

Daniel S. Karp

Department of Wildlife, Fish, and Conservation Biology
University of California, Davis
1071 Academic Surge
One Shields Ave
Davis, CA 95616-8627

office: (530) 752-2108 • cell: (530) 219-9868

email: dkarp@ucdavis.edu • website: <http://karp.ucdavis.edu> • twitter: @dskarp

CURRENT POSITION

2022-present Associate Professor, Department of Wildlife, Fish, & Conservation Biology
University of California, Davis
Department of Wildlife, Fish, & Conservation Biology

PREVIOUS POSITIONS

2017-2022 Assistant Professor, Department of Wildlife, Fish, & Conservation Biology
University of California, Davis

2015-2016 Killam Postdoctoral Fellow, The University of British Columbia
Institute for Resources, Environment, and Sustainability
Advisor: Kai Chan

2013-2015 NatureNet Science Fellow, The Nature Conservancy & UC Berkeley
Department of Environmental Science, Policy, and Management
Advisors: Claire Kremen, Mary Ruckelshaus, and Peter Kareiva

EDUCATION

2009-2013 PhD, Biology- Ecology and Evolution, Stanford University
Advisor: Gretchen Daily

2005-2009 BS, Biology- Ecology and Evolution Track, Stanford University
BS, Earth Systems- Biosphere Concentration, Stanford University
Advisors: Terry Root and Rodolfo Dirzo

CURRENT RESEARCH

Earth is experiencing more rapid changes now than at any time in the past ten thousand years. I am investigating the resulting trajectories of change in biodiversity and Earth's life-support systems. Looking forward, a key challenge for humanity is to increase food production, while at the same time securing other vital societal benefits from rural landscapes. Meeting this challenge requires improved understanding of how agricultural practices affect yields, biodiversity, and ecosystem services. My research thus focuses on developing methods for reconciling conservation activities with food production practices. My research program has four aspects. First, I develop and apply ecological theory to understanding and managing biodiversity in working landscapes. Second, I quantify the effects of alternative agricultural practices on biodiversity-mediated ecosystem services. Third, I investigate how identifying tradeoffs among biodiversity and ecosystem services can inform development of multifunctional landscapes. Finally, I work with international experts to synthesize science and guide policy.

TEACHING EXPERIENCE

2021-present Instructor, Conservation in Working Landscapes (WFC 126).

2018-present Instructor, Tropical Ecology and Conservation (WFC 125).
 2017-present Instructor, Conservation Biology (WFC 154).
 2022 Co-instructor, Animal Space Use and Movement Ecology (ECL 290, graduate seminar).
 2017 Co-instructor, BioControl: Ecology & Applications (ECL 290, graduate seminar).
 2010 Teaching Assistant, Human Evolution and the Environment (Bio 1).
 2010 Teaching Assistant, Core Experimental Biological Laboratory (Bio 44Y).
 2010 Teaching Assistant, Conservation Biology (Bio 144).
 2009 Teaching Assistant, Biology of Birds (Bio 139).

MENTORING EXPERIENCE

Postdocs

2022-present Austin Spence, Postdoctoral Researcher
 2020-present Jason Riggio, Postdoctoral Researcher
 2021-2023 Sara Emery, Postdoctoral Researcher
 2021-2023 Mahdiah Tourani, Postdoctoral Researcher
 2019-2022 Naresh Devarajan, Postdoctoral Researcher (2019-2021);
 Assistant Project Scientist (2021-2022)
 2019-2022 Thao Tran, Assistant Project Scientist (2019-2022)
 2019-2021 Daniel Paredes, Postdoctoral Researcher
 2017-2020 Elissa Olimpi, Postdoctoral Researcher

Graduate Students

2023-present Julian Tattoni (supervisor)
 2023-present Karen Gallardo Cruz (supervisor)
 2022-present John Veon, PhD Student (co-supervisor)
 2022-present Emily Mensch, PhD student (co-supervisor)
 2021-present Cody Pham, PhD student (supervisor)
 2019-present Katherine Lauck, PhD student (supervisor)
 2017-2022 Alison Ke, PhD student (supervisor)

Graduate Student Committees

2024 Elizabeth Gallegos (qualifying exam committee member)
 2023-present Sage Madden (qualifying and dissertation exam committee member)
 2023-present Yuzhaong Zhang (master committee member)
 2023 Conner Rosenblatt (qualifying exam committee member)
 2023 Monica Serrano (qualifying exam committee member)
 2023 Emily Phillips (qualifying exam committee member)
 2023 Brandi Goss (guidance committee member)
 2023 Laura Kojima (guidance exam committee member)
 2022 Mary Badger (guidance committee member)
 2022-present Mia Lippey (qualifying exam and dissertation committee member)
 2022 Yesenia Valverde (external qualifying exam committee member)
 2022 Leila Harris (qualifying exam committee member)
 2021-present Michael Ellis (external qualifying exam and dissertation committee member)
 2020-present Maria Ospina (qualifying exam and dissertation committee)
 2021-2022 Alison Williams (masters thesis committee member)
 2020 Breanna Martinico (qualifying exam committee)
 2020 Aviv Karasov-Olson (qualifying exam committee)
 2020 Olivia Feldman (guidance committee)
 2020 Sidney Woodruff (guidance committee)
 2017-2022 Emelie Graves (qualifying and dissertation exam committees)

2017-2021	Daniel Rocha (guidance, qualifying, and dissertation exam committees)
2015-2019	Alejandra Echeverri Ochoa (qualifying and dissertation exam committees)
2017-2019	Mickey Agha (qualifying and dissertation exam committees)
2019	Meredith Lutz (qualifying exam committee)
2019	Valerie Linden (external evaluator; dissertation exam committee)
2018-2023	Allie Essert (qualifying exam and dissertation exam committee)
2017	Michael Culshaw-Maurer (qualifying exam committee)

Undergraduates

2023-2024	Alex Ginez, Meirun Zhang, Frank Fabbro, Rylie Klingaman, Yifang Zhang, Zane Pickus, Astrid Boyd, Ezra Yanez, Julia Decker, Maggie Bourda, Kristalyn Mendoza, Abigale Deen
2022-2023	Kees Hood, Violet Wu, Wentao Yang, Meirun Zhang, Frank Fabbro, Maggie Bourda, Rylie Klingaman, Yifang Zhang, Kristalyn Mendoza
2021-2022	Thomas Phillips, Kees Hood, Katia Goldberg, Violet Wu, Wentao Yang, Yanshu Wang, Meirun Zhang
2020-2021	Thomas Phillips, Kees Hood, Katia Goldberg
2019-2020	Alice Mathew, Kathleen Mendez, Sophie Borison, Thomas Phillips
2018-2019	Janie Paz, Kathleen Cotti, Kimberly Luke, Adam Humphrey, Sophie Borison
2017-2018	Hallie Daly, Delayni Miller, Victoria Glynn, Eavan Barbieux
2015-2016	William Ou
2013-2014	Mia Waters, Sara Winesemias
2012-2013	Sarah Kaewert
2011-2012	Florence Rutsch, Maesen Churchill, Seth Judson, Zoe Dubrow
2010-2011	Steve Scheele

Technicians

2023-2024	Gigi Diekelman, Kyle Brown, Tara Robey, Cherish Lyda
2022-2023	Fatime Jomaa, Max Leibowitz, Kenzie Pollard
2021-2022	Rose Albert
2020-2021	Tyler Glaser
2019-2020	Tyler Glaser

Visiting Scholars

2023	Katharina Adler
2022	Ronald Sanchez-Brenes (PhD Student)
2021	Navila Monteagudo (PhD Student)
2017	Daniel Paredes (PhD Student)

SYNERGISTIC ACTIVITIES

2022-present	Subject Matter Editor , Ecological Applications and Ecological Monographs
2018-present	Review Editor , Frontiers in Sustainable Food Systems.
2017-present	Student Blog Curator , UC Davis. Created and now curates an outward facing blog— The Student Conservation Corner (www.medium.com/student-conservation-corner)— where undergraduate students communicate conservation literature to the public.
2017-present	Outreach and workshops . Helped organize or present at dozens of workshops and webinars in Costa Rica and California for farmers, conservationists, and industry officials, reaching thousands of stakeholders.
2018-2023	Science Advisory Team , Wildlife Insights. Joined a collaborative effort to compile global camera trap data into one database to inform biodiversity monitoring. Working with colleagues to use these data to track changes in

- mammal/bird diversity in tropical protected areas. Also, recruited and now co-advise a postdoctoral scholar tasked with analyzing global camera trap data and producing occupancy analytics for the Wildlife Insights Platform.
- 2017-2020 **Faculty Advisor of the Graduate Group of Ecology's Diversity Committee**, UC Davis. One of two faculty members of a committee charged with fostering diversity and promoting inclusivity in the UC Davis ecology community.
- 2010-2022 **Ecosystem Services Working Group Member**, Group on Earth Observations—Biodiversity Observation Network (GEO BON). Member of a working group designed to monitor and report changes in ecosystem services from local to global scales. Helped write manuscripts and designed research aimed at reporting ecosystem services at national scales.
- 2014-2017 **Pest Control Working Group Co-Lead**, National Socio-Environmental Synthesis Center (SESYNC). With Rebecca Chaplin-Kramer, organized international working group of ecologists, entomologists, economists, and sociologists to develop a general, spatial model for biological control. Responsible for all team leadership activities, including securing funding and coordinating bi-annual meetings, research activities, syntheses of pest control data, dissemination of findings, and outreach.
- 2010-present **Peer reviewer**. Contributed peer reviews to >65 grants and academic articles for journals including *Nature*, *Ecology Letters*, *PNAS*, and others.
- 2016-2018 **Science Advisory Board**, The Nature Conservancy's Working Lands Program. Member of an advisory board tasked with reviewing the evidence that a variety of agricultural practices increase biodiversity, ecosystem services, and/or crop yields in Mediterranean ecosystems.
- 2012-2013 **Rising Environmental Leaders Program**, Woods Institute for the Environment. Trained in environmental leadership including crafting policy-informative research, communication skills, and strategies for integrating research into policy with a cohort of 24 students. Attended meetings in California and in Washington, DC.

COMMITTEES

- 2024-present Academic and Unionized Appointments Committee (*department*), chair
- 2023-present Undergraduate Awards Committee (*department*), chair
- 2022-present Diversity, Equity, and Inclusion Committee (*College of Agriculture and Environmental Sciences*), member
- 2017-present Seminar Committee (*department*), founding member and chair
- 2017-present Admissions Committee (*Graduate Group in Ecology*), member
- 2017-present Wildlife Society Student Chapter (*department*), member
- 2023-2024 Faculty Search Committee- Professor of Avian Ecology, Waterfowl (*department*), member
- 2022-2023 Museum Committee (*department*), chair
- 2022-2023 Conservation Ecology AOE (*Graduate Group in Ecology*), chair
- 2018, 2022-2023 Curriculum Committee (*department*), member
- 2019-2022 Library Representative (*department*), chair
- 2018-2022 Endowment and Scholarship Committee (*department*), member
- 2021-2022 Admissions Committee (*Graduate Group in Ecology*), chair
- 2020-2022 Executive Committee (*Graduate Group in Ecology*), member
- 2020-2021 Admissions Committee (*Graduate Group in Ecology*), vice-chair
- 2018-2019 Swift Award Committee (*department*), member
- 2020 Visioning Committee for Agriculture Sustainability Institute (college), member
- 2017-2020 Diversity Committee (*Graduate Group in Ecology*), faculty mentor

2019	Faculty Search Committee- Professor of Wildlife Teaching (<i>department</i>), member
2018	Space Committee (<i>department</i>), member
2018	Faculty Search Committee- Wildlife Habitat Ecologist (<i>department</i>), member
2017	Strategic Vision Committee (<i>department</i>), member

GRANTS

2024-present	CDFA Biologically Integrated Farming Systems Program (co-PI; \$584,333 to Karp; \$1,000,000 for the full award)
2024-present	California Rice Commission (co-PI; \$8,965 to Karp, \$152,256)
2023-present	USDA Agricultural Research Service (PI: \$82,599)
2023-present	Solano County Water Agency (PI: \$84,010)
2022-present	Agriculture Research Initiative (co-PI; \$121,180 to Karp; \$659,987 for the full award)
2022-present	Private Gift from Paul Bonderson (co-PI; \$700,000)
2022-present	USDA Bioenergy, Natural Resources, and Environment Program (PI; \$649,633)
2020-present	USDA Food and Agriculture Cyberinformatics and Tools Initiation (co-PI; \$282,648 to Karp; \$877,990 for full award)
2022-2023	Center for Produce Safety (PI; \$365,515)
2020-2023	Conservation International Wildlife Insights Program (PI; \$149,128)
2018-2023	USDA Agricultural Research Service (PI; \$539,400)
2023	UC Davis Academic Senate Travel Grant (PI, \$1000)
2019-2022	NSF and the Belmont Forum (Co-PI: \$179,542 to Karp)
2018-2022	NSF Coupled Human Natural Systems (Co-PI; \$150,051 to Karp)
2020-2022	National Geographic Committee for Research and Exploration (PI; \$17,100)
2019-2021	UC Davis Academic Senate (PI: \$24,984)
2019-2021	Center for Produce Safety (PI; \$290,678)
2017-2021	USDA Bioenergy, Natural Resources, and Environment Program (PI; \$500,000)
2017-2019	National Geographic Committee for Research and Exploration (PI; \$20,850)
2015-2016	Killam Postdoctoral Research Fellowship (\$100,000)
2013-2014	NatureNet Science Fellow, The Nature Conservancy (\$200,000)
2013	Stanford BioSciences Travel Grant (\$500)
2013	Stanford Biology Department Travel Grant (\$600)
2012	NSF Doctoral Dissertation Improvement Grant (\$15,000)
2012	Stanford Biology Department Travel Grant (\$750)
2012	Organization for Tropical Studies Research Fellowship Program (\$3,650)
2012	Bat Conservation International Student Scholarship (\$3,600)
2012	SciFund Challenge (\$1,100)
2011-2013	NSF Graduate Research Fellowship (\$180,000)
2011	Vice Provost of Graduate Education SCORE grant (\$2,000)
2008	Tambopata Experienced Researcher Fellowship (\$5,000)
2008	Stanford University Major Grant (\$5,200)
2007	Tambopata Research Fellowship (\$5,000)
2007	Monica Miller Walsh Internship Grant (\$2,150)
2007	Stanford University Quarterly Grant (\$1,500)

HONORS AND FELLOWSHIPS

2018	Nominated by UC Davis for Packard Early Career Fellowship.
2015	Killam Postdoctoral Research Fellowship, Killam Trusts Office.
2014	Hann Endowed Lecture of Ornithology, University of Michigan.

- 2014 Faculty of 1000, Nomination of 2012 Ecology Letters paper.
 2014 Early Career Scientist Symposium, University of Michigan.
 2013 Davidson-Cristoph Award, Organization for Tropical Studies
 2013 NatureNet Science Fellowship, Inaugural class
 2012 Best Talk Award, North American Congress for Conservation Biology
 2010 Graduate Research Fellowship, NSF
 2010 Excellence in Teaching Award, Biology Department-Stanford University
 2009 JE Sterling Award for Scholastic Achievement, Stanford University
 2009 Firestone Medal for Undergraduate Research, Stanford University
 2009 Miller-Marsden Prize for Environmental Research, Stanford University
 2009 Dean's Award for Academic Achievement, School of Earth Sciences
 2009 Honorable Mention Graduate Research Fellowship, NSF
 2007 Award for Excellence in Biological Laboratory, Stanford University
 2006 President's Award for Academic Excellence, Stanford University

PUBLICATIONS (* = shared first authorship)

86. Olimpi, E.M., A. Ke, P. Baur, L. Carlisle, K.E. Esquivel, T. Glaser, W.E. Snyder, H. Waterhouse, T.M. Bowles, C. Kremen, and **D.S. Karp** (2024) Ungrazed seminatural habitats around farms benefit bird conservation without enhancing infectious disease risks. *Landscape Ecology* **39**: 128.
85. Ke, A., R. Sollmann, L.O. Frishkoff, A. Echeverri, J. Zook, and **D.S. Karp** (2024) Effects of agriculture and nature reserves on avian behavior in northwestern Costa Rica. *Conservation Biology* **38**: e14241.
84. Rasmussen, L.V., I. Grass, Z. Mehrabi, O.M. Smith, R. Bezner-Kerr, J. Blesh, L.A. Garibaldi, M.E. Isaac, C.M. Kennedy, H. Wittman, P. Batáry, D. Buchori, R. Cerda, J. Chará, D. Crowder, K. Darras, K. DeMaster, K. Garcia, M. Gómez, D. Gonthier, P. Hidayat, J. Hipólito, M. Hiron, L. Hoey, D. James, I. John, A.D. Jones, **D.S. Karp**, M. Kotowska, Y. Kebede, C.B. Kerr, S. Klassen, H. Kreft, R. Llanque, C. Levers, D.J. Lizcano, A. Lu, R.N. Marques, P.B. Martins, A. Melo, S. Madsen, H. Nyantakyi-Frimpong, E.M. Olimpi, J.P. Owen, H. Pantevez, M. Qaim, S. Redlich, C. Scherber, A.R. Sciligo, S. Snapp, W.E. Snyder, I. Steffan-Dewenter, A.E. Stratton, J.M. Taylor, V. Valencia, C. Vogel, and C. Kremen (2024) Joint environmental and social benefits from diversified agriculture. *Science* **384**: 87-93.
83. Goldstein, B.R., B.J. Furnas, K.L. Calhoun, A.E. Larsen, **D.S. Karp**, and P. de Valpine (2024) Drought influences habitat associations and abundances of birds in California's Central Valley. *Diversity and Distributions* **30**: e13827.
82. Emery, S.E., J. Rosenheim, R. Chaplin-Kramer, R. Sharp, and **D.S. Karp** (2024) Leveraging satellite observations to predict agricultural pest densities and reveal ecological drivers of variation across landscapes. *Science of the Total Environment* **924**: 171591.
81. Tourani, M., R. Sollmann, R. Kays, J. Ahumada, E. Fegraus, and **D.S. Karp** (2023) Maximum temperatures determine the habitat affiliations of North American mammals. *Proceedings of the National Academy of Sciences* **120**: e230441120. **Cover Article.**
80. Ke, A., E. Cedeño, J. Karubian, F. Castillo, B. Gonzales, and **D.S. Karp** (2023) Cavity-nesting birds are limited by nesting habitat in Neotropical agricultural landscapes. *Biotropica* **55**: 1045-1057.

79. Lauck, K.S.* , A. Ke*, E.M. Olimpi, D. Paredes, K. Hood, T. Phillips, W.R.L. Anderegg, and **D.S. Karp** (2023) Agriculture and hot temperatures interactively erode the nest success of habitat generalist birds across the United States. *Science* **362**: 290-294.
78. Devarajan, N., D. Weller, M. Jones, A.D. Adell, A. Adhikari, A. Allende, N.L. Arnold, P. Baur, S.M. Beno, D. Clements, E.M. Olimpi, F. Critzer, H. Green, L. Gorski, A.F. Gruber, J. Kovac, J. McGarvey, C.M. Murphy, S.I. Murphy, N. Navarro-Gonzalez, J.P. Owen, A.F.A. Pires, N. Richard, S. Samaddar, R. Schmidt, K. Scow, N.W. Shariat, O.M. Smith, A.R. Spence, D. Stoeckel, T.D.H. Tran, G. Wall, and **D.S. Karp**. (2023). Evidence for the efficacy of pre-harvest agricultural practices in mitigating food-safety risks to fresh produce. *Frontiers in Sustainable Food Systems* **7**: 1101435. **1st place Ohio Joint Council of Extension Professionals 2023 award for Monographs, Journal Articles, and Book Chapters.**
77. Thompson, J.B., J. Symonds, L. Carlisle, A. Iles, **D.S. Karp**, J. Ory, and T.M. Bowles (2023) Remote sensing of hedgerows, windbreaks, and winter cover crops in California's Central Coast reveals low adoption but hotspots of use. *Frontiers in Sustainable Food Systems* **7**: 1052029.
76. García, K., E.M. Olimpi, L. M'Gonigle, **D.S. Karp**, E.E. Wilson-Rankin, C. Kremen and D.J. Gonthier (2023) Semi-natural habitats on organic strawberry farms and in surrounding landscapes promote bird biodiversity and pest control potential. *Agriculture, Ecosystems, and the Environment* **347**: 108353.
75. Riggio, J., Engilis, A., Cook, H., De Greef, E., **Karp, D.S.**, and Truan, M. (2023) Long-term monitoring reveals the impact of changing climate and habitat on the fitness of cavity-nesting songbirds. *Biological Conservation* **278**: 109885.
74. Rosenheim, J.A., E. Cluff, M.K. Lippey, B.N. Cass, D. Paredes, S. Parsa, **D.S. Karp**, and R. Chaplin-Kramer. (2023) Reply to Marini et al.: Insect spill-over is a double-edged sword in agriculture. *Proceedings of the National Academy of Sciences* **120**: e2219197120.
73. Rosenheim, J.A., E. Cluff, M.K. Lippey, B.N. Cass, D. Paredes, S. Parsa, **D.S. Karp**, and R. Chaplin-Kramer. (2022) Increasing crop field size does not consistently exacerbate insect pest problems. *Proceedings of the National Academy of Sciences* **119**: e2208813119.
72. Alexandridis, N., G. Marion, R. Chaplin-Kramer, M. Dainese, J. Ekroos, H. Grab, M. Jonsson, **D.S. Karp**, C. Meyer, M.E. O'Rourke, M. Pontarp, K. Poveda, R. Seppelt, H.G. Smith, Y. Clough, and E.A. Martin. (2022) Archetype models upscale understanding of natural pest control response to land-use change. *Ecological Applications* **32**: e2696.
71. Ke, A., R. Sollmann, L.O. Frishkoff, and **D.S. Karp**. (2022) A hierarchical N-mixture model to estimate shifts in animal behavior. *Ecological Applications* **32**: e2632.
70. Carlisle, L.* , K.E. Esquivel*, P. Baur, N. Ichikawa, E.M. Olimpi, J. Ory, H. Waterhouse, A. Iles, **D.S. Karp**, C. Kremen, and T. Bowles. (2022) Organic vegetable farmers face persistent structural barriers to adopting diversification practices in California's Central Coast. *Agroecology and Sustainable Food Systems*. DOI: <https://doi.org/10.1080/21683565.2022.2104420>
69. Olimpi, E.M., H. Daly, K. Garcia, V.M. Glynn, D.J. Gonthier, C. Kremen, L.K. M'Gonigle, and **D.S. Karp**. (2022) Interactive effects of multiscale diversification practices on farmland

- bird stress. *Conservation Biology* **36**: e13902.
68. Olimpi, E.M., K. Garcia, D.J. Gonthier, C. Kremen, W.E. Snyder, E.E. Wilson-Rankin, and **D.S. Karp**. (2022) Semi-natural habitat surrounding farms promotes multifunctionality in avian ecosystem services. *Journal of Applied Ecology* **59**: 898-908.
67. Paredes, D., J.A. Rosenheim, and **D.S. Karp**. (2022) The causes and consequences of pest population variability in agricultural landscapes. *Ecological Applications* **32**: e2607.
66. Smith, O., C.M. Kennedy, A. Echeverri, **D.S. Karp**, J.M. Taylor, E.E. Wilson-Rankin, J.P. Owen, and W.E. Snyder. (2022) Complex landscapes stabilize farm bird communities and their expected ecosystem services. *Journal of Applied Ecology* **59**: 927-941. **Cover Article**.
65. Smith, O., E.M. Olimpi, N. Navarro-Gonzalez, K. Cornell, L.O. Frishkoff, T.D. Northfield, T.M. Bowles, A. Edworthy, J. Eilers, Z. Fu, K. Garcia, D.J. Gonthier, M.S. Jones, C.M. Kennedy, C.E. Latimer, J.P. Owen, C. Sato, J.M. Taylor, E.E. Wilson-Rankin, W.E. Snyder, **D.S. Karp**. (2022) A trait-based framework for predicting foodborne pathogen spillover from wild birds. *Ecological Applications* **32**: e2523.
64. Chapman, M., S. Wiltshire, P. Baur, T.M. Bowles, L. Carlisle, F. Castillo, K. Esquivel, S. Gennet, A. Iles, D.S. Karp, C. Kremen, J.A. Liebert, E.M. Olimpi, J. Ory, M. Ryan, A.R. Sciligo, J. Thompson, H. Waterhouse, and C. Boettiger. (2022) Social-ecological feedbacks drive tipping points in farming system diversification. *One Earth*, **5**: 283-292.
63. Balvanera, P., I.R. Geijzendorffer, A. Cord, E.G. Drakou, **D.S. Karp**, B. Martín-López, T.H. Mwampamba, K.A. Brauman, and M. Schröter (2022) Essential ecosystem service variables for monitoring progress towards sustainability. *Current Opinion in Environmental Sustainability* **54**: 101152.
62. Esquivel, K.E.* , L. Carlisle*, A. Ke, E.M. Olimpi, P. Baur, J. Ory, H. Waterhouse, A. Iles, **D.S. Karp**, C. Kremen, and T. Bowles (2021) The 'sweet spot' in the middle: why do mid-scale farms adopt diversification practices at higher rates? *Frontiers in Sustainable Food Systems* **5**: 734088.
61. Alexandridis, N., G. Marion, R. Chaplin-Kramer, M. Dainese, J. Ekroos, H. Grab, M. Jonsson, **D.S. Karp**, C. Meyer, M. E. O'Rourke, M. Pontarp, K. Poveda, R. Seppelt, H.G. Smith, E.A. Martin, and Y. Clough (2021) Models of natural pest control: towards predictions across agricultural landscapes. *Biological Control* **163**: 104761.
60. Samaddar, S., **D.S. Karp**, R. Schmidt, N. Devarajan, J.A. McGarvey, A. Pires, and K. Scow. (2021) Role of soil in the regulation of human and plant pathogens: soils' contributions to people. *Philosophical Transactions of the Royal Society B* **376**: 20200179.
59. Devarajan, N., J. McGarvey, K.M. Scow, M.S. Jones, S. Lee, S. Samaddar, R. Schmidt, T. Tran, and **D.S. Karp** (2021) Cascading effects of composts and cover crops on soil chemistry, bacterial communities, and the survival of foodborne pathogens. *Journal of Applied Microbiology* **131**: 1564-1577.
58. Echeverri*, A., **D.S. Karp***, L.O. Frishkoff, J. Krishnan, R. Naidoo, J. Zhao, and K.M.A. Chan (2021) Avian cultural services peak in tropical wet forests. *Conservation Letters* **14**: e12763. **Cover Article**.

57. Bay, R.A., **D.S. Karp**, J.F. Saracco, W.R.L. Anderegg, L. Frishkoff, D. Wiedenfeld, T.B. Smith, and K. Ruegg. (2021) Genetic variation reveals individual-level climate tracking across the full annual cycle of a migratory bird. *Ecology Letters* **24**: 819-828.
56. Paredes, D., J.A. Rosenheim, R. Chaplin-Kramer, S. Winter, and **D.S. Karp** (2021). Landscape simplification increases vineyard pest outbreaks and insecticide use. *Ecology Letters* **14**: 73-83.
55. Tamburini, G., G. Santoiemma, M. O'Rourke, R. Bommarco, R. Chaplin-Kramer, M. Dainese, **D.S. Karp**, T.N. Kim, E.A. Martin, M. Peterson, and L. Marini (2020) Species traits elucidate crop pest response to landscape composition: a global analysis. *Proceedings of the Royal Society: B* **287**: 20202116.
54. Garcia, K., E.M. Olimpi, **D.S. Karp**, and D.J. Gonthier (2020) The good the bad and the risky: can birds be incorporated as biological control agents into integrated pest management programs. *Journal of Integrated Pest Management* **11**: 1-11.
53. Olimpi, E.M., K. Garcia, D. Gonthier, K.T. De Master, A. Echeverri, C. Kremen, A.R. Sciligo, W.E. Snyder, E. Wilson-Rankin, and **D.S. Karp** (2020) Shifts in species interactions and farming contexts mediate net effects of birds in agroecosystems. *Ecological Applications* **30**: e02115. **Cover Article.**
52. Echeverri, A., **D.S. Karp**, R. Naidoo, J.A. Tobias, J. Zhao, and K. Chan (2020) Can avian functional traits predict cultural ecosystem services? *People and Nature* **2**: 138-151.
51. González-Chang, M., S.D. Wratten, M.W. Shields, R. Costanza, M. Dainese, G.M. Gurr, J. Johnson, **D.S. Karp**, J.W. Ketelaar, J. Nboyine, J. Pretty, R. Rayl, H. Sandhu, M. Walker, and W. Zhou (2020) Understanding the pathways from biodiversity to agro-ecological outcomes: a new, interactive approach. *Agriculture, Ecosystems, and the Environment* **301**: 107053.
50. Olimpi, E.M., P. Baur, D. Gonthier, **D.S. Karp**, C. Kremen, A. Sciligo, and K.T. De Master (2019) Evolving food safety pressures in California's Central Coast region. *Frontiers in Sustainable Food Systems* **3**:102.
49. Dainese, M., E.A. Martin, M.A. Aizen, M. Albrecht, I. Bartomeus, R. Bommarco, L.G. Carvalheiro, R. Chaplin-Kramer, V. Gagic, L.A. Garibaldi, J. Ghazoul, H. Grab, Mattias Jonsson, **D.S. Karp**, C.M. Kennedy, D. Kleijn, C. Kremen, D.A. Landis, D.K. Letourneau, L. Marini, K. Poveda, R. Rader, H.G. Smith, T. Tscharntke, G.K.S. Andersson, I. Badenhauer, S. Baensch, A.D.M. Bezerra, F.J.J.A. Bianchi, V. Boreux, V. Bretagnolle, B. Caballero-Lopez, P. Cavigliasso, A. Četković, N.P. Chacoff, A. Classen, S. Cusser, F.D. da Silva e Silva, G.A. de Groot, J. H. Dudenhöffer, J. Ekroos, T. Fijen, P. Franck, B.M. Freitas, M.P.D. Garratt, C. Gratton, J. Hipólito, A. Holzschuh, L. Hunt, A.L. Iverson, S. Jha, T. Keasar, T.N. Kim, M. Kishinevsky, B.K. Klatt, A.-M. Klein, K.M. Krewenka, S. Krishnan, A.E. Larsen, C. Lavigne, H. Liere, B. Maas, R.E. Mallinger, E.M. Pachon, A. Martínez-Salinas, T.D. Meehan, M.G.E. Mitchell, G.A.R. Molina, M. Nesper, L. Nilsson, M.E. O'Rourke, M.K. Peters, M. Plečaš, S.G. Potts, D.L. Ramos, J.A. Rosenheim, M. Rundlöf, A. Rusch, A. Sáez, J. Scheper, M. Schleuning, J. Schmack, A.R. Sciligo, C. Seymour, D.A. Stanley, R. Stewart, J.C. Stout, L. Sutter, M.B. Takada, H. Taki, G. Tamburini, M. Tschumi, B.F. Viana, C. Westphal, B.K. Willcox, S.D. Wratten, A. Yoshioka, C. Zaragoza-Trello, W. Zhang, Y. Zou, and I. Steffan-Dewenter (2019) A global synthesis reveals

biodiversity-mediated benefits for crop production. *Science Advances* **5**: eaax0121.

48. Mastrángelo, M.E., N. Perez-Harguindeguy, L. Enrico, E. Bennett, S. Lavorel, G.S. Cumming, D. Abeygunawardane, L.D. Amarilla, B. Burkhard, B.N. Egoh, L.O. Frishkoff, L. Galetto, S. Huber, **D.S. Karp**, A. Ke, E. Kowaljow, A. Kronenburg-García, B. Locatelli, B. Martín-López, P. Meyfroidt, T.H. Mwampamba, J. Nel, K.A. Nicholas, C. Nicholson, E. Oteros-Rozas, S.J. Rahlao, C. Raudsepp-Hearne, T. Ricketts, U.B. Shrestha, C. Torres, K.J. Winkler, and K. Zoeller (2019) Key knowledge gaps to achieve global sustainability goals. *Nature Sustainability* **2**: 1115-1121.
47. Shackelford, G., R. Kelsey, W. Sutherland, C.M. Kennedy, S. Wood, S. Gennet, **D.S. Karp**, C Kremen, N. Seavy, J. Jedlicka, K. Gravuer, S. Kross, D. Bossio, A. Muñoz-Sáez, D. LaHue, K. Garbach, L. Ford, M. Felice, M. Reynolds, D. Rao, K. Boomer, G. LeBuhn, and L. Dicks (2019) Evidence synthesis as the basis for decision analyses: a method of selecting the best agricultural practices for multiple ecosystem services. *Frontiers in Sustainable Food Systems*. **3**: 83.
46. Chaplin-Kramer, R., M. O'Rourke, N. Schellhorn, W. Zhang, B. Robinson, C. Gratton, J.A. Rosenheim, T. Tschamtkke, and **D.S. Karp** (2019) Measuring what matters: actionable information for conservation biocontrol in multifunctional landscapes. *Frontiers in Sustainable Food Systems*. **3**: 60.
45. Echeverri, A., L.O. Frishkoff, J.P. Gomez, J.R. Zook, P. Juárez, R. Naidoo, K.M.A. Chan, and **D.S. Karp** (2019) Precipitation and tree cover gradients structure avian alpha-diversity in Northwestern Costa Rica. *Diversity and Distributions*. **25**: 1222-1233.
44. Gonthier, D., A. Sciligo, **D.S. Karp**, A. Lu, K. Garcia, G. Juarez, T. Chiba, and C. Kremen (2019) Bird services and disservices to strawberry farming in Californian agricultural systems. *Journal of Applied Ecology*. **56**: 1948-1959.
43. **Karp, D.S.**, A. Echeverri, J. Zook, P. Juárez, A. Ke, J. Krishnan, K.M.A. Chan, and L.O. Frishkoff (2019) Remnant forest on private land fosters Neotropical bird communities that are indistinguishable from formal reserves. *Journal of Applied Ecology*. **56**: 1839-1849.
42. Frishkoff, L.O. and **D.S. Karp** (2019) Species-specific responses to habitat conversion across scales synergistically restructure Neotropical bird communities. *Ecological Applications* **29**: e01910. **Cover Article**.
41. Frishkoff, L.O., A. Ke, I. Martins, E. Olimpi, and **D.S. Karp** (2019) Countryside Biogeography: The controls of species distributions in human-dominated landscapes. *Current Landscape Ecology Reports* **4**: 15-30.
40. Echeverri, E., R. Naidoo, **D.S. Karp**, K.M.A. Chan, and J. Zhao (2019) Iconic manakins and despicable grackles: comparing bird-related cultural ecosystem services across birdwatchers, farmers, and urbanites in Northwestern Costa Rica. *Ecological Indicators* **106**:105454.
39. Dinat, D., A. Echeverri, M. Chapman, **D.S. Karp**, and T. Satterfield (2019) Eco-xenophobia among rural populations: the Great-tailed Grackle as a contested species in Guanacaste, Costa Rica. *Human Dimensions of Wildlife*. **24**: 332-348.
38. Jones, M.S., Z. Fu, J.P. Reganold, **D.S. Karp**, T.E. Besser, J.M. Tylianakis, and W.E.

- Snyder (2019) Organic farming promotes biotic resistance to food-borne human pathogens. *Journal of Applied Ecology* **56**: 1117-1127.
37. Paredes, D., **D.S. Karp**, R. Chaplin Kramer, E. Benítez, and M. Campos (2019) Natural habitat increases the economic value of natural pest control in olive groves. *Journal of Pest Science* **92**: 1111-1121.
36. Maas, B., S. Heath, I. Grass, C. Cassano, A. Classen, D. Faria, P. Gras, K. Williams-Guillén, M. Johnson, **D. S. Karp**, V. Linden, A. Martínez-Salinas, J. Schmack, and Sara Kross (2019) Experimental field enclosure of birds and bats in agricultural systems - methodological insights, potential improvements, and cost-benefit trade-offs. *Basic and Applied Ecology* **35**: 1-12.
35. **Karp, D. S.**, R. Chaplin-Kramer, T. D. Meehan, E. A. Martin, F. DeClerck, H. Grab, C. Gratton, L. Hunt, A. E. Larsen, A. Martínez-Salinas, M. E. O'Rourke, A. Rusch, K. Poveda, M. Jonsson, J. A. Rosenheim, N. A. Schellhorn, T. Tschardtke, S. D. Wratten, W. Zhang, A. L. Iverson, L. S. Adler, M. Albrecht, A. Alignier, G. M. Angelella, M. Zubair Anjum, J. Avelino, P. Batáry, J. M. Baveco, F. J. J. A. Bianchi, K. Birkhofer, E. W. Bohnenblust, R. Bommarco, M. J. Brewer, B. Caballero-López, Y. Carrière, L. G. Carvalheiro, L. Cayuela, M. Centrella, A. Četković, D. C. Henri, A. Chabert, A. C. Costamagna, A. De la Mora, J. de Kraker, N. Desneux, E. Diehl, T. Diekötter, C. F. Dormann, J. O. Eckberg, M. H. Entling, D. Fiedler, P. Franck, F. J. Frank van Veen, T. Frank, V. Gagic, M. P. D. Garratt, A. Getachew, D. J. Gonthier, P. B. Goodell, I. Graziosi, R. L. Groves, G. M. Gurr, Z. Hajian-Forooshani, G. E. Heimpel, J. D. Herrmann, A. S. Huseeth, D. J. Inclán, A. J. Ingrao, P. Iv, K. Jacot, G. A. Johnson, L. Jones, M. Kaiser, J. M. Kaser, T. Keasar, T. N. Kim, M. Kishinevsky, D. A. Landis, B. Lavandero, C. Lavigne, A. Le Ralec, D. Lemessa, D. K. Letourneau, H. Liere, Y. Lu, Y. Lubin, T. Luttermoser, B. Maas, K. Mace, F. Madeira, V. Mader, A. M. Cortesero, L. Marini, E. Martinez, H. M. Martinson, P. Menozzi, M. G. E. Mitchell, T. Miyashita, G. A. R. Molina, M. A. Molina-Montenegro, M. E. O'Neal, I. Opatovsky, S. Ortiz-Martinez, M. Nash, Ö. Östman, A. Ouin, D. Pak, D. Paredes, S. Parsa, H. Parry, R. Perez-Alvarez, D. J. Perović, J. A. Peterson, S. Petit, S. M. Philpott, M. Plantegenest, M. Plečáň, T. Pluess, X. Pons, S. G. Potts, R. F. Pywell, D. W. Ragsdale, T. A. Rand, L. Raymond, B. Ricci, C. Sargent, J.-P. Sarthou, J. Saulais, J. Schäckermann, N. P. Schmidt, G. Schneider, C. Schüepp, F. S. Sivakoff, H. G. Smith, K. Stack Whitney, S. Stutz, Z. Szendrei, M. B. Takada, H. Taki, G. Tamburini, L. J. Thomson, Y. Tricault, N. Tsafack, M. Tschumi, M. Valantin-Morison, M. Van Trinh, W. van der Werf, K. T. Vierling, B. P. Werling, J. B. Wickens, V. J. Wickens, B. A. Woodcock, K. Wyckhuys, H. Xiao, M. Yasuda, A. Yoshioka, and Y. Zou. (2018) Crop pests and predators exhibit inconsistent responses to surrounding landscape composition. *Proceedings of the National Academy of Sciences* **115**: E7863-E7870. **Cover Article.**
34. Anderegg, W.R.L., A.G. Konings, A.T. Trugman, K. Yu, D.R. Bowling, **D.S. Karp**, S. Pacala, J.S. Sperry, and B. Sulman (2018) Hydraulic diversity of forests regulates ecosystem resilience during drought. *Nature* **561**: 538-541.
33. Frishkoff, L.O., A. Echeverri, K.M.A. Chan, and **D.S. Karp** (2018) Do correlated responses to multiple environmental changes exacerbate or mitigate species loss? *Oikos* **127**: 1724-1734. **Cover Article.**
32. Echeverri, A., **D. S. Karp**, R. Naidoo, J. Zhao, and K.M.A. Chan (2018) Approaching human-animal relationships from multiple angles: a synthetic perspective. *Biological Conservation*: **224**: 50-62.

31. **Karp, D.S.**, L.O. Frishkoff, A. Echeverri, J. Zook, P. Juárez, and K.M.A. Chan (2018) Agriculture erases climate-driven β -diversity in Neotropical bird communities. *Global Change Biology* **24**: 338-349.
30. Stegner, M.A., **D.S. Karp**, A.J. Rominger, and E.A. Hadly (2017) Can protected areas really maintain mammalian diversity? Insights from a nestedness analysis of the Colorado Plateau. *Biological Conservation* **209**: 546-553.
29. Turcotte, M.M., Araki, H., **Karp, D.S.**, Poveda, K., and Whitehead, S.R. The eco-evolutionary impacts of domestication and agricultural practices on wild species. (2017) *Philosophical Transactions of the Royal Society B* **372**: 20160033.
28. Tschardtke, T., **D.S. Karp**, R. Chaplin-Kramer, P. B atary, F. DeClerk, C. Gratton, L. Hunt, A. Ives, M. Jonsson, A. Larsen, E.A. Martin, A. Mart inez-Salinas, T.D. Meehan, M. O'Rourke, K. Poveda, J.A. Rosenheim, A. Rusch, N. Schellhorn, T.C. Wanger, S. Wratten, and W. Zhang (2016) When natural habitat fails to enhance biological pest control- five hypotheses. *Biological Conservation* **204**: 449-458.
27. **Karp, DS**, R. Moses, S. Gennet, M. Jones, S. Joseph, L.K. M'Gonigle, L.C. Ponisio, W.E. Snyder, and C. Kremen. (2016) Agricultural practices for food safety threaten pest-control services to fresh produce. *Journal of Applied Ecology* **53**: 1402-1412.
26. Balvanera, P., S. Quijas, **D.S. Karp**, N. Ash, E. Bennett, R. Boumans, C. Brown, K. Chan, R. Chaplin-Kramer, B.S. Halpern, J. Honey-Roses, C.K. Kim, W. Cramer, M.J. Mart nez-Harms, H. Mooney, T. Mwampamba, J. Nel, S. Polasky, B. Reyers, J. Roman, W. Turner, R.J. Scholes, H. Tallis, K. Thonicke, F. Villa, M. Walpole, and A. Walz. (2016) Ecosystem Services. In: GEO Handbook on Biodiversity Observation Networks. Springer pp. 39-78.
25. Frishkoff, L.O., **D.S. Karp**, J.R. Flanders, J. Zook, E.A. Hadly, G.C. Daily, and L.K. M'Gonigle. (2016) Climate change and habitat conversion favour the same species. *Ecology Letters* **19**: 1081-1090.
24. Baur, P., L. Driscoll, S. Gennet, and **D.S. Karp**. (2016) Inconsistent food safety pressures complicate environmental conservation for California produce growers. *California Agriculture* **70**: 142-151.
23. Maas, B., **D.S. Karp**, J. S. Bumrungsri, K. Darras, C. Huang, C. Lindell, J. Maine, L. Mestre, N. Michel, E. Morrison, I. Perfecto, S. Philpott, C.H. Sekercioglu, R.M. Silva, T. Tschardtke, S. Van Bael, C.J. Whelan, K. Williams-Guillen (2016) Bird and bat predation services in tropical forests and agroforestry landscapes. *Biological Reviews*. 91: 1081-1101.
22. **Karp, D.S.***, P. Baur*, E.R. Atwill, K. DeMaster, S. Gennet, A. Iles, J. Nelson, A. Sciligo, and C. Kremen (2015) Unintended ecological and social impacts of food safety regulations in the California Central Coast. *BioScience* **65**: 1173-1183.
21. Wood, S., **D.S. Karp**, F. DeClerke, C. Kremen, S. Naeem, and C. Palm (2015) A functional trait approach for understanding the impacts of biodiversity in agriculture. *Trends in Ecology and Evolution* **30**: 531-539.
20. **Karp, D.S.**, H. Tallis, R. Sachse, B. Halpern, K. Thonicke, W. Cramer, B. Tietjen, H.

- Mooney, S. Polasky, B. Tietjen, K. Waha, A. Walz, and S. Wolny. (2015) National indicators for observing ecosystem service change. *Global Environmental Change* **35**: 12-21.
19. **Karp, D.S.**, S. Gennet, C. Kilonzo, M. Partyka, N. Chaumont, E.R. Atwill, and C. Kremen. (2015) Co-managing agriculture for nature conservation and food safety. *Proceedings of the National Academy of Sciences* **112**: 11126-11131.
 18. **Karp, D.S.**, C.D. Mendenhall, E. Callaway, L. Frishkoff, P.M. Kareiva, P.R. Ehrlich and G.C. Daily (2015) Confronting and resolving competing values behind conservation objectives. *Proceedings of the National Academy of Sciences* **112**: 11132-11137.
 17. **Karp, D.S.**, C.D. Mendenhall, E. Callaway, L. Frishkoff, P.M. Kareiva, P.R. Ehrlich and G.C. Daily (2015) Reply to Kirchhoff: Homogenous and mutually exclusive conservation typologies are neither possible nor desirable. *Proceedings of the National Academy of Sciences* **112**: e5906.
 16. Daily, G.C. and **D.S. Karp** (2015) Nature's bounties: reliance on pollinators for health *The Lancet* **386**: 1925-1927.
 15. Tallis, H, J. Lubchenco,...**D.S. Karp**..., et al. (2014) A call for inclusive conservation. *Nature* **515**: 27-28.
 14. **Karp, D.S.**, S. Judsen, E. Hadly, and G. Daily (2014) Molecular diagnosis of bird-mediated pest control across tropical countryside. *SpringerPlus* **3**: 630.
 13. Frishkoff, L.* , **D.S. Karp***, C.D. Mendenhall, L. M'Gonigle, J. Zook, C. Kremen, E.A. Hadly, and G.C. Daily. (2014) Loss of avian phylogenetic diversity in Neotropical agricultural systems. *Science* **345**: 1343-1346.
 12. Mendenhall, C.D., **D.S. Karp**, C.F.J. Meyer, E.A. Hadly, and G.C. Daily. (2014) Predicting biodiversity change and averting collapse in agricultural landscapes. *Nature* **509**: 213-217.
 11. **Karp, D.S.** and G. Daily (2014) Cascading effects of insectivorous birds and bats in tropical coffee plantations. *Ecology* **95**: 1065-1074.
 10. Garbach, K., J.C. Milder, M. Montenegro, **D.S. Karp**, and F. DeClerke. (2014) Ecosystem Services in Agricultural Lands. In: The Encyclopedia of Agriculture.
 9. **Karp, D.S.**, C.D. Mendenhall, R.F. Sandí, P.R. Ehrlich, E.A. Hadly, and G.C. Daily (2013) Forest bolsters bird abundance, pest control, and coffee yield. *Ecology Letters* **16**: 1339-1347.
 8. Pereira, H., S. Ferrier, M. Walters, G. Geller, R. Jongman, R. Scholes, M. Bruford, N. Brummit, S. Butchart, A. Cardoso, N. Coops, E. Dulloo, D. Faith, J. Freyhof, R. Gregory, C. Heip, R. Hoft, G. Hurtt, W. Jetz, **D.S. Karp**, M. McGeoch, D. Obura, Y. Onoda, N. Pettorelli, B. Reyers, R. Sayre, J. Scharlemann, S. Stuart, E. Turak, M. Walpole, and M. Wegmann. (2013) Essential biodiversity variables for global earth observation. *Science* **339**: 277-278.
 7. **Karp, D.S.**, H. Moeller, and L. Frishkoff (2013) Nonrandom extinction patterns can modulate pest-control service decline. *Ecological Applications* **23**: 840-849.

6. Anderegg, W.R.L, L. Anderegg, C. Sherman, and **D.S. Karp** (2012) Effects of widespread drought-induced aspen mortality on understory plants. *Conservation Biology* **26**: 1082-1090.
5. Tallis, H., H. Mooney, S. Andelman, P. Balvanera, W. Cramer, **D.S. Karp**, S. Polasky, B. Reyers, T. Ricketts, S. Running, K. Thonicke, B. Tietjen, and A. Walz (2012) A global system for monitoring ecosystem service change. *BioScience* **62**: 977-986.
4. **Karp, D.S.**, A.J. Rominger, J. Zook, J. Ranganathan, P.R. Ehrlich, and G.C. Daily (2012) Intensive agriculture erodes β -diversity at large scales. *Ecology Letters* **15**: 963-970. **Faculty of 1000.**
3. **Karp, D.S.**, G. Ziv, J. Zook, P.R. Ehrlich, and G.C. Daily (2011) Resilience and stability in bird guilds across tropical countryside. *Proceedings of the National Academy of Sciences* **108**: 21134-21139.
2. **Karp, D.S.** and R. Guevara (2011) Conversational noise reduction as a win-win for ecotourists and rainforest birds. *Biotropica* **43**: 122-130
1. **Karp, D.S.** and T. Root (2009) Sound the stressor: how hoatzins (*Opisthocomus hoazin*) react to ecotourist conversation. *Biodiversity and Conservation* **18**: 3733-3742.

PUBLICATIONS IN REVIEW

Hsieh, C., D. Gorczynski, J. Tonos, M. Donald, L.O. Frishkoff, **D.S. Karp**, R. Sollmann, J.P. Lessard, P. Alvarez-Loayza, M.H. Andrianarisoa, R. Bitariho, S. Espinosa, V. Estienne, P.A. Jansen, S. Johnson, M.G.M. Lima, B. Mugerwa, J.C. Razafimahaimodison, F. Rovero, J. Salvador, F. Santos, D. Sheil, and L. Beaudrot (In Review) Anthropogenic threats modulate edge effects in protected forests worldwide. *Nature*.

POPULAR PUBLICATIONS

- Devarajan, N., and **D.S. Karp** (2022) Can organic soil management practices limit the survival of foodborne pathogens? *Microbiologist* **23**: 24-26.
https://issuu.com/societyforappliedmicrobiology/docs/sfam_microbiologist_june_2022_hres_singles/24
- Smith, O.M., E.M. Olimpi, and **D.S. Karp** (2022) Feedlot association increases food safety risk associated with wild birds. *Bulletin of The Ecological Society of America* **103**: e01974.
- Garcia, K., E.M. Olimpi, **D.S. Karp**, and D.J. Gonthier (2020) Birds, bugs, and agriculture: is it a sin to kill a mockingbird? *Entomology Today*. Entomological Society of America.
- A. Echeverri, **D.S. Karp**, and J. Tobias (2020) Loved or loathed: Why are some Neotropical birds more popular than others. *Neotropical Birding*.
- D.S. Karp** and A. Echeverri. (2019) Forest patches in working landscapes offer surprising opportunities to conserve neotropical birds. *The Applied Ecologist*. Journal of Applied Ecology Blog. <https://appliedecologistsblog.com/2019/06/27/forest-patches-neotropical-birds/>
- D.S. Karp**, S. Gennet, and R. Kelsey (2014) Can we grow safe produce and conserve nature at

the same time? *Cool Green Science*. The Nature Conservancy. <http://blog.nature.org/science/2014/12/15/safe-produce-conservation-nature-wildlife-ecoli-habitat-foodborne>

L.O. Frishkoff and **D.S. Karp** (2014) Preserving evolutionary history alongside tropical agriculture. *Landscapes Blog for People, Food, and Nature*. EcoAgricultural Partners. <http://peoplefoodandnature.org/blog/preserving-evolutionary-history-alongside-tropical-agriculture/>

D.S. Karp (2014) Discovering abundance in own backyard. *Field Notes*. Peninsula Open Space Trust. <http://blog.openspacetrust.org/2014/06/26/abundance-in-our-backyard/>

Keyes, S.M. and **D.S. Karp**. (2014) The Bard's Birds. *The Pacific Standard*. <http://www.psmag.com/navigation/nature-and-technology/shakespeare-fanatic-introduced-bards-birds-america-82279/>

Karp, D.S. (2012) Big farms, small farms, and biodiversity. *Landscapes Blog for People, Food, and Nature*. EcoAgricultural Partners. http://blog.ecoagriculture.org/2012/09/19/ccb_birds/

Karp, D.S. (2011) Birds, bats, and the berry borer: Conserving insectivores and pest control services in Costa Rican coffee plantations. *Amigos Newsletter N76*: 6-7.

Karp, D.S. (2011) Birds, bats, and la broca: valuing pest control in coffee plantations. *San Vito Bird Club Newsletter 5*: 6-9

INVITED TALKS

2024	Bren Seminar, University of California at Santa Barbara
2024	Food Safety Seminar Series, California Certified Organic Farmers
2024	Birdy Hour, San Francisco Bay Bird Observatory
2024	Department of Wildlife and Conservation Seminar Series, University of Florida
2024	Sustainability Committee Seminar Series, UC Trusts UK-EU
2024	Organic Farming Seminar Series, University of California Cooperative Extension
2023	Site Visit Talk, Center for Produce Safety
2023	Ecology, Evolution, and Conservation Biology Seminar Series, Oregon State University
2023	Dept. of Environmental Studies, University of California at Santa Cruz
2023	ENVS 120 Conservation Biology Course, University of California at Santa Cruz
2023	Special Seminar, Fresno Audubon Society
2023	Agriculture Research Institute PI Meeting
2022	Site Visit Talk, Center for Produce Safety
2022	Special Seminar, Mount Diablo Audubon Society
2022	BUZZ Ecology Conference, GoogleX
2021	Kellogg Biological Station, Michigan State University
2021	Dept of Wildlife, Fish, and Conservation Biology, University of California, Davis
2021	Project Director's Meeting, United States Department of Agriculture
2020	UC Davis Environmental Law Symposium, University of California, Davis
2020	California District Attorneys Association, Long Beach, California
2019	Department of Evolution and Ecology, University of California, Davis
2019	Chinese Academy of Agricultural Sciences Delegation, UC Davis
2018	Project Director's Meeting, United States Department of Agriculture
2018	School of Forest Resources and Environmental Science, Michigan Technological University

2018 Department of Ecology and Evolutionary Biology, Tulane University
 2018 Department of Entomology, University of California, Davis
 2018 Dept. of Wildlife, Fish, & Conservation Biology, University of California, Davis
 2018 Department of Ecology and Evolutionary Biology, University of Arizona
 2018 Department of Ecology, Evolution, and Behavior, UT Austin
 2017 Project Director's Meeting, United States Department of Agriculture
 2017 Wildlife, Fish, and Conservation Biology Seminar Series, UC Davis
 2017 Wildlife Seminar Series, UC Berkeley
 2016 Institute for Resources, Environment, & Sustainability Seminar Series, University of British Columbia
 2016 Centro Agronómico Tropical de Investigación y Enseñanza (CATIE)
 2016 Department of Food Science, Cornell University
 2015 Department of Wildlife, Fish, and Conservation Biology, UC Davis
 2015 Department of Anthropology, UC Davis
 2015 Department of Ecology and Evolutionary Biology, Princeton University
 2014 Swedish University of Agricultural Sciences
 2014 Center for Latin American Studies, Stanford University
 2014 MARINE seminar series, Moss Landing Biological Labs
 2014 Hann endowed lecture, University of Michigan, Biological Station
 2014 Early Career Scientist Symposium, University of Michigan.
 2014 Center for Tropical Research, University of California Los Angeles
 2014 San Jose State University
 2014 Essig Museum of Entomology, University of California Berkeley
 2013 San Francisco State University
 2009 Achauer Symposium, Stanford University

CONFERENCE PRESENTATIONS (* = invited, + = organized symposium, \$ = keynote)

2024 Ecological Society of America
 2024 Swiss Ornithological Institute Centennial Symposium*, \$
 2024 Center for Produce Safety Research Symposium*
 2024 EcoFarm Annual Conference*
 2023 Ecological Society of America
 2023 Center for Produce Safety Research Symposium*
 2023 California Plant and Soil Conference*
 2022 Western Bird Banding Association*
 2022 Ecological Society of America
 2022 Center for Produce Safety Research Symposium*
 2022 EcoFarm Annual Conference*
 2021 Nekudat Hen Annual Conference *, \$
 2021 Ecological Society of America+
 2021 Center for Produce Safety Research Symposium*
 2020 Ecological Society of America
 2020 Center for Produce Safety Research Symposium*
 2019 American Ornithological Society*
 2018 American Ornithological Society*, +
 2017 Ecological Society of America*
 2017 Natural Capital Symposium, Stanford University*
 2016 North American Ornithological Congress
 2016 Ecological Society of America
 2015 Natural Capital Symposium, Stanford University
 2014 Ecological Society of America

2013	Association for Tropical Biodiversity and Conservation*
2013	All Science Meeting, The Nature Conservancy
2012	Ecological Society of America
2012	North American Congress of the Society for Conservation Biology
2011	Ecological Society of America
2011	Bay Area Conservation Biology Symposium
2012	Species Interactions Workshop, Stanford University/UC Santa Cruz
2012	Species Interactions Workshop, Stanford University/UC Santa Cruz

Webinars/Workshops/Outreach

2024	Field Day at the Vineyard, Honig Vineyard, Napa, California
2024	Conserving California Biodiversity and the Sentinel Site Network Discussion, UCD Institute of the Environment
2024	Sustainable and Resilient Agriculture Webinar, UCD Institute of the Environment
2024	Earth Day in the Vineyard Event, Grgich Hills Estate
2024	I See Dead Plants Podcast, Iowa State University
2024	Career Panel, Environmental Club at UC Davis
2024	Student-Professional Mixer, Wildlife Society at UC Davis
2024	Bird Management Grower Workshop, Chapallet Vineyard, Napa, California
2023	Integrated Pest Management Field Day at Braga Fresh
2023	Food Safety Community of Practice Webinar
2023	Earth Day in the Vineyard Event, Grgich Hills Estate
2023	Bird Management Grower Workshop, Tres Sabores Vineyard, Napa, California
2023	Bird Management Grower Workshop, Honig Vineyard, Napa, California
2023	Bird Impacts to Food Safety Webinar, International Association for Food Protection
2022	Finding and Contacting Potential Advisors, Ecology and Evolution Graduate Preview Program
2022	Role of Birds on Farms Virtual Course, Wild Farm Alliance
2022	Essential Ecosystem Service Variables Webinar, Group on Earth Observations-Biodiversity Observation Network
2021	Vegetated Practices and Food-Safety Impacts Webinar, California Marine Sanctuary Foundation
2021	Bird Identification and Conservation Workshop, Hojanca Costa Rica
2021	Virtual Field Day Webinar, Blue Herons, Wild Farm Alliance
2020	Beyond Environmental Science Series, Webinar
2019	Bird Management Grower Workshop and Banding Demonstration, Tres Sabores Vineyard, Napa, California
2019	Bird Management Grower Workshop and Banding Demonstration, Wights Station Vineyard, Los Gatos, California
2019	Bird Management Grower Workshop and Banding Demonstration, Redhill Farm, Nevada City, California
2019	Field Trip for EcoFarm Conference, Watsonville, California
2019	Water Control Board, Watsonville, California
2019	SINAC and MINEAT, Hojanca, Costa Rica
2019	Taylor Farms, Watsonville, California
2019	Bird Identification and Conservation Workshop, Hojanca Costa Rica
2019	Corredor Biológico Hojanca-Nandayure, Hojanca, Costa Rica
2018	Agro-Ecology Course Field Trip, UC Santa Cruz
2018	Western Section Student Conclave, The Wildlife Society
2018	Biological Control Modeling Workshop, Lund University

- 2017 Developing BONs in Latin America, Stanford University*
- 2016 Way Cool Seminar Series, Biodiversity Research Centre,
University of British Columbia
- 2016 Canada Wildlife Service, Environment and Climate Change Canada

MEDIA AND OUTREACH

I have worked with the UC Davis and Stanford University press offices to develop releases, and have been interviewed for print, online, television, and radio media. Outlets include Nature News, PBS, and NPR. Articles have been published in English, Spanish, Dutch, and German.