of urban America*. (\$299,880 to ASU; ). #1065740, 7/11-7/15. REU Suppl. (\$8,000) 2012-13.
- NSF – Division of Environmental Biology  
Co-Principal Investigator. *LTER Renewal - CAP3: Urban Sustainability in the Dynamic Environment of Central Arizona, USA*. (\$940,000). 12/11-12/16.
- Andrew W. Mellon Foundation.  
Principal Investigator. *Ecosystem science close to home: Impacts of the urban environment on nutrient cycling in fynbos shrublands of the Cape Town metropolitan area*. (\$299,000). 4/09-4/15.

- NSF – DEB Ecosystem Science.  
Principal Investigator. *Legacies on the Landscape: Prehistoric human land use and long-term ecological change.* (\$465,000). #0614349, 6/06-6/12. 2007 REU Supplement (\$6,000); 2008 Minority Graduate Student Supplement (\$42,814); 2009 REU Supplement (\$7,000)
- NSF –BCS Long-term Ecological Research.  
Co-Principal Investigator. *ULTRA-EX: Land and water use decision-making and ecosystem services along a southwestern socio-ecological gradient.* #0948749 (\$59,143). 10/10-10/12.
- NSF –Social, Behavioral, and Economic Sciences.  
Co-Principal Investigator. LTER Social Science Supplement: *Untangling the variability in urban ecological processes: Socio-ecological drivers of residential landscape management and ecosystem responses.* (\$19,956). 2007-10.
- NSF – DEB Ecosystem Science.  
Co-Principal Investigator. RAPID: *Responses of herbaceous annual plants to material deposition from the urban atmosphere under contrasting conditions of antecedent drought and winter rainfall.* #0937397 (\$29,904). 2009-10.
- NSF – DEB Ecosystem Science.  
Co-Principal Investigator. Ecosystem response to organic C and N deposition from the urban atmosphere. (\$634,565). #0514382, 2005-08; 2006 REU Supplement (\$12,000); 2007 REU Supplement (\$12,000).
- Andrew W. Mellon Foundation  
Principal Investigator. Scaling Biogenic Trace Gases from Plots to Regions: Remote Sensing of Invasive N-Fixing Species (\$165,000). 2002-06.
- US Bureau of Land Management  
Co-Principal Investigator. *Agricultural Production on Perry Mesa, Agua Fria National Monument.* Co-PIs: Kate Spielmann and David Abbott (SHESC). (\$72,423). 2009-11.

## PUBLICATIONS

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### In review or revision

1. D.L. Narango, M.L. Avolio, A. Bratt, J.P. Cubino, P.M. Groffman, **S.J. Hall**, S.C. Hobbie, L. Templeton, T.L.E. Trammell, S.B. Lerman. Yard management and tree canopy cover mediate urban ground beetle (Coleoptera: Carabidae) diversity across the United States. *Biodiversity and Conservation*, in review.
2. M. Wheeler, K.L. Larson, E.M. Cook, and **S.J. Hall**. Residents manage dynamic plant communities: Change over time in urban vegetation. *Frontiers in Ecology and Evolution*, in review.
3. K. Ragan, J. Schipper, H.L. Bateman, and **S.J. Hall**. Mammal Use of Riparian Corridors in Semi-Arid Sonora, Mexico. *Journal of Wildlife Management and Wildlife Monographs*, in revision.

### 2022

4. S. Buessecker, A.F. Sarno, M. C. Reynolds, R. Chavan, J. Park, M. Fontánez Ortiz, A.G. Pérez-Castillo, G. Panduro Pisco, J. David Urquiza-Munoz, L.P. Reis, J. Ferreira-Ferreira, J.M. Furtunato Maia, K.E. Holbert, C.R. Penton, **S.J. Hall**, H. Gandhi, I.G. Boëchat, B. Gücker, N.E. Ostrom, H. Cadillo-Quiroz. Coupled abiotic-biotic cycling of nitrous oxide in tropical peatlands. *Nature Ecology and Evolution*, in press.
5. S. Yabiku, A. Sullivan, A. York, Q. Zhao, J. Glick, **S.J. Hall**, D. Ghimire, L. An. Drivers of prohibited natural resource collection in a protected area. *Env. Conservation*, 49(2):114-121.

6. K.L. Larson, S.B. Lerman, K. Nelson, D.L. Narango, M.M. Wheeler, P.M. Groffman, **S.J. Hall**, M. Grove. Examining the potential to expand wildlife-supporting residential yards and gardens. *Landscape and Urban Planning*, 222:104396.
7. M.M. Wheeler, Larson K.L., Bergman, D., and **S.J. Hall**. Environmental attitudes predict native plant abundance in residential yards. *Landscape and Urban Planning*, 222:104443.

## 2021

8. J.A. Brown, K.L. Larson, S.B. Lerman, A. Cocroft, and **S.J. Hall**. 2021. Resident perceptions of mosquito problems are more influenced by landscape factors than mosquito abundance. *Sustainability*, 13(20): 11533. <https://doi.org/10.3390/su132011533>.
9. S.B. Lerman, D.L. Narango, M.L. Avolio, A.R. Bratt, J.M. Engebretson, P.M. Groffman, **S.J. Hall**, J.B. Heffernan, S.E. Hobbie, K.L. Larson, D.H. Locke, C. Neill, K. C. Nelson, J. Padullés Cubino, and Tara L. E. Trammell. 2021. Residential yard management and landscape cover affect urban bird community diversity across the continental US. *Ecological Applications*, e02455, <https://doi.org/10.1002/eap.2455>.
10. **S.J. Hall**, K.A. Lohse, and P.A. Matson. 2021. Nitrogen deposition and ecosystem response: A twenty-year perspective. *Ambio* 50th Anniversary Special Issue. *Ambio*, 50(4) 750-752. [10.1007/s13280-020-01465-y](https://doi.org/10.1007/s13280-020-01465-y).
11. M.M. Wheeler, S.L. Collins, N.B. Grimm, E.M. Cook, C. Clark, R.A. Sponseller, and **S.J. Hall**. 2021. Water and nitrogen shape winter annual plant diversity and community composition in near-urban Sonoran Desert preserves. *Ecological Monographs*, 91(3): [doi.org/10.1002/ecm.1450](https://doi.org/10.1002/ecm.1450).

## 2020

12. J.A. Brown, Larson K.L., Lerman S.B., Childers D.L., Andrade R., Bateman H.L., **Hall S.J.**, Warren P.S. and York A.M. (2020) Influences of Environmental and Social Factors on Perceived Bio-Cultural Services and Disservices. *Frontiers in Ecology and Evolution*, 8:569730. doi: [10.3389/fevo.2020.569730](https://doi.org/10.3389/fevo.2020.569730)
13. K.L. Larson, R. Andrade, K.C. Nelson, M.M. Wheeler, J.M. Engebretson, **S.J. Hall**, M.L. Avolio, P.M. Groffman, M. Grove, J.B. Heffernan, S.E. Hobbie, S.B. Lerman, D.H. Locke, C. Neill, R. Roy Chowdhury, T.L.E. Trammell. Municipal Regulation of Residential Landscapes across US Cities: Patterns and Implications for Landscape Sustainability. *Journal of Environmental Management*, 275:111132.
14. J. Dai, D.A Roberts, D.A Stow, L. An, **S.J. Hall**, S.T. Yabiku, and P.C. Kyriakidis. 2020. Mapping understory invasive plant species with field and remotely sensed data in Chitwan, Nepal. *Remote Sensing of Environment*, 250(1): 112037.
15. J. Padullés Cubino, J. Cavendar-Bares, P.M. Groffman, M.L. Avolio, A.R. Bratt, **S.J. Hall**, K.L. Larson, S.B. Lerman, D.L. Narango, C. Neill, T.L.E. Trammell, M.M. Wheeler, S.E. Hobbie. 2020. Taxonomic, phylogenetic, and functional composition and homogenization of residential yard vegetation with contrasting management, *Landscape and Urban Planning*, i202, 103877, <https://doi.org/10.1016/j.landurbplan.2020.103877>.
16. J.M. Engebretson, K.C. Nelson, L.A. Ogden, K.L. Larson, J.M. Grove, **S.J. Hall**, D.H. Locke, D.E. Pataki, R. Roy Chowdhury, T.L.E. Trammell, P.M. Groffman. 2020. How the nonhuman world influences homeowner yard management in the American residential macrosystem. *Human Ecology*, 48 (347–356).
17. K.L. Larson, M. Fleeger, S.B. Lerman, M.M. Wheeler, R. Andrade, J.A. Brown, **S.J. Hall**, and D.L. Narango. Who is abuzz about bees? Explaining residents' attitudes in Phoenix, Arizona. *Urban Ecosystems*, doi [10.1007/s11252-020-01013-2](https://doi.org/10.1007/s11252-020-01013-2).

18. T.L.E. Trammell, D.E. Pataki, J. Cavender-Bares, P. Groffman, **S.J. Hall**, J.B. Heffernan, S.E. Hobbie, J.L. Morse, C. Neill, K.C. Nelson. 2020. Urban soil carbon and nitrogen converge at a continental scale. *Ecological Monographs*, 90(2):e01401.
19. J. Padullés Cubino, C. Neill, D.E. Pataki, J.M. Grove, J. Cavender-Bares, K.L. Larson, K. Nelson, M. Wheeler, M.L. Avolio, P.M. Groffman, S. E. Hobbie, **S.J. Hall**, T.L.E. Trammell. 2020. Linking yard plant diversity to homeowners' landscaping priorities across the U.S. *Landscape and Urban Planning*, 196(103730).

## 2019

20. K.L. Larson, E. Corley, R. Andrade, **S.J. Hall**, A. York, , D. Childers, P. Coseo, D. Hondula, and S. Meerow. 2019. Subjective evaluations of ecosystem services and disservices: an approach to creating and analyzing robust survey scales. *Ecology and Society*, 24(2):7.
21. T.L.E. Trammell, D.E. Pataki, C. J. Still, J.R. Ehleringer, M.L. Avolio, N. Bettez, J. Cavender-Bares, P.M. Groffman, J.M. Grove, **S.J. Hall**, J. Heffernan, S.E. Hobbie, K. L. Larson, J.L. Morse, C. Neill, K. C. Nelson, J. O'Neil-Dunne, W.D. Pearse, R. Roy Chowdhury, M. Steele, M.M. Wheeler. 2019. Climate and lawn management interact to control C<sub>4</sub> plant distribution in residential lawns across seven U.S. cities. *Ecological Applications*, 29(4): e01884.
22. J. Padullés Cubino, Cavender-Bares, S. E. Hobbie, D.E. Pataki, M.L. Avolio, L.E. Darling, K.L. Larson, **S.J. Hall**, P.M. Groffman, T.L.E. Trammell, M.K. Steele, J.M. Grove & C. Neill. 2019. Contribution of non-native plants to the phylogenetic homogenization of US yard floras. *Ecosphere* 10(3): e02638. <https://doi.org/10.1002/ecs2.2638>.
23. M.L. Word, **S.J. Hall**, B. Robinson, B. Manneh, A. Beye, and A.J. Cease. Soil-targeted interventions could alleviate locust and grasshopper pressure in West Africa. *Science of the Total Environment*. 2019. *Science of the Total Environment*, 663: 632-643. <https://doi.org/10.1016/j.scitotenv.2019.01.313>.
24. J. Padullés Cubino, Cavender-Bares, S. E. Hobbie, D.E. Pataki, M.L. Avolio, L.E. Darling, K.L. Larson, **S.J. Hall**, P.M. Groffman, T.L.E. Trammell, M.K. Steele, J.M. Grove & C. Neill. Drivers of plant richness and phylogenetic composition in urban yards at the continental scale. 2019. *Landscape Ecology*, <https://doi.org/10.1007/s10980-018-0744-7>.
25. D.H. Locke, C. Polsky, J.M. Grove, P.M. Groffman, K.C. Nelson, K.L. Larson, J. Cavender-Bares, J.B. Heffernan, R.R. Chowdhury, S.E. Hobbie, N.D. Bettez, **S.J. Hall**, C. Neill, L. Ogden, J. O'Neil-Dunne. Residential household yard care practices along urban-exurban gradients in six climatically diverse U.S. metropolitan areas, *PLoS One*, 14(11): <https://doi.org/10.1371/journal.pone.0222630>

## 2018

26. B.A. Ball, M.P. Christman, and **S.J. Hall**. 2018. Nutrient dynamics during photodegradation of plant litter in the Sonoran Desert. *Journal of Arid Environments*, <https://doi.org/10.1016/j.jaridenv.2018.09.004>.
27. **S.J. Hall**, D.P. Huber, R. Flint Hughes. Invasion of Hawaiian rainforests by an introduced amphibian predator and N<sub>2</sub>-fixing tree increases soil N<sub>2</sub>O emissions. 2018. *Ecosphere*, 9(9).
28. D. Locke, C. Polsky, M. Avolio, T. Trammell, R.R. Chowdhury, J. M. Grove, J. Rogan, D.E. Martin, N.D. Bettez, J. Cavender-Bares, P. Groffman, **S.J. Hall**, J.B. Heffernan, S.E. Hobbie, K.L. Larson, J. Morse, C. Neill, L. Ogden, J. O'Neill-Dunne, D. Pataki, W. Pearse, C. Polsky, M.M. Wheeler. 2018. A Multi-City Comparison of Front and Backyard Differences in Plant Species Diversity and Nitrogen Cycling in Residential Landscapes. *Landscape and Urban Planning*, 178:102-11.

29. J.R. Blaszczak, M.K. Steele, B.D. Badgley, J.B. Heffernan, S.E. Hobbie, J.L. Morse, E.N. Rivers, **S.J. Hall**, C. Neill, D. Pataki, P.M. Groffman, and E.S. Bernhardt. 2018. Sediment Chemistry of Urban Stormwater Ponds and Controls on Denitrification. *Ecosphere* 9(6): e02318. doi.org/10.1002/ecs2.2318.
30. E.M Cook, R.A. Sponseller, N.B. Grimm, and **S.J. Hall**. 2018. Mixed method approach to assess atmospheric nitrogen deposition in arid and semi-arid ecosystems. *Environmental Pollution*, 239: 617-630.
31. W.D. Pearse, J. Cavender-Bares, S.E. Hobbie, M.L. Avolio, N. Bettez, R. Roy Chowdhury, L.E. Darling, P.M. Groffman, M. Grove, **S.J. Hall**, J.B. Heffernan, J. Learned, C. Neill, K.C. Nelson, D.E. Pataki, B.L. Ruddell, M.K. Steele, and T. Trammell. 2018. Homogenization of plant diversity, composition and structure in North American urban yards. *Ecosphere*,9(2).

## 2017

32. P.M. Groffman, M. Avolio, J. Cavender-Bares, N.D. Bettez, J.M. Grove, **S.J. Hall**, S.E. Hobbie, K.L. Larson, S.B. Lerman, D. Locke, J. Heffernan, J.L. Morse, C. Neill, K. Nelson, J. O'Neil-Dunne, D. Pataki, C. Polsky, R.V. Pouyat, R. Roy Chowdhury, M. Steele and T. Trammell. 2017. Ecological homogenization of residential macrosystems. *Nature Ecology and Evolution*. DOI: 10.1038/s41559-017-0191.
33. M. Wheeler, C. Neill, P.M. Groffman, M. Avolio, N. Bettez, J. Cavender-Bares, R. Roy Chowdhury, L. Darling, J.M. Grove, **S.J. Hall**, J. B. Heffernan, S. E. Hobbie, K.L. Larson, J. L. Morse, K.C. Nelson, L. Ogden, J.P.M. O'Neil-Dunne, D.E. Pataki, C. Polsky, M. Steele, and T. Trammell. 2017. Continental-scale homogenization of residential lawn plant communities. *Landscape and Urban Planning*, 165:54-62.
34. A. Sullivan, A.M. York, D.D. White, **S.J. Hall**, and S.T. Yabiku. 2017. De jure versus de facto institutions: trust, information, and collective efforts to manage the invasive mile-a-minute weed (*Mikania micrantha*). *International Journal of the Commons*. 11(1):171-199.
35. A. Sullivan, A.M. York; L. An, S.T. Yabiku, and **S.J. Hall**. 2017. How does perception at multiple levels influence collective action in the commons? The case of *Mikania micrantha* in Chitwan, Nepal. *Forest Policy and Economics*, 80(2017): 1-10. doi: 10.1016/j.forpol.2017.03.0012017
36. M.R. McHale, **S.J. Hall**, A. Majumdar, and N.B. Grimm. 2017. Carbon lost and carbon gained: A study of vegetation and carbon tradeoffs among diverse land uses in Phoenix, AZ. *Ecological Applications*, 27(2), 2017, pp. 644–661.

## 2016

37. H. Heavenrich and **S.J. Hall**. 2016. Elevated soil nitrogen pools after conversion of turfgrass to water-efficient residential landscapes. *Environmental Research Letters*, doi:10.1088/1748-9326/11/8/084007.
38. P.M. Groffman, J. Cavender-Bares, N. Bettez, J.M. Grove, **S.J. Hall**, J. B. Heffernan, S. E. Hobbie, K.L. Larson, D. Locke, J. L. Morse, C. Neill, K.C. Nelson, J.P.M. O'Neil-Dunne, L. Ogden, D.E. Pataki, C. Polsky, R. Roy Chowdhury. 2016. Satisfaction, water and fertilizer use in the American residential macrosystem. *Environmental Research Letters*, 11: 034004.
39. T.L.E. Trammell, D.E. Pataki, J. Cavender-Bares, P. Groffman, **S.J. Hall**, J.B. Heffernan, S.E. Hobbie, J.L. Morse, C. Neill, K.C. Nelson. 2016. Plant nitrogen concentration and isotopic composition in residential lawns across seven U.S. cities *Oecologia* 181(1): 271-285. DOI 10.1007/s00442-016-3566-9.
40. **S.J. Hall**, J. Learned, B. Ruddell, K.L. Larson, J. Cavender-Bares, N. Bettez, P.M. Groffman,

J.M. Grove, J.B. Heffernan, S.E. Hobbie, J.O. Morse, C. Neill, K.C. Nelson, J.P.M. O'Neil-Dunne, L. Ogden, D.E. Pataki, W.D. Pearse, C. Polsky, R. Roy Chowdhury, M.K. Steele, T.L.E. Trammell. 2016. Convergence of microclimate in residential landscapes across diverse cities in the United States. *Landscape Ecology* 31(1), 101-17. DOI: 10.1007/s10980-015-0297-y.

## 2015

41. K.L. Larson, K. C. Nelson, S. R. Samples, **S. J. Hall**, N. Bettez, J. Cavender-Bares, P. M. Groffman, J.M. Grove, J. B. Heffernan, S. E. Hobbie, J. Learned, J. L. Morse, C. Neill, L. A. Ogden, J. O'Neil-Dunne, D. E. Pataki, C. Polsky, R. Roy Chowdhury, M. Steele, T. L. E. Trammell. 2015. Ecosystem services in managing residential landscapes: Priorities, value dimensions, and cross-regional patterns. *Urban Ecosystems*, DOI 10.1007/s11252-015-0477-1.
42. M. Davis, E. Cook, S. Collins, and **S.J. Hall**. 2015. Top-down vs. bottom-up regulation of herbaceous primary production and composition in an arid, urbanizing ecosystem. *Journal of Arid Environments*, 116; 103-114. doi:10.1016/j.jaridenv.2015.01.018.
43. Y. Marusenko, F. Garcia-Pichel, and **S.J. Hall**. 2015. Ammonia-oxidizing archaea respond positively to inorganic N addition in desert soils. *FEMS Microbiology Ecology*, 91(2):1-11.
44. W.D. Shuster, S.D. Dadio, C.E. Burkman, S.R. Earl, and **S.J. Hall**. 2015. Hydrogeological assessments of parcel-level infiltration in an arid urban ecosystem. *Soil Science Society of America Journal*, doi:10.2136/sssaj2014.05.0200.

## 2014

45. C. Zhang, X. Li, D. Niu, **S.J. Hall**, C. Wan. 2014. Effects of simulated nitrogen deposition on soil respiration components and their temperature sensitivities in a semiarid grassland. *Soil Biology and Biochemistry* 75, 113-123.
46. C. Polsky, J.M. Grove, C. Knudson, P.M. Groffman, N. Bettez, J. Cavender-Bares, **S.J. Hall**, J.B. Heffernan, S.E. Hobbie, K.L. Larson, J.L. Morse, C. Neill, K.C. Nelson, L.A. Ogden, J. O'Neil-Dunne, D.E. Pataki, R. Roy Chowdhury and M.K. Steele. 2014. Assessing the homogenization of urban land management with an application to US residential lawn care. *Proceedings of the National Academy of Sciences*, 111(12): 4432-4437. doi/10.1073/pnas.1323995111.
47. M. K. Steele, J. B. Heffernan, N. Bettez, J. Cavender-Bares, P. M. Groffman, J. M. Grove, **S. Hall**, S. E. Hobbie, K. Larson, J. L. Morse, C. Neill, K. C. Nelson, J. O'Neil-Dunne, L. Ogden, D. E. Pataki, C. Polsky, R. Roy Chowdhury. 2014. Convergent surface water distributions in U.S. cities. *Ecosystems*, February: 1-13. doi: 10.1007/s10021-014-9751-y.
48. P.M. Groffman, J. Cavender-Bares, N.D. Bettez, J.M. Grove, **S.J. Hall**, J.B. Heffernan, S.E. Hobbie, Kelli L Larson, Jennifer L Morse<sup>1</sup>, Christopher Neill, K. Nelson, Jarlath O'Neil-Dunne, L. Ogden, D.E. Pataki, C. Polsky, R. Roy Chowdhury, M.K. Steele. 2014. Ecological homogenization of urban America. *Frontiers in Ecology and the Environment*, 12(1): 74-81.
49. D.K. Nakase., A.S. Hartshorn, K.A. Spielmann, and **S.J. Hall**. 2014. Eolian deposition and soil fertility in a prehistoric agricultural complex in central Arizona. *Geoarchaeology*, 29: 79-97.

## 2013 and earlier

50. **S.J. Hall**, J. Trujillo, D. Nakase, C. Strawhacker, M. Kruse-Peeples, H. Schaafsma, and J. Briggs. 2013. Legacies of prehistoric agricultural practices within plant and soil properties across an arid ecosystem. *Ecosystems*. doi 10.1007/s10021-013-9681-0.
51. Y. Marusenko, D.P. Huber, and **S.J. Hall**. 2013. Fungi mediate nitrous oxide production but not ammonia oxidation in arid and semi-arid soils. *Soil Biology and Biochemistry*, 63: 24-36.



52. C. Boone, E. Cook, , **S.J. Hall**, N.B. Grimm, C. Raish, D. Finch, M. Nation, and A. York. A comparative gradient approach to understanding and managing urban ecosystems. 2012. *Urban Ecosystems*, DOI 10.1007/s11252-012-0240-9.
53. Sponseller, RA., **S.J. Hall**, D. Huber, N.B. Grimm, J.P. Kaye, C. Clark, and S. Collins. 2012. Variation in monsoon precipitation drives spatial and temporal patterns of *Larrea tridentata* growth in the Sonoran Desert. *Functional Ecology*, DOI 10.1111/j.1365-2435.2012.01979.x.
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69. **S.J. Hall**, G. Asner and K. Kitayama. 2004. Land use, climate, and substrate controls over soil dynamics and N-oxide emissions in Borneo. *Biogeochemistry*, 70(1): 27-58.
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### Book chapters

1. K.A. Spielmann, **S.J. Hall**, M. Kruse-Peebles, D. Nakase, and J. Trujillo. 2015. Soil Texture and Agricultural Resilience in the Prehistoric Southwest: Farming on Perry Mesa, Arizona. *In: From Field to Table: Historical ecology of regional subsistence strategies*. USC Press.
2. **S.J. Hall**. Soil and the Future of Food: Challenges and Opportunities for Feeding 9 Billion People. 2014. *In: The Soil Underfoot: Infinite Possibilities for a Finite Resource*, CRC Press. G. Churchman and E. Landa (eds).
3. K.A. Spielmann, H. Schaafsma, J. Briggs, **S.J. Hall**, and M. Kruse. 2011. Legacies on the Landscape: The enduring effects of long-term human-ecosystem interactions. *In: M. Nelson, (ed), Movement, Connectivity, and Landscape Change, Proceedings of the 2008 Southwest Symposium of Archaeology*, Tempe, AZ. University Press of Colorado. 448 p..
4. **S.J. Hall**. Empirical Critical Loads of Nitrogen for US Ecoregions: Tropical and subtropical humid forests. 2010. *In: Assessment of Effects of N deposition and Empirical Critical Loads of Nitrogen for Ecoregions of the United States*. L.H. Pardo (ed). USDA Forest Service General Technical Report, 200 pp. URL: <http://treesearch.fs.fed.us/pubs/38109>
5. **S.J. Hall** and P.A. Matson. 2002. Environmental Variables Controlling Trace Gas Emissions from Forests: Acid Precipitation and Nitrogen Deposition. Pages 279-306 *in* H. Papen, R. Gasche, and H. Rennenberg, eds. *Trace Gas Exchange in Forest Ecosystems*. Fundamental and Applied Tree Physiology, Book Series, Volume 3. Kluwer Academic Publishers, The Netherlands.

### Reports, white papers, and datasets

1. Holmes C., **S.J. Hall**. 2019. Trace Metal Content of Community Garden Soils in Metro Phoenix, AZ. Environmental Data Initiative. <https://doi.org/10.6073/pasta/6ff7ea2732e8fc3a0418b56d9c7859c8>
2. J. Givens and **S.J. Hall**. 2018. Nature at ASU, 2016-18 Inaugural Report. Arizona State University, Tempe, AZ. <http://halllab.asu.edu/annual-report/>.
3. C. Holmes, H. Heavenrich, E. Shock, and **S.J. Hall**. 2018. Trace Metal Content of Community Garden Soils and Plants in metro Phoenix, AZ. Report prepared for a coalition of community gardens in metro Phoenix.

4. K. Hooton, S. Giannakorous, W. Campbell, M.H. Friedman, J. Groeneveld, L. Steger, and **S.J. Hall**. 2018. **Ozone Precursor, Particulate Matter and Particulate Matter Precursor Emissions from Composting Operations**: A Literature Review and Estimates Report Prepared for the Maricopa County Air Quality Department. 68 pp.
5. E. Cook, C. Boone, **S.J. Hall**, and M. Nation. 2009. Urban long-term research across a Southwest socio-ecological gradient. A White Paper prepared for the US Forest Service Southwest Research Station.
6. K.L. Larson, **S.J. Hall**, E. Cook, B. Funke, C. Strawhacker, and V. Turner. 2008. Social-ecological dynamics of residential landscapes: Human drivers of management practices and ecological structure in an urban ecosystem context. The Final Report from an Interdisciplinary Graduate Research and Education Training (IGERT) Workshop, 52 pp., School of Sustainability, Arizona State University.
7. **S.J. Hall**, S. Pfirman, and T. Titenberg. 2005. Environmental Programs at Liberal Arts Colleges. Findings and Recommendations for the Andrew W. Mellon Foundation. URL: <http://www.pkal.org/documents/EnvironmentalPrograms.pdf>

## CONFERENCE PRESENTATIONS

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### 2022

- Hall, S.J.**, N. Doud, S. Brownell, and M. Chew. Developing empathy and nature connectedness through technology at scale: How and when can it work, and to what end? Invited talk, Natural History Section, Ecol. Soc. of Am. Annual Meeting, Montreal, August 2022.
- Hall, S.J.**, R. Andrade, J. Brown, H. Bateman, S.B. Lerman, P. Warren, and K.L. Larson. Risk perceptions of urban wildlife vary by animal functional group, geography, and characteristics of people. Contributed poster, Ecol. Soc. of Am. Annual Meeting, Montreal, August 2022.
- Cocroft, A., J. Lewis, S.B. Lerman, J. Haight, and **S.J. Hall**. Neighborhood ethnicity and income influence urban mammal communities in metro Phoenix, Arizona. Contributed poster, Ecol. Soc. of Am. Annual Meeting, Montreal, August 2022.
- Haight, J., **S.J. Hall**, et al. Human-driven landscape changes and species traits shape mammal communities across North American ecoregions. Contributed poster, Ecol. Soc. of Am. Annual Meeting, Montreal, August 2022.

### 2021

- Cocroft, A., J.A. Brown, J.D. Haight, Z. Snyder, G. Goncalves, B. Thomas, J. Paredes-Sanchez, K. Larson, J. Lewis, S. Lerman, and **S.J. Hall**. Assessing the influence of income and ethnicity on wildlife in residential neighborhoods. 23rd Annual Symposium, Central Arizona–Phoenix Long-term Ecological Research Project (CAP LTER), Tempe (virtual), Arizona, May 2021.
- Haight, J.D., **S.J. Hall**, and J.S. Lewis. Wildlife communities respond to urban landscape characteristics across the Phoenix Metropolitan Area. 23rd Annual Symposium, Central Arizona–Phoenix Long-term Ecological Research Project (CAP LTER), Tempe (virtual), Arizona, May 2021.
- Goncalves, G., J. Paredes-Sanchez, B. Thomas, Z. Snyder, A. Cocroft, and **S.J. Hall**. The effects of ethnicity on species richness in metro Phoenix, Arizona. 2021 WAESO (Western Alliance to Expand Student Opportunities) Virtual Undergraduate Research Conference, March 2021.
- Paredes-Sanchez, J., G. Goncalves, B. Thomas, Z. Snyder, A. Cocroft, and **S.J. Hall**. Effects of water features and park size on native wildlife in Arizona neighborhood parks. 2021

WAESO (Western Alliance to Expand Student Opportunities) Virtual Undergraduate Research Conference, March 2021.

Thomas, B., J. Paredes-Sanchez, G. Goncalves, Z. Snyder, A. Cocroft, and **S.J. Hall**. Effects of city income on native species richness in metro Phoenix. 2021 WAESO (Western Alliance to Expand Student Opportunities) Virtual Undergraduate Research Conference, March 2021.

## 2020

Larson, K.L., R. Andrade, M.M. Wheeler, and **S.J. Hall**. Challenges and opportunities for integrated and multi-scalar social-ecological research. *International Association for Landscape Ecology*. April 2020.

Bing, I., K. Ragan, and **S.J. Hall**. Water presence along washes in Los Ojos, Sonora, Mexico. 2020 WAESO (Western Alliance to Expand Student Opportunities) Undergraduate Research Conference, Tempe, AZ, March 2020.

Renteria, K., M. Clark, and **S.J. Hall**. Impacts of invasive plant species on culturally important plants in a biodiversity hotspot. 2020 WAESO (Western Alliance to Expand Student Opportunities) Undergraduate Research Conference, Tempe, AZ, March 2020.

Rodriguez-Garcia, R., K. Ragan, and **S.J. Hall**. Relationship between animal presence and water presence in washes in Sonora, Mexico. 2020 WAESO (Western Alliance to Expand Student Opportunities) Undergraduate Research Conference, Tempe, AZ, March 2020.

Kenney, D., K. Ragan, and **S.J. Hall**. Water presence in washes after storms in semi-arid Sonora, Mexico. 2020 WAESO (Western Alliance to Expand Student Opportunities) Undergraduate Research Conference, Tempe, AZ, March 2020.

Fleeger, M., K.L. Larson, M.M. Wheeler, R. Andrade, J.A. Brown, S.B. Lerman, **S.J. Hall**, and D.L. Narango. Who is abuzz about bees? Explaining residents' attitudes in Phoenix, Arizona. 22st Annual All Scientists Meeting of the CAP LTER, Tempe, AZ. January 2020.

Wheeler, M.M., K.L. Larson, E.M. Cook, and **S.J. Hall**. Change over time in privately-managed residential vegetation: Resident actions promote dynamic plant communities. 22st Annual All Scientists Meeting of the CAP LTER, Tempe, AZ. January 2020.

Haight, J.D., **S.J. Hall**, and J.S. Lewis. Species richness of mammals and terrestrial birds across a gradient of urbanization in central Arizona. 22st Annual All Scientists Meeting of the CAP LTER, Tempe, AZ. January 2020

Brown, J.A., A.J. Basile, H.L. Bateman, S.B. Lerman, P.S. Warren, P. Deviche, and K. Sweazea. No fry zones: Birds' response to restaurant distributions in the Phoenix metropolitan area. 22st Annual All Scientists Meeting of the CAP LTER, Tempe, AZ. January 2020.

## 2019

D. Narango, S. Lerman, P. Groffman, M. Avolio, J. Cavendar-Bares, M. Grove, **S.J. Hall**, J. Heffernan, S. Hobbie, J. Morse, C. Neill, D. Pataki, T. Trammell. Patterns of local and landscape scale management on urban bird communities across six major metropolitan areas: Do yards matter? *American Ornithological Society*, Albuquerque, NM.

M. Clark, **S.J. Hall**, and M. Shrestha. Perceptions of Invasive Plants: A Case-study from Sub-tropical Nepal. *Society for Applied Anthropology*. Portland, OR.

M.M. Wheeler, K.L. Larson, D. Bergman, and **S.J. Hall**. Dynamics of social drivers of native plant abundance in privately managed urban landscapes. *International Association for Landscape Ecology*. Fort Collins, CO.

J.D. Haight, **S.J. Hall**, and J.S. Lewis. Underrepresentation of community approaches in the study of urban small mammals. *International Urban Wildlife Conference*, Portland, OR.

K.C.B. Weiss, C.A. Ray, J. Schipper, and **S.J. Hall**. Defining Mammalian Functional Traits in Urban

- Landscapes. International Urban Wildlife Conference, Portland, OR.
- M. Fleeger, K.L. Larson, M.M. Wheeler, R. Andrade, and **S.J. Hall**. Attitudes toward pollinators in residential landscapes of metropolitan Phoenix, Arizona. 21st Annual All Scientists Meeting of the CAP LTER, Tempe, AZ.
- K.C.B. Weiss, C.A. Ray, J. Schipper, and **S.J. Hall**. Conceptual methods for the definition of mammalian functional traits in urban landscapes. 21st Annual All Scientists Meeting of the CAP LTER, Tempe, AZ.
- D.N. Bergman, M.M. Wheeler, K.L. Larson, and **S.J. Hall**. Do attitudes towards native flora predict landscaping choices in privately managed urban landscapes?
- E.M. Cook, P.E. Padgett, and **S.J. Hall**. Desert herbaceous composition impacted by co-occurring pollutants in urban ecological airshed. 21st Annual All Scientists Meeting of the CAP LTER, Tempe, AZ.

#### 2018-14

- R. Manandhar, M.D. Clark, **S.J. Hall**, S. Yabiku, S. Murphy, and D. Ghimire. Land managers drive plant community dynamics: Assessing a low-technology intervention to control *Mikania micrantha* in the community forests of Chitwan, Nepal. 2018 Mountains in a Changing World Conference, Kathmandu, Nepal.
- M.M. Wheeler, K.L. Larson, E.M. Cook and **S.J. Hall**. Land managers drive plant community dynamics: A case study of change over time in Phoenix residential neighborhoods. 2018 Meeting of the Ecological Society of America, New Orleans, LA.
- K.C.B. Weiss, R. Lipfert, T. Sprague, J. Schipper and **S.J. Hall**. Mammal community composition and connectivity through an urban corridor. 2018 Meeting of the Ecological Society of America, New Orleans, LA.
- M.D. Clark, Q. Zhao, R. Manandhar, A.V. Sullivan, A.M. York, D.J. Ghimire, S.T. Yabiku and **S.J. Hall**. Social and ecological drivers of invasive plant species distribution in community forests of subtropical Nepal. 2018 Meeting of the Ecological Society of America, New Orleans, LA.
- C. Beauclaire Reyes, A. Bailey, L. Steger, M.M. Wheeler, and **S.J. Hall**. Plant species diversity and community composition of alternative yards in Phoenix, AZ. 2018 CAP LTER All Scientists Meeting, Tempe, AZ.
- C. Ribeiro, M.M. Wheeler, L. Steger, and **S.J. Hall**. Shrubs alter patterns of inorganic nitrogen availability in native desert parks across metropolitan Phoenix. 2018 CAP LTER All Scientists Meeting, Tempe, AZ.
- M.M. Wheeler, S.L. Collins, N.B. Grimm, C. Clark, R.A. Sponseller, E.M. Cook, and **S.J. Hall**. Nutrient enrichment alters annual plant community composition in the northern Sonoran Desert. 2018 CAP LTER All Scientists Meeting, Tempe, AZ.
- J.M. Grove, K.L. Larson, P. M. Groffman, **S.J. Hall**, D. Locke, A. York, S.B. Lerman. The new American farmers and foresters: Residential lands and their owners as the new stewards of American lands. 2017 Meeting of the Ecological Society of America, Portland, OR
- M.M. Wheeler, S.L. Collins, N.B. Grimm, C. Clark, R.A. Sponseller, E.M. Cook, and **S.J. Hall**. Global change in the desert: Effects of increased nitrogen on diverse annual plant communities. 2017 Meeting of the Ecological Society of America, Portland, OR.
- C. Holmes, H. Heavenrich, and **S.J. Hall**. Trace Metal Content of Community Garden Soils in metro Phoenix, AZ. 2017 Southwest Agricultural Summit, Yuma AZ.
- M.M. Wheeler, E. Vivoni, and **S.J. Hall**. Residential soil water model evaluation to improve outdoor water use recommendations in Phoenix, Arizona. 2017 CAP LTER All Scientists Meeting, Tempe, AZ.

- H.J. Carrillo Hernandez, M.D. Clark, and **S.J. Hall**. 2017. Bridging the Gap Between Employer Expectations and University Curricula for Undergraduate Students in Conservation Science. Annual Research Conference for the Western Alliance to Expand Student Opportunities (WAESO) Program, Tempe, AZ, March 2017.
- J. Givens and **S.J. Hall**. 2017. Building a Diverse Undergraduate Community in Sustainability and Conservation Science. Annual Research Conference for the Western Alliance to Expand Student Opportunities (WAESO) Program, Tempe, AZ, March 2017.
- M.M. Wheeler, E. Vivoni, and **S.J. Hall**. Residential soil water model evaluation to improve outdoor water use recommendations in Phoenix, Arizona. American Geophysical Union Annual Conference, San Francisco, December 2016.
- S.J. Hall** and C. Holmes. Trace metals in community gardens in metro Phoenix. Desert Ag Conference, Gilbert, AZ.
- T.L.E. Trammell, D.E. Pataki, P.M. Groffman, N. Bettez, J.L. Morse, J. Cavender-Bares, J.M. Grove, **S.J. Hall**, J. Heffernan, S.E. Hobbie, C. Neill, K.C. Nelson, L.A. Ogden. Soil nitrogen isotope composition in residential lawns across six U.S. cities. Soil Science Society of America Conference, Phoenix, AZ, October 2016.
- M. Clark, S. Yabiku, and **S.J. Hall**. Evaluating the effects of *Mikania micrantha* on plant species richness and diversity throughout invaded community forests in the buffer zone of Chitwan National Park, Nepal. 2016 Ecological Society of America conference, Ft. Lauderdale, FL.
- M.M. Wheeler, J. Learned, H. Heavenrich, and **S.J. Hall**. Homogenization of residential yard soil moisture in US cities. 2016 INTERFACE Meeting, St. Pete's Beach, FL.
- M.M. Wheeler, J. Learned, H. Heavenrich, and **S.J. Hall**. Regional patterns and homogenization of residential yard soil moisture in US cities. 2016 CAP LTER All Sci. Meeting, Tempe, AZ.
- H. Heavenrich and **S.J. Hall**. Soil nutrients during a 'sustainable' urban grassland to shrubland transition. 2015 Meeting of the Ecological Society of America, Baltimore, MD.
- J. Shaw, **S.J. Hall**, and J. Learned. Patterns of surface rock cover and implications for plant, water, and nutrient dynamics at long-term ecological research sites in Phoenix, AZ. 2015 Meeting of the Ecological Society of America, Baltimore, MD.
- H. Heavenrich, **S.J. Hall**, J. Rittenhouse, and C. Holmes. Where has all the nitrogen gone? Investigating soil nutrients during the transition from lawn to xeric landscapes. 2015 CAP LTER All Scientists Meeting, Tempe, AZ.
- J. Shaw, **S.J. Hall**, and J. Learned. Patterns of surface rock cover and implications for plant, water, and nutrient dynamics at long-term ecological research sites in Phoenix, AZ. 2015 CAP LTER All Scientists Meeting, Tempe, AZ.
- J. Learned and **S.J. Hall**. Residential Landscape Microclimates Mitigate the UHI in Cities across the US. American Geophysical Union Annual Meeting, San Francisco, CA.
- S.J. Hall**, J. Learned, B. Ruddell, C. Holmes, K. Larson, J. Cavender-Bares, N. Bettez, P.M. Groffman, J.M. Grove, J.B. Heffernan, S.E. Hobbie, J.L. Morse, C. Neill, K.C. Nelson, J. O'Neill-Dunne, L. Ogden, D.E. Pataki, W.D. Pearse, C. Polsky, R. Roy Chowdhury, and M.K. Steele. Convergence of local climate in outdoor home environments across diverse ecoregions of the United States. 2014 Annual Meeting of the Ecological Society of America, August, Sacramento, CA.
- W.D. Pearse, J. Cavender-Bares, S.E. Hobbie, M.L. Avolio, N. Bettez, R. Roy Chowdhury, L.E. Darling, P.M. Groffman, M. Grove, **S.J. Hall**, J.B. Heffernan, J. Learned, C. Neill, K.C. Nelson, D.E. Pataki, B.L. Ruddell, M.K. Steele, and T. Trammell. Homogenization of plant diversity in six major USA cites: integrating socio-economic, environmental, and phylogenetic information. 2014 Annual Meeting of the Ecological Society of America, August, Sacramento, CA.

- S.T. Yabiku, **S.J. Hall**, A.M. York, J.E. Glick and D.J. Ghimire. Tablet-assisted collection and mapping of human disturbance activities across complex social-ecological landscapes. 2014 Annual Meeting of the Ecological Society of America, August, Sacramento, CA.
- J. Dai, **S.J. Hall**, L. An, S.T. Yabiku, D. Ghimire, and A.M. York. Linking Forest Health with Vulnerability to an Invasive Plant Species: A Case Study in Chitwan, Nepal. 2014 Meeting of the American Association of Geographers, April, Tampa, FL.
- M. Morgan, E. Barton, J. Learned, and **S.J. Hall**. Low impact development ordinances: How are they influencing landscape design? 2014 CAP LTER All Scientists Meeting, Tempe, AZ.
- C. Holmes and **S.J. Hall**. Soil contamination and the implications of growing food in urban gardens. 2014 CAP LTER All Scientists Meeting, Tempe, AZ.
- E. Barton, M. Morgan, J. Learned, B. Ruddell, and **S.J. Hall**. A comparison of yard-scale climates in the Phoenix metro area. 2014 CAP LTER All Scientists Meeting, Tempe, AZ.
- M. Christman, **S.J. Hall**, and B. Ball. The dynamics of N and P during *Ambrosia* litter degradation in urban versus rural desert environments. CAP LTER All Scientists Meeting and 2013 CAP LTER Site Review Symposium; September, Tempe, AZ.
- H. Heavenrich and **S.J. Hall**. Hidden pools of nitrate in emerging sustainable landscapes. 2014 CAP LTER All Scientists Meeting, Tempe, AZ.
- E.M. Cook and **S.J. Hall**. Spatial distribution of ecologically relevant urban air pollutants in the Sonoran Desert. 2014 CAP LTER All Scientists Meeting, Tempe, AZ.
- S.T. Yabiku, A. York, and **S.J. Hall**. Armed conflict, community forest user groups, and natural resource management, 2014 Annual Meeting of the Population Assoc. of Am., Boston, MA.

### 2013 and earlier

- E. Cook and **S.J. Hall**. Spatial distribution of ecologically relevant atmospheric compounds in native Sonoran Desert protected areas within and surrounding Phoenix, Arizona. 2013 meeting of the National Atmospheric Deposition Program, Salt Lake City, UT.
- L. Turnbull, **S.J. Hall**, B. Ball, J. Sparks, and N. Grimm. Mechanisms regulating the fate of nitrogen in deserts. American Geophysical Union, Chapman Conference, Tucson, AZ.
- B. Shrestha, **S.J. Hall**, S. Yabiku, A. York, L. An, D. Ghimire, J. Glick, and S. Murphy. Human community dynamics and social-ecological vulnerability in a biodiversity hotspot. 2013 CAP LTER All Scientists Meeting, Tempe, AZ.
- E. Cook, P. Padgett, and **S.J. Hall**. Effects of multiple pollutants on growth of desert annual plants. 2013 CAP LTER All Scientists Meeting, Tempe, AZ.
- D. Huber, K. Lohse, R. Sponseller, and **S.J. Hall**. Climate controls the fate of anthropogenic nitrogen additions in desert ecosystems. 2013 CAP LTER All Sci. Meeting, Tempe, AZ.
- J. Learned, D. Huber, D. Nakase, E. Vivoni, and **S.J. Hall**. Experimentally validated mathematical modeling reveals the influence of surface rock cover on soil water availability in a semi-arid ecosystem. 2013 CAP LTER All Scientists Meeting, Tempe, AZ.
- M. Camba, E. Warkus, D. Nakase, and **S.J. Hall**. Surface rock affects succulent distribution in a prehistorically active agricultural landscape. 2013 CAP LTER All Sci. Meeting, Tempe, AZ.
- S.J. Hall**, Y. Marusenko, E. Cook, D. Huber, and K. Wyant. Nutrient enrichment in an arid, urbanizing ecosystem: Snapshots of surprises. 2012 Annual Meeting of the Ecological Society of America, August, Portland, OR.
- B. Ramirez, Y. Marusenko, and **S.J. Hall**. Ammonia oxidation across patch types the Sonoran Desert. 2012 Annual Meeting of the Ecological Society of America, August, Portland, OR.
- E. Warkus, M. Camba, D. Nakase, C. Strawhacker, J. Learned, and **S.J. Hall**. Effects of surface rock on succulent distribution in a prehistorically active landscape. 2012 Annual Meeting of the Ecological Society of America, August, Portland, OR.



- E. Cook, **S.J. Hall**, and R.A. Sponseller. Nitrogen deposition is lower than expected in the Phoenix metro area. 2011 CAP LTER Poster Symposium, January, Tempe, AZ.
- Y. Marusenko, K. Wyant, **S.J. Hall** and J. Sabo. Links between soil food webs and ecosystem function in urban landscapes. 2011 CAP LTER Poster Symposium, January, Tempe, AZ.
- B. Ramirez, Y. Marusenko, and **S.J. Hall**. Ammonia oxidizing communities under legumes in the Sonoran Desert. 2011 CAP LTER Poster Symposium, January, Tempe, AZ.
- E. Warkus, D. Nakase, and **S.J. Hall**. Effects of surface rock on succulent distribution in the Agua Fria National Monument. 2011 CAP LTER Poster Symposium, January, Tempe, AZ.
- M. Schmoker, E. Cook, S. Collins, and **S.J. Hall**. Top down vs. bottom up effects on plant production and community composition across an urban-rural gradient. 2011 CAP LTER Poster Symposium, January, Tempe, AZ.
- J. Angstmann, **S.J. Hall**, E. February, A. West, N. Allsopp, and W. Bond. Nitrogen deposition in a southern hemisphere biodiversity hotspot within and surrounding Cape Town, South Africa. 2011 American Geophysical Union Fall Meeting, December, San Francisco, CA.
- E. Cook, **S.J. Hall**, R.A. Sponseller, D.P. Huber, S. Earl, and N.B. Grimm. Atmospheric nitrogen deposition fluxes in arid Phoenix, Arizona: A comparison of sampling methods. 2011 Annual Meeting of the Ecological Society of America, August, Austin, TX.
- M. Schmoker, E. Cook, S. Collins, and **S.J. Hall**. Impacts of urban herbivory on primary production of herbaceous annual plants in an arid ecosystem. 2011 Annual Meeting of the Ecological Society of America, August, Austin, TX.
- J. Sayles, K.L. Larson, E. Cook, and **S.J. Hall**. The influence of environmental values and neighborhood context on household & neighborhood biodiversity. 2011 Annual Meeting of the American Association of Geographers, April, Seattle, WA.
- M. Kruse-Peeples, D. Nakase, and **S.J. Hall**. Soil Nutrient Dynamics and Moisture Retention of Prehistoric Runoff Agricultural Systems the Perry Mesa Region, Central Arizona. Organized symposium: Approaches to Prehispanic Agricultural Soils in the New World. 2011 Society for American Archaeology Annual Meeting, April, Sacramento, CA.
- J. Trujillo, D. Nakase, K. Spielmann, M. Kruse-Peeples, and **S.J. Hall**. Legacies on the Landscape: Long-term socio-ecological interactions in the US Southwest. 2010 Decade of Discovery Science Symposium, Bureau of Land Management, May, Albuquerque, NM.
- D. Nakase, T. Hartshorn, and **S.J. Hall**. Fertility and prehistoric farming of semi-arid soils in the southwestern US. 2010 Annual Meeting of the Ecological Society of America, August, Pittsburgh, PA.
- Y. Marusenko, D. Huber, P. Ortiz, and **S.J. Hall**. Fungal and bacterial control of the N cycle in arid and semi-arid ecosystems. 2010 Annual Meeting of the Ecological Society of America, August, Pittsburgh, PA.
- Y. Marusenko, D. Huber, and **S.J. Hall**. Fungi dominate N<sub>2</sub>O production in arid and semi-arid ecosystems. 2009 LTER All Scientists Meeting, Estes Park, Colorado.
- Y. Marusenko, P. Herckes, and **S.J. Hall**. Fate of PAH compounds in an arid city. 2009 LTER All Scientists Meeting, Estes Park, Colorado.
- S.J. Hall**, R. Sponseller, N.B. Grimm, C. Clark, S. Collins, D. Huber, J.P. Kaye, and J. Allen. Ecosystem response to the urban atmosphere in the Sonoran Desert. 2009 Annual Meeting of the Ecological Society of America, August, Albuquerque, NM.
- E. Cook, C. Strawhacker, K.L. Larson, and **S.J. Hall**. Values and other social drivers of the management and ecological properties of residential landscapes in Phoenix, Arizona. 2009 Annual Meeting of the Ecological Society of America, August, Albuquerque, NM.
- Y. Marusenko, P. Herckes, and **S.J. Hall**. Fate of PAH compounds in an arid city. 2009 Annual

- Meeting of the Ecological Society of America, August, Albuquerque, NM.
- M. Salem, E. Cook, K.L. Larson, and **S.J. Hall**. Effects of landscape cover on microclimate in urban residential landscapes of the Phoenix metropolitan area. 2009 Annual Meeting of the Association of American Geographers, March, Las Vegas, NV.
- K.L. Larson, E. Cook, and **S.J. Hall**. Social-ecological dynamics of residential landscapes in an urban ecosystem context. 2009 Annual Meeting of the Association of American Geographers, March, Las Vegas, NV.
- B. Funke, E. Cook, C. Strawhacker, V. Turner, K.L. Larson, and **S.J. Hall**. Legacy effects and the socio-ecological dynamics of residential landscapes: An interdisciplinary study in Phoenix, AZ. 2009 Annual Meeting of the Association of Am. Geographers, March, Las Vegas, NV.
- Y. Marusenko, P. Herckes, and **S.J. Hall**. Fate of PAH compounds in an arid city. 10<sup>th</sup> Annual GELSS Symposium (Graduates in Earth, Life, and Social Sciences), February, Tempe, AZ.
- C. Strawhacker, E. Cook, K. Larson, and **S.J. Hall**. Values and other social drivers of the management and ecological properties of residential landscapes in Phoenix, Arizona. 11<sup>th</sup> Annual Poster Symposium of the CAP LTER project, Tempe, AZ.
- S.J. Hall**, H. Schaafsma, J. Trujillo, and J. Briggs. Legacies of prehistoric agriculture in the arid US Southwest. Organized symposium participant, Combining Archaeological and Ecological Perspectives to Understand the Reciprocal Dynamics of People and the Ecosystems that Sustain Them. 2008 Ecological Society of America, Aug., Milwaukee, WI.
- E. Cook, **S.J. Hall**, and K.L. Larson. Drivers of residential landscape structure and functioning: a literature review and synthesis. 2008 Ecological Society of America, August, Milwaukee, WI.
- K.L. Larson, **S.J. Hall**, E. Cook, and J. Vittall. Exploring social and ecological aspects of residential landscapes in metropolitan Phoenix, AZ. 14th International Symposium on Society and Resource Management, June, Burlington, VT.
- J.O. Allen, D.A. Gonzales, R.A. Sponseller, **S.J. Hall**, N.B. Grimm. Atmospheric Dry Deposition of Gaseous and Particulate Nitrogen to Urban-Influenced Sonoran Desert Sites in Central Arizona. 18th Conference on Atmospheric Biogeosciences, April, Orlando, Florida.
- E. Cook, **S.J. Hall**, and K.L. Larson. Drivers of residential landscape structure and functioning: a literature review and synthesis. 9<sup>th</sup> Annual GELSS Symposium (Graduates in Earth, Life, and Social Sciences), February, Tempe, AZ.
- Pfirman, S., **S. Hall**, T. Tietenberg, and D. Rhoten, Interdisciplinary Environmental Programs: Opportunities and Challenges for Faculty and Students. Paper No. 79-13, Geological Society of America Annual Meeting, October, Denver, CO
- S.J. Hall**, R.A. Sponseller, N.B. Grimm, J.P. Kaye, and J.O. Allen. Ecosystem response to the urban atmosphere in the Sonoran Desert. Ecological Society of America, San Jose, California.
- R. Davies and **S.J. Hall**. Effects of native urban landscape restoration on belowground ecological processes. 2007 Ecological Society of America, August, San Jose, California.
- T. Ontl, H. Schaafsma, J. Briggs, and **S.J. Hall**. Legacies of prehistoric agriculture on herbaceous plant community composition in a desert grassland. 2007 Ecological Society of America, August, San Jose, California.
- K. Spielmann, Briggs, J., and **S.J. Hall**. The Changing Face of Ecology: Integrating Archaeology and Ecology in the Study of Landscape Transformation. Interdisciplinary Integration and Practice: Reconciling Humans and Nature. 2006 XIV International Conference of the Society for Human Ecology, October, Estes Park, CO.
- R. Sponseller, **Hall, S.J.**, N.B. Grimm, J. Kaye, J. Allen, D. Huber, J. Riddell, Q. Stewart, C. Kochert, and A. Ghimire. 2006 US LTER All Scientists Meeting, Estes Park, CO. The urban atmosphere alters ecosystem processes in the Sonoran Desert
- S.J. Hall**, N.B. Grimm, and R. Sponseller. Ecosystem responses to the urban atmosphere in the

- Sonoran Desert: Initial patterns. 2006 Ecol. Soc. of Am. Annual Meeting, Memphis, TN.
- S.J. Hall**, and G.P. Asner. Scaling biogenic trace gas emissions from plots to regions: Effects of *Morella faya* (Fire tree) stand size on soil N<sub>2</sub>O and NO<sub>x</sub> fluxes in Hawai'i Volcanoes National Park. 2005 Ecological Society of America Annual Meeting, Montreal, Canada.
- C. O'Brady, J. Creveling, and **S.J. Hall**. Neighborhood effects of N-fixing *M. faya* on understory plant nutrients and soil N cycling. 2005 Ecol. Soc. of Am. Annual Meeting, Montreal.
- J. Ahrens, **S.J. Hall**, P. Marchand, S.A. Johnson. Checking the forest pulse 20 years after disturbance: Effects of forest thinning on community and ecosystem dynamics. 2004 Ecological Society of America Annual Meeting, Portland, Oregon.
- D.L. Lombardozzi and **S.J. Hall**. Effects of an invasive, nitrogen-fixing tree on soil trace gas emissions in Hawai'i Volcanoes National Park. 2004 Ecol. Soc. of Am. Annual Meeting, Portland, Oregon.
- Grimm, N.B., J.P. Kaye, **S.J. Hall**, J.O. Allen, and D.B. Lewis. A distinct urban biogeochemistry? 2004 Ecological Society of America Annual Meeting, Portland, Oregon.
- S.J. Hall**, Factors controlling nitrification in tropical soils. 2003 Ecological Society of America Annual Meeting, Savannah, Georgia.
- S.J. Hall**, N.B. Grimm, S.L. Collins, K. Gade, D. Hope, G.D. Jenerette, A.P. Kinzig, J.D. Schade, R. Sponseller, J.R. Welter, W. Wu, T. Flores, M. Luck, R. Erikson, and C. Kochert. NO<sub>x</sub> emissions and uptake by urban soils. 2002 CAP LTER Symposium, Tempe, AZ.
- Hall, S.J.**, G.P. Asner and K. Kitayama. Effects of N additions on N-oxide emissions and soil N dynamics across a matrix of land use, elevation, soil age, and soil type in Borneo, Malaysia. 2001 Ecological Society of America Annual Meeting, Madison, Wisconsin.
- Hall, S.J.** and P.A. Matson. Soil nitrogen dynamics explain patterns of N trace gas losses following N additions in N and P-limited Hawaiian rain forests. 1998 Ecol. Soc. of America Annual Meeting, Baltimore, Maryland.
- Hall, S.J.** and P.A. Matson. Factors controlling N gas losses in nitrogen fertilized N and P-limited Hawaiian rain forests. 1997 Ecological Soc. of America Annual Meeting, Albuquerque, NM.
- Hall, S.J.** and P.A. Matson. Nitrogen trace gas responses to experimental long-term nitrogen inputs in N and P-limited Hawaiian rain forests. 1996 Ecological Society of America Annual Meeting, Providence, Rhode Island.
- Ruehl, W., **S. Hall**, H. Rothermel and R. Moorhead. Comparative Clinical Pathology of Retroviral Infections in Cats and People. 1990 Proceedings of the Annual Meeting of the American College of Veterinary Pathologists, Phoenix, Arizona.
- Ruehl, W.W. and **S.J. Hall**. Clinical Signs, Laboratory Abnormalities and Survival of Western Cats with Antibodies to FIV. 1990 Proceedings of the Annual Meeting of the American College of Veterinary Internal Medicine, Washington D.C.
- Hall, S.J.** Intertidal Movements of the Woolly Sculpin, *Clinocottus analis*. Hopkins Marine Station Spring Papers. 1989 China Point Symposium, Hopkins Marine Station, Monterey, CA.

## COURSE DEVELOPMENT AND TEACHING

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- Graduate courses (# students/year; in-person)
  - 2017-22: Grand Challenges in Environmental Life Sciences (~12)
  - 2005-06, 2008, 2010, 2012: Soil Ecology (10-20) – Graduate/Undergraduate
  - 2007: Socio-ecology of Residential Landscapes (5)
  - 2016-2011: Ecosystem Ecology (40-60) - Graduate/Undergraduate
- Undergraduate courses (# students/year)

- 2015-22: Conservation of Biodiversity (~120), in-person and ASU Online
- 2020: Environmental Careers: Landing a Job You Love (~100), ASU Online
- 2017-21: Nature Guides: Peer Mentoring in ConBio/Eco (~5-10), in-person
- 2017: Sustainability Challenges of the Wildlife Economy in S. Africa (11), in-person
- 2011-2008: Biology & Society (~100-200); in-person
- 2005: Introduction to Environmental Science (75); in-person
- Guest Instructor (# students; in-person): Methods in Conservation Biology and Ecology (20); Earth's Critical Zone (15); The Global Classroom (15); Sustainable Ecosystems (40); Society and the Environment (15)
- Colorado College (1999-2005) and University of Colorado (2000-01) courses: Introduction to Environmental Science; Biogeochemistry; Earth Science; Sustainable Cities; Introduction to Ecology; and Environmental Statistics; Society and Earth Science

## INVITED WORKSHOPS AND TALKS

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- Distinguished Ecology Lecture Series, Michigan Technological University. Invited speaker, September 2022.
- University of New Hampshire, Natural Resources and Earth System Science Program. Invited speaker, October 2019.
- Global Drylands Center, Pulse Reserve Symposium and Workshop. Invited participant. Fountain Hills, AZ, April 2018.
- 2018 LTER All Scientists Meeting Workshop, Camera trapping for long-term monitoring of wildlife: Cross-network considerations. K.C.B. Weiss, H. Bateman, K. Kielland, and S.J. Hall, organizers.
- ESA Workshop: Invited panelist for workshop on “Women in Ecology: Unique Pathways, Common Experiences, and Next Steps to Addressing Remaining Challenges”. 2015 Ecological Society of America Centennial meeting, Baltimore, MD, August.
- ESA Lightning Session on Macrobiology: Invited speaker for Organized Oral Session on Macrobiology, "Going macro - is scaling up all the same?". 2015 Ecological Society of America Centennial meeting, Baltimore, MD, August, 2015.
- ESA Vice Presidents Forum, 2015 Ecological Society of America Centennial meeting. Invited symposium speaker for a special session on Frontiers in Science, Education, Management, and Policy to Address Pressing Environmental Issues: "Future Directions and Policy Implications of Research on Ecosystem Nutrient Pollution and Management." Baltimore, MD, August, 2015
- Southwest Agricultural Summit Trace Metal Content of Community Garden Soils in metro Phoenix, AZ." (Presented by former undergraduate Caitlin Holmes). February 2017.
- Desert Agriculture Conference, Arizona Crop Protection Assoc.. Invited speaker, "Trace Metal Content of Community Garden Soils in metro Phoenix, AZ." November, 2016.
- College of Letters & Sciences, Science and Mathematics Colloquium. Invited speaker, "Complex Ecological Effects of Urbanization in Arid Ecosystems." April, 2016.
- Lanzhou University, China: Invited speaker, “Complex ecological effects of urbanization in arid ecosystems”. July 2013.
- NSF Geoscience Education: Invited panelist, “Undergraduates and interdisciplinary natural-social science education”. University of Arizona, AZ, September, 2011.

- Tri-Society Annual Meeting (American Soc. of Agronomy, Soil Science Soc. of America, and the Crop Science Soc. of America): Invited speaker for a Cross-Divisional Special Session on Urban Grassland Soil and Water Quality: “A Social-Ecological Perspective on Residential Lawns and Lawn Alternatives”. Long Beach, CA, November, 2014.
- Soil Science Society of America, Annual Meeting: Invited symposium speaker, Urban Soil Restoration: “Designing residential landscapes to restore native ecological functioning to urban soils”. San Antonio, TX, October, 2011.
- University of California, Riverside, Dept. of Env. Science. Graduate student invitation, “Complex ecological effects of urbanization in arid ecosystems.” 2011.
- University of Arizona, Dept. of Soil, Water, and Environmental Sciences. Invited seminar speaker: “Complex ecological effects of urbanization in arid ecosystems”. Tucson, AZ, November 2014.
- University of Cape Town, South Africa, Dept. of Botany. Invited speaker, “Ecosystem Response to the Urban Atmosphere in the Sonoran Desert.” 2009.
- University of Cape Town, South Africa, Dept. of Botany and Conservation Biology. Invited speaker, “Urbanization and ecosystem services: Lessons from an arid US city.” 2007.
- Brown University, Dept. of Ecology and Evolutionary Biology. Invited speaker, “Long-term human manipulation of ecosystem services in the arid, US Southwest.” 2007.
- University of Minnesota, Dept. of Ecology, Evolution and Behavior. Graduate student invitation, Mary J. Cowan Memorial Lecture on Science Education: “Training interdisciplinary scientists for the 21<sup>st</sup> century.” 2007.
- Soil Science Society of America, Annual Meeting: “NO<sub>x</sub> and N<sub>2</sub>O emissions from urban ecosystems”. Invited speaker at the Dennis E. Rolston Symposium on Soil Biophysical and Environmental Controls on Greenhouse Gas Emissions. Indianapolis, November, 2006
- American Geophysical Union, Joint Assembly: “Ecosystem responses to urbanization across the Central Arizona-Phoenix (CAP) LTER site”. Invited Speaker at the Union Session: Impacts of Urbanization on Environmental Processes. Baltimore, May, 2006.
- Northern Arizona University, Forestry Seminar Series: “Scaling biogenic trace gases from plots to regions using remote sensing techniques.” 2006.
- Plenary Speaker, Arizona State University, Ninth Annual CAP LTER Poster Symposium “Xeriscapes: Our domesticated deserts.” Tempe, AZ, January 2007.
- University of Denver, Department of Biology. “Effects of nitrogen additions on nitrification in tropical soils.” Denver, 2003.
- Colorado State University, Department of Rangeland Ecology. “Linking soil microbial communities and ecosystem processes: structure and function of ammonium-oxidizer communities in tropical and temperate ecosystems.” Fort Collins, 2002.
- University of Colorado, Department of Evolution, Population, and Organismal Biology. “Factors controlling N-oxide emissions from soils: N availability and microbial community composition.” Boulder, 2001.
- The Colorado College, Science Colloquium. “Human Alteration of the Nitrogen Cycle: Air Pollution and Biological Invasions.” Colorado Springs, CO, 2003.
- The Colorado Springs School, Invited Speaker, (grades 9-12), Colorado Springs, CO, 2002.
- Pikes Peak Environmental Forum, Public Seminar. “Emerging trends in global environmental change.” Colorado Springs, CO, 1999.

- Sigma Xi Research Society, Public Seminar. Agriculture and the environment: Balancing human needs and ecological costs. Colorado Springs, CO, 1998.
- The Colorado College, Environmental Science Program. “Nitrogen on the Move: Human alteration of the global nitrogen cycle.” Colorado Springs, CO, 1997.

## COMMUNITY EMBEDDEDNESS and PROFESSIONAL SERVICE

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### Science advisor for local government offices and non-profits

- Author/Advisor, Metro Phoenix Community Garden Collective, “Trace Metal Content of Community Garden Soils and Plants in Metropolitan Phoenix, AZ”. 2018 Technical report.
- Author/Advisor, Maricopa Co. Air Quality Dept., “Evaluation of Ozone and PM Precursor Emissions from Composting Facilities in Maricopa County”. 2017 Technical report.
- Science Advisory Board, McDowell Sonoran Conservancy Field Institute, 2016-present
- Principal Investigator and Citizen Science Coordinator, Community Wildflower Survey of the Central Arizona Conservation Alliance, 2015.

### Community Outreach

- Keynote speaker: McDowell Sonoran Conservancy Symposium, October 2015.
- Keynote speaker: Arizona Science Teachers Night at the Arizona Science Center, Phoenix, AZ. ‘Urban Ecology: Studying the Science of Home, January 2012.
- Invited speaker: Retired Bank of America Employees Luncheon, Tempe, AZ. ‘Global Environmental Change’, June 2011.
- Invited speaker: Girl Scouts of America, Lafayette, CA chapter (high school, grade 10). ‘Food and Sustainability’, June 2010. Students received a copy of Omnivore’s Dilemma (Michael Pollan) after the discussion.
- Invited panel moderator: ‘21<sup>st</sup> Century Challenges for Conservation Biology’, Central Arizona Chapter of the Society for Conservation Biology”, April 2010.
- Invited seminar speaker: McDowell Sonoran Conservancy: “Atmospheric pollution impacts on the Sonoran Desert”, May 2008.
- Invited guest lecturer: CAP LTER Ecoplexity summer teacher workshop: “Soils and nitrogen cycling in urban ecosystems”, June 2007.
- ASU Spotlight Faculty video: “Long-term human impact on the landscape” Sept. 2006.
- Invited public lecture: Unitarian Universalist Church, Social Justice Committee, Surprise, AZ. “Ecosystem consequences of global climate change.” Sept. 2006.
- Invited public lecture: National Association for Retired Federal Employees, Phoenix, AZ. “Ecosystem Services in our Cities.” June 2006.

### National Service

- Ecological Society of America
  - Governing Board, Elected Member-at-Large (2016-2018); Early Career Section Mentor (2016); Oral session presider (2004)
- Program reviewer for undergraduate environmental degree programs
  - 2018 Environmental Science and Policy Program at Chapman University; 2017 Environmental Analysis Program at Pomona College; 2003 Environmental programs at ten liberal arts colleges (Barnard, Bates, Bowdoin, Colby, Colgate, Colorado College,



Hobart & William Smith, Lewis & Clark, Middlebury, Mount Holyoke, and Whitman); see <http://www.pkal.org/documents/EnvironmentalPrograms.pdf>

- Panel reviewer and external reviewer:
  - National Science Foundation (2020 and earlier): Ecosystem Science; Coupled Natural-Human Systems Program; Doctoral Dissertation Improvement Grants; Biocomplexity in the Environment; Coupled Biogeochemical Cycles; CAREER program.
  - NASA: Large-Scale Biosphere-Atmosphere Experiment in Amazonia Program
- 2011, Panel Speaker, NSF Advisory Board, 2011.
- 2007/04, Undergraduate Education Advisory Board, Andrew W. Mellon Foundation.

## University Service

2020-2015

- SOLS Grad Programs committee; Panelist, New Assistant Professor Workshop, College of Liberal Arts and Sciences; College of Liberal Arts and Sciences Curriculum Committee; Speaker on "Diversity in the Life Sciences", SOLS Initiative for Maximizing Student Development program (IMSD); Udall Scholarship for the Environment and Native American Studies, Reviewer; CAP LTER Site Manager search committee; SOLS Graduate Programs Committee; SOLS Director Search Committee; ASU-OKED Limited Submiss. Committee; SOLS Strategic Assessment Committee; Presenter, ASU-Desert Discovery Center partnership, ASU Foundation; Faculty coordinator, Biomimicry 3.8 MS program.

2015-and earlier

- ASU: SOLS Undergrad Programs Committee; Chair, Lisa Dent Memorial Fellowship (for women ecologists at ASU); Faculty sponsor, ASU chapter of Ecological Society of America SEEDS program ("SEEDS Devils) for underrepresented groups in ecology; Equal Opportunity representative, Microbial, Community, and Ecosystem ecology faculty search committee; Invited speaker, Preparing Future Faculty Seminar Series (2 yrs); Participant, NSF site review for CAP LTER; Chair, CAP graduate student grant panel; Invited speaker, SOLS Undergraduate Research program seminar, 'Diversity in scientific research'; ASU Representative, Assembly of Delegates, Organization for Tropical Studies.
- The Colorado College: Minority Concerns Committee; Timothy Linneman Memorial Lecture on the Environment (chair); Office of Admissions (faculty panel); New Student and Faculty Orientations (faculty panel); Sustainable Living House (faculty sponsor); Udall Scholarship for the Environment and Native American Studies (faculty sponsor); Committee on Instruction; Faculty Seminars Committee; Lecturer, Howard Hughes Summer Bridge Program in Biology; CC Teaching and Learning Seminars (participant); Web-based learning, ITS Dept. (participant); NSF science education conference (SENCER), San Jose, CA.

## MEMBERSHIPS & CERTIFICATIONS

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- Ecological Society of America (current); Soc. for Con. Bio. and The Wildlife Society (past).
- High School Teaching Certification, Grades 9-12, Biological Sciences.