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Vibrant Planet

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Websites/Films/Podcasts:

- Vibrant Planet: <https://www.vibrantplanet.net/>
- UC-Davis: <https://safford.faculty.ucdavis.edu/research/>
- Google Scholar profile: <https://scholar.google.com/citations?hl=en&user=7G8SSsMAAAAJ>
- *Our Beautiful Planet* series short film on Safford Lab fire research, May 2022: <https://kikim.com/project/fire-on-the-mountain/> (Entire series at: <https://kikim.com/project/our-beautiful-planet/>)
- Conservation Careers Podcast with Hugh Safford, Aug 2021: <https://www.conservation-careers.com/conservation-jobs-careers-advice/podcast/dr-hugh-safford-forest-fires-conservation/>

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EDUCATION-DEGREES-LICENSES

- 2010 Certified Senior Ecologist, Ecological Society of America Professional Certification
- 2008 Fire Incident Qualification (“Red Card”), Ecologist and Technical Specialist, IQCS #40509
- 1999 Ph.D., Ecology, University of California, Davis, California 95616. Dissertation title: *Brazilian páramos: Geoecological studies in the campos de altitude*. Major professor: Marcel Rejmánek.
- 1994 M.S. program in Biology, California State University, Hayward, California (24 quarter-hours; transferred to UC-Davis). Major professor: Rolf Benseler.
- 1990 State of California Single Subject Teaching Credential: German.
- 1989 State of California Single Subject Teaching Credentials: Physical Sciences and Social Sciences.
- 1989 M.A., Secondary Education, San Francisco State University, San Francisco, California 94132. Thesis title: *The federal government and private schooling: A study in courtship*. Advisor: Bernard Palmer.
- 1986 B.S., Geology/Earth Sciences, Montana State University, Bozeman, Montana 59715. Advisor: David Lageson.
- 1981 Diploma, Bozeman Senior High School, Bozeman, Montana 59715

PROFESSIONAL EXPERIENCE

- CHIEF SCIENTIST
Vibrant Planet
<https://www.vibrantplanet.net/>
Dates Employed: 1/22 – present
- RESEARCH ECOLOGIST
Department of Environmental Science and Policy
University of California, Davis 95616
Dates: 10/03 - present
- CLIMATE CHANGE ADAPTATION AND ECOSYSTEM MANAGEMENT SPECIALIST (contractor)
USDA-Forest Service, International Programs Office
1 Thomas Circle NW, Washington, DC 20005
Dates Employed: 5/06 – present
- REGIONAL ECOLOGIST
USDA-Forest Service
Pacific Southwest Region (California, Hawaii and Pacific Islands)
1323 Club Drive, Vallejo, CA 94592
Dates Employed: 7/01 – 12/21
- RESEARCH ECOLOGIST
Department of Environmental Science and Policy
Dates Employed: 6/99 – 10/02

University of California, Davis 95616

- **RESEARCHER**
University of California Natural Reserve System
University of California, Davis 95616
Dates Employed: 12/99 – 4/00

- **ECOLOGIST AND STATISTICIAN (self-employed)**
Great Basin Unified Air Pollution Control District
Bishop, California.
Dates Employed: 11/98 – 4/00

- **RESEARCH ASSISTANT IN ECOLOGY**
Department of Environmental Science and Policy
University of California, Davis 95616
Dates Employed: 3/99 – 6/99

- **RESEARCH FELLOW IN ECOLOGY**
Section of Evolution and Ecology
University of California, Davis 95616
Dates Employed: 9/96 – 3/99

- **LABORATORY INSTRUCTOR/TEACHING ASSISTANT**
Division of Biological Sciences and
Division of Environmental Studies
University of California, Davis, California 95616
Dates Employed: 9/94 – 4/98

- **PLANT ECOLOGIST (contractor)**
Bitterroot Native Growers, Inc.
445 Quast Lane, Corvallis, Montana 59828
Dates Employed: 1995-1996

- **FIELD NATURALIST, GUIDE, AND TRANSLATOR (AMAZON RIVER)**
International Journeys, Inc.
17849 San Carlos Blvd., Fort Myers Beach, Florida
Dates Employed: 1995

- **TEACHER (High School)**
Escola Americana de Brasília
L-2 Sul, SGAS, 605-E
Brasília, D.F., Brazil
Dates Employed: 8/90 - 6/93

- **TEACHER (High School)**
Bishop O'Dowd High School
9500 Stearns Avenue
Oakland, California 94605.
Dates Employed: 9/86 - 6/89

CURRENT COLLABORATIVE PROJECTS

Project	Overall funding and start date	Major partners	Safford roles
Guidelines for Community Based Ecological and Landscape Restoration in the MENA* region *Middle East and North Africa	UNEP funding to Lebanon Reforestation Initiative (LRI); January, 2022	United Nations Environmental Program (UNEP), LRI, numerous MENA universities and research institutions	Co-author

National Synthesis of Wildland Fire Under a Changing Climate: Fomenting tribal burning and scaling up to landscapes	\$240,000; February, 2021	US Geological Survey National Climate Adaptation Science Center	Co-PI, wrote proposal; co-supervises postdoc; writeup and outreach
Southern California Montane Forest Conservation Strategy	\$485,000; May, 2020	US Forest Service Region 5, US Geological Survey, Cal Clim Science Alliance, San Diego St Univ	PI, devised project, wrote proposal; data collection, analysis, writeup, outreach
California Prescribed Fire Monitoring Program	\$1,126,000; May, 2019	Cal Fire	PI, devised project, wrote proposal, supervise project staff; writeup, outreach
Southern California Ecosystem Services Assessment	~\$600,000 (multiple funders over multiple years); since August, 2014	US Forest Service Region 5, US Forest Service PSW Research Station, Michigan State Univ	Project lead*, devised project, wrote most proposals; writeup, outreach
Measuring Post-fire Recovery of Shrubland Biomass Under Different Climate Conditions	\$334,000; May, 2020	Cal Fire, US Forest Service Region 5	Co-PI, Collaborated on project development and proposal, supervise field crews; outreach
Forest Successional Trends in the Showers and Gondola Fires	\$111,000; April, 2018	US Forest Service Region 5	Project lead*, devised project, wrote proposal, supervise project staff; data collection, analysis, writeup, and outreach
Developing a Decision Support Tool for Postfire Restoration	\$460,000 (multiple funders over multiple years); since October, 2017	Cal Fire, National Fish and Wildlife Foundation, US Forest Service Region 5, UC-Santa Barbara	Co-PI, collaborated on project development and proposal; writeup and outreach
California Fire Science Consortium	~\$580,000; since August, 2010	Joint Fire Sciences Program, UC-Berkeley, US Forest Service Region 5	Project lead*, collaborated on project development and proposal, supervise project staff; writeup and outreach
UC-Davis support to USFS Region 5 ecological inventory and monitoring	~\$1,270,000 (multiple agreements); since 2009	US Forest Service Region 5	Devised projects, facilitated funding, supervise project staff; data collection, analysis, writeup, outreach

* "Project lead" = Before 2021 UC-Davis did not permit Safford to be PI on many incoming grants even though he was the project director

PUBLICATIONS BY CATEGORY

Manuscripts in review

Underwood, E., Q. Sorenson, C. Shrader-Patton, N Molinari, and H. Safford. Resprouting, seeding, and facultative seeding shrub species in California's Mediterranean-type climate region. In review at *Journal of Ecology*.

Wall, T., et al. (18 other authors). The drivers of California's changing wildfires: a state-of-the-knowledge synthesis. In review at *International Journal of Wildland Fire*.

- Richter, C.J., M. Rejmánek, J.E.D. Miller, and H.D. Safford. High postfire shrub cover negatively impacts plant diversity in yellow pine and mixed conifer forests of the North American Mediterranean climate zone. In review at *Applied Vegetation Science*.
- Brodie, E., J. Stewart, S. Winsemius, J.E.D. Miller, A.M. Latimer, and H.D. Safford. Wildfire facilitates upslope advance in a shade-intolerant but not a shade-tolerant conifer. In review at *Global Change Biology*.
- Williams, J.N., H.D. Safford, Z.L. Steel, A.K. Paulson, N. Enstice, and J. Tangenberg. High severity burn area and proportion exceed historic conditions in forests of Sierra Nevada and adjacent ranges (USA). In review at *Ecosphere*.
- Davis, K.T., et al. (62 other authors). Reduced fire severity offers near-term buffer to climate-driven declines in conifer resilience across the western United States. In review at *Proceedings of the National Academy of Sciences*.
- Zou, Y., G. Backus, H Safford, S. Sawyer, and M. Baskett. Quantifying the capacity for assisted migration to achieve conservation and forestry goals under climate change. In review at *Ecological Applications*.
- Williams, J.N., L. Quinn-Davidson, H.D. Safford, et al. (six additional authors). Overcoming barriers to prescribed fire in the North American Mediterranean Climate Zone. In review at *Frontiers in Ecology and the Environment*.

Journal articles in press

- Weeks, J., H.D. Safford, J.E.D. Miller, Z.L. Steel, and E. Batzer. In press. High severity fire drives floristic homogenization in human-altered forests. *Ecosphere*.
- Miller, J.E.D., S. Copeland, B. Anacker, H.D. Safford, K. Davies, and S.P. Harrison. In press. Plant community data from a statewide survey of paired serpentine and non-serpentine soils in California. *Ecology*.
- Safford, H.D., A.R. Gruppenhoff, J.N. Williams, and J. Restaino. In press. The California Prescribed Fire Monitoring Program. *Fire Management Today*.

Journal articles

- Ursell, T.L., and H.D. Safford. 2022. Nucleation sites and forest recovery under high shrub competition. *Ecological Applications*: e2711.
- Guiterman, C., et al. (26 other authors). 2022. Vegetation type conversion in the US Southwest: Frontline observations and management responses. *Fire Ecology* 18: 6.
- Safford, H.D., A.K. Paulson, Z.L. Steel, D.J.N. Young, and R.B. Wayman. 2022. The 2020 California fire season: A year like no other, a return to the past, or a harbinger of the future? *Global Ecology and Biogeography*. DOI: 10.1111/geb.13498
- Werner, C., S.P. Harrison, H.D. Safford, G. Bohlman, and R. Serata. 2021. Extreme pre-fire drought decreases shrub regeneration on fertile soils. *Ecological Applications*: e02464.
- Brodie, E., J.E.D. Miller, and H.D. Safford. 2021. Productivity modifies the effects of fire severity on understory diversity. *Ecology*: e03514.
- Hagmann, K., P. Hessburg, S. Prichard, et al. (26 other authors). 2021. Evidence for widespread changes in the structure, composition, and fire regimes of western North American forests. *Ecological Applications* 31(8): e02431.
- Prichard, S., P. Hessburg, K. Hagmann, et al. (17 other authors). 2021. Adapting western North American forests to climate change and wildfires: ten common questions. *Ecological Applications* 31(8): e02433.

- Underwood, E.C., A. Hollander, N. Molinari, L. Larios, and H.D. Safford. 2021. Identifying priorities for post-fire restoration in California chaparral shrublands. *Restoration Ecology* DOI: 10.1111/rec.13513
- Portes, M.C.G.O., H.D. Safford, V. Montade, and H. Behling. 2021. Pollen rain-vegetation relationship along an elevational gradient in the Serra dos Órgãos National Park, southeastern Brazil. *Review of Palaeobotany and Palynology* 283: 104304.
- Steel, Z.L., A.M. Fogg, R. Burnett, L.J. Roberts, and H. Safford. 2021. When bigger isn't better – implications of large high-severity wildfire patches on avian diversity and community composition. *Diversity and Distributions* DOI: 10.1111/ddi.13281
- Stewart, J.A.E., P.J. van Mantgem, D.J.N. Young, K.L. Shive, H.K. Preisler, A.J. Das, N.L. Stephenson, J.E. Keeley, H.D. Safford, M.C. Wright, K.R. Welch, and J.H. Thorne. 2021. Influence of postfire climate and seed production on conifer regeneration. *Ecological Applications* 31(3): e002280
- Wayman, R.B., and H.D. Safford. 2021. Recent bark beetle outbreaks influence wildfire severity in mixed-conifer forests of the Sierra Nevada, California, USA. *Ecological Applications* 31(3): e002287
- Portes, M.C.G.O., H. Behling, H., V. Montade, and H.D. Safford. 2020. Holocene vegetation, climate and fire dynamics in the Serra dos Órgãos, Rio de Janeiro State, southeastern Brazil. *Acta Palaeobotanica* 60: 438-453.
- Safford, H.D., and J.E.D. Miller. 2020. An updated database of serpentine endemism in the California flora. *Madroño* 67: 85-104.
- Young, D.J., T. Blush, M. Landram, J. Wright, A. Latimer, and H.D. Safford. 2020. Assisted gene flow in the context of large-scale forest management in California, USA. *Ecosphere* 11: art e03001.
- Viedma, O., F. Chico, J.J. Fernández, C. Madrigal, H.D. Safford and J.M. Moreno. 2020. Disentangling the role of prefire vegetation vs. burning conditions on fire severity in a large forest fire in SE Spain. *Remote Sensing of Environment* 247: 111891
- Cansler, C.A., et al. (74 other authors). 2020. The Fire and Tree Mortality Database (FTM): a database for empirical modeling of tree mortality after fire. *Scientific Data* 7: 194
<https://doi.org/10.1038/s41597-020-0522-7>
- McLauchlan, K.K., et al. (43 other authors). 2020. Fire as a fundamental ecological process: research advances and frontiers. *Journal of Ecology* 108: 2047-2069.
- Miller, J.E.D., and H.D. Safford. 2020. Are plant community responses to wildfire contingent upon historical disturbance regimes? *Global Ecology and Biogeography* 29: 1621-1633.
- Dove, N.C., H.D. Safford, G.N. Bohlman, B.E. Estes, and S.C. Hart. 2020. High-severity wildfire leads to multi-decadal impacts on soil biogeochemistry in mixed conifer forests. *Ecological Applications* 30: e02072
- Striplin, R.S., S.A. McAfee, H.D. Safford, and M.J. Papa. 2020. Retrospective analysis of burn windows for fire and fuels management: An example from the Lake Tahoe Basin, California, USA. *Fire Ecology* 16: e13.
- Santín, C., S. Doerr, J.G. Pausas, E.C. Underwood, and H.D. Safford. 2020. No evidence of suitability of prophylactic fluids for wildfire prevention at landscape scales. *Proceedings of the National Academy of Sciences* 117: 5103-5104.
- Behling, H., H.D. Safford, and N. Jantz. 2020. Mid- and Late Holocene vegetation, climate and fire dynamics in the Serra do Itatiaia, Rio de Janeiro State, southeastern Brazil. *Review of Palaeobotany and Palynology* 274: 104152.

- Young, D., M.D. Meyer, B.E. Estes, S.E. Gross, A. Wuenschel, C.M. Restaino, and H.D. Safford. 2020. Forest recovery following extreme drought in California, USA: natural patterns and effects of pre-drought management. *Ecological Applications* 30(1): e02002.
- Moreira, F., D. Ascoli, H.D. Safford, et al. (22 other authors). 2020. Wildfire management in Mediterranean-type regions: paradigm change needed. *Environmental Research Letters* 15: 011001.
- Steel, Z.L., B. Campos, W. Frick, R. Burnett, and H.D. Safford. 2019. Wildfire severity and pyrodiversity promote bat occupancy and diversity in fire-suppressed forests. *Scientific Reports* 9: 1-11.
- Werner, C., D.J. Young, H.D. Safford, and T.P. Young. 2019. Decreased snowpack and warmer temperatures reduce the negative effects of interspecific neighbors on regenerating conifers. *Oecologia* 191: 731-743.
- Underwood, E., A. Hollander, H.D. Safford, J. Kim, L. Srivastava, and R. Drapek. 2019. The impacts of climate change on ecosystem services in southern California. *Ecosystem Services* 39: 101008.
- Richter, C.J., M. Rejmánek, J.E.D. Miller, J. Weeks, K.R. Welch, and H.D. Safford. 2019. The species diversity x fire severity relationship is hump-shaped in yellow pine and mixed conifer forests. *Ecosphere* 10(10): e02882
- Hessburg, P., et al. (28 other authors). 2019. Climate, environment, and disturbance history govern resilience of western North American forests. *Frontiers in Ecology and Evolution* 7: article 239.
- Levine, C.R., C.V. Cogbill, B.M. Collins, A.J. Larson, J.A. Lutz, M.P. North, C.M. Restaino, H.D. Safford, S.L. Stephens, and J.J. Battles. 2019. Estimating historical forest density from land-survey data: A response to Baker and Williams (2018). *Ecological Applications* 29(8): e01968.
- Dalrymple, S.E., and H.D. Safford. 2019. Ants, wind, and low litter deposition contribute to the maintenance of fire-protective clearings around Jeffrey pine trees (*Pinus jeffreyi*). *Forest Ecology and Management* 438: 44-50.
- Restaino, C.M., D.J. Young, B. Estes, S.E. Gross, A. Wuenschel, M.D. Meyer, and H.D. Safford. 2019. Forest structure and climate mediate drought-induced tree mortality in forests of the Sierra Nevada, USA. *Ecological Applications* 29(4): e01902.
- Young, D.J.N., C.M. Werner, K.R. Welch, T.P. Young, H.D. Safford, and A.M. Latimer. 2019. Post-fire regeneration in California, USA, shows limited climate tracking and potential for drought-induced type conversion. *Ecology* 100(2): e02571.
- Axelson, J., J. Battles, B. Bulaon, et al. (22 other authors). 2019. The California Tree Mortality Data Collection Network – Enhanced communication and collaboration among scientists and stakeholders. *California Agriculture* 73(2): 55-62.
- Coppoletta, C., H.D. Safford, B. Estes, M.D. Meyer, S.E. Gross, K.E. Merriam, N. Molinari, and R. Butz. 2019. Fire regime alteration in Natural Areas underscores the need to restore a key ecological process. *Natural Areas Journal* 39: 250-263.
- Wiggins, H.L., C.R. Nelson, A.J. Larson, and H.D. Safford. 2019. Using LiDAR to develop high-resolution models of stand structure and tree spatial patterns in a reference ecosystem. *Forest Ecology and Management* 434: 318-330
- North, M.P., J.T. Stevens, D.F. Greene, et al. (21 other authors). 2019. Tamm Review: Reforestation for resilience in dry western U.S. forests. *Forest Ecology and Management* 432: 209-224.
- Underwood, E.C., A. Hollander, L. Flint, A. Flint, and H.D. Safford. 2018. Climate change impacts on hydrological ecosystem services in southern California. *Environmental Research Letters* 13: 124019.

- Shive, K., H. Preisler, K.R. Welch, H.D. Safford, R.J. Butz, K. O'Hara, and S.L. Stephens. 2018. Scaling stand-scale measurements to landscape-scale predictions of forest regeneration after disturbance: the importance of spatial pattern. *Ecological Applications* 28: 1626-1639.
- Portes, M.C.G.O., H.D. Safford, and H. Behling. 2018. Human and climate as designers of the landscape in Serra da Bocaina National Park, southeastern Brazil, over the last seven centuries. *Anthropocene* 24: 61-71.
- Underwood, E.C., H.D. Safford, and N.A. Molinari. 2018. Global change and the vulnerability of chaparral ecosystems. *Bulletin of the Ecological Society of America* 99(4): e01460.
- Miller, J.E.D., H. Root, and H.D. Safford. 2018. Altered fire regimes cause long-term lichen diversity losses. *Global Change Biology* 24: 4909-4918.
- Steel, Z.L., M. Koontz, and H.D. Safford. 2018. The changing landscape of wildfire: Burn pattern trends and implications for California's yellow pine and mixed conifer forests. *Landscape Ecology* 33: 1159-1176.
- Stephens, S.L., B.M. Collins, C.J. Fettig, M. Finney, C. Hoffman, E.E. Knapp, M. North, H.D. Safford, and R. Wayman. 2018. Drought, tree mortality, and wildfire in forests adapted to frequent fire. *Bioscience* 68(2): 77-88.
- Bohlman, G.N., E. Underwood, and H.D. Safford. 2018. Estimating biomass in California's chaparral and coastal sage scrub shrublands. *Madroño* 65: 28-46.
- Safford, H.D., S.C. Sawyer, S. Kocher, K. Hiers, and M. Cross. 2017. Linking knowledge to action: the role of boundary spanners in translating ecology. *Frontiers in Ecology and the Environment* 15: 560-568.
- Enquist, C.E., S.T. Jackson, et al. (27 other authors). 2017. Foundations of translational ecology. *Frontiers in Ecology and the Environment* 15: 541-550.
- Maestrini, B., E.C. Alvey, M.D. Hurteau, H.D. Safford, and J.R. Miesel. 2017. Fire severity alters the distribution of pyrogenic carbon stocks across ecosystem pools in a Californian mixed-conifer forest. *Journal of Geophysical Research-Biogeosciences* 122: 2338-2355
- Levine, C.R., C.V. Cogbill, B.M. Collins, A.J. Larson, J.A. Lutz, M.P. North, C.M. Restaino, H.D. Safford, S.L. Stephens, and J.J. Battles. 2017. Evaluating a new method for reconstructing forest conditions from General Land Office survey records. *Ecological Applications* 27: 1498-1513.
- Shive, K.L., B.L. Estes, A. White, H.D. Safford, K. O'Hara, and S.L. Stephens. 2017. Rice straw mulch for post-fire erosion control: assessing non-target effects on vegetation communities. *International Journal of Wildland Fire* 26: 538-550.
- Miller, J.D., and H.D. Safford. 2017. Corroborating evidence of a pre-Euro-American low-to-mixed severity fire regime in yellow pine/mixed conifer forests of the Sierra Nevada, California, USA. *Fire Ecology* 13: 58-89.
- Miller, J.D., H.D. Safford, and K.R. Welch. 2016. Using one year post-fire severity assessments to estimate longer-term effects of fire in conifer forests of northern and eastern California, USA. *Forest Ecology and Management* 382: 168-183.
- Meyer, M.D., B. Bulaon, M. MacKenzie, and H.D. Safford. 2016. Mortality, structure, and regeneration in whitebark pine stands impacted by mountain pine beetle in the southern Sierra Nevada. *Canadian Journal of Forest Research* 46: 572-581.
- Welch, K.R., H.D. Safford, and T.P. Young. 2016. Predicting conifer establishment post wildfire in mixed conifer forests of the North American Mediterranean-climate zone. *Ecosphere* 7(12): article e01609.

- Kavgaç, A., E. Örtel, I. Torres, and H.D. Safford. 2016. Early postfire vegetation recovery of *Pinus brutia* forests: effects of fire severity, pre-fire stand type and aspect. *Turkish Journal of Agriculture and Forestry* 40: 723-736.
- Egan, J.M., J.M. Slougher, T. Cardoso, P. Trainer, K. Wu, H. Safford, and D. Fournier. 2016. Multi-temporal ecological analysis of Jeffrey pine beetle outbreak dynamics within the Lake Tahoe Basin. *Population Ecology* 58: 441-462.
- Stevens, J.T., H.D. Safford, M.P. North, (plus 13 other authors). 2016. Average stand age from forest inventory plots does not describe historical fire regimes in ponderosa pine and mixed-conifer forests of western North America. *PLoS One* 11(5): e0147688
- Bohlman, G.N., M. North, and H.D. Safford. 2016. Shrub removal in reforested post-fire areas increases native plant species richness. *Forest Ecology and Management*. 374: 195-210.
- Rivera-Huerta, H., H.D. Safford, and J.D. Miller. 2016. Patterns and trends in burned area and fire severity 1984-2010 in the Sierra de San Pedro Mártir, Baja California, México. *Fire Ecology* 12: 52-72.
- Dunbar-Irwin, M., and H.D. Safford. 2016. Climatic and structural comparison of yellow pine and mixed-conifer forests in northern Baja California (México) and the eastern Sierra Nevada (California, USA). *Forest Ecology and Management* 363: 252-266
- White, A.M., P.N. Manley, G.L. Tarbill, T.W. Richardson, R.E. Russell, H.D. Safford, and S.Z. Dobrowski. 2015. Avian community responses to post-fire forest structure: Implications for fire management in mixed conifer forests. *Animal Conservation*. doi:10.1111/acv.12237
- Winford, E.M., J.T. Stevens, and H.D. Safford. 2015. Fuel treatment impacts on the ecology of yellow pine and mixed conifer forests: a synthesis. *California Agriculture* 69(3): 150-156.
- Stevens, J.T., H.D. Safford, S.P. Harrison, and A.M. Latimer. 2015. Forest disturbance accelerates thermophilization of understory plant communities. *Journal of Ecology* 103: 1253-1263.
- Hanberry, B.B., R.F. Noss, S.K. Allison, H.D. Safford, and D.C. Dey. 2015. Restoration is preparation for the future. *Journal of Forestry* 113: 425-429.
- Schwartz, M.W., N. Butt, C.R. Dolanc, A. Holguin, M.A. Moritz, M. P. North, H.D. Safford, N. Stephenson, J.H. Thorne, and P. van Mantgem. 2015. Increasing elevation of fire in the Sierra Nevada and implications for forest change. *Ecosphere* 6(7): Article 121.
- Dobrowski, S.Z., A. Swanson, J. Abatzoglou, Z. Holden, H.D. Safford, M. Schwartz, and D. Gavin. 2015. Forest structure and species traits mediate projections of climate-driven recruitment declines in western US tree species. *Global Ecology and Biogeography* 24: 917-927.
- DeSiervo, M.H., E. Jules, and H.D. Safford. 2015. Disturbance response across a productivity gradient: postfire vegetation in serpentine and non-serpentine forests. *Ecosphere* 6(4): Article 60.
- Safford, H.D., J.D. Miller, and B.M. Collins. 2015. Differences in land ownership, fire management objectives and source data matter: a reply to Hanson and Odion (2014). *International Journal of Wildland Fire* 24: 286-293.
- Steel, Z.L., H.D. Safford, and J.H. Viers. 2015. The fire frequency-severity relationship and the legacy of fire suppression in California forests. *Ecosphere* 6(1): Article 8
- Dolanc, C.R., H.D. Safford, J.H. Thorne, and S.Z. Dobrowski. 2014. Changing forest structure across the landscape of the Sierra Nevada, CA, USA, since the 1930s. *Ecosphere* 5(8): Article 101
- Maxwell, R.S., A.H. Taylor, C. Skinner, H.D. Safford, R. Isaacs, C. Airey, and A. Young. 2014. Landscape scale modeling of reference period forest conditions and fire behavior on heavily-logged lands. *Ecosphere* 5(3): Article 32

- Stevens, J.T., H.D. Safford, and A.M. Latimer. 2014. Wildfire-contingent effects of fuel treatments can promote ecological resilience in dry mixed conifer forests. *Canadian Journal of Forest Research* 44: 843-854.
- Crimmins, S., S.Z. Dobrowski, A. Mynsberge, and H.D. Safford. 2014. Can fire atlas data improve species distribution model projections through time? *Ecological Applications* 24: 1057-1069.
- Dolanc, C.R., H.D. Safford, S.Z. Dobrowski, and J.H. Thorne. 2014. Twentieth century shifts in abundance and composition of vegetation types of the Sierra Nevada, CA, USA. *Applied Vegetation Science* 17: 442-455.
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REPORTS, TOOLS, DATASETS

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- Safford, H.D. 2019. Revisão do Plano de Acção Pós-Fogo para o incêndio Peninha-Cresmina. Delivered to Empresa Municipal do Ambiente de Cascais, Portugal. 5 pp.

- Safford, H.D., and M. North. 2018. Israel trip report: MedPine6 conference and field visits to forest management sites, October 6-17, 2018. 13 pp. USDA Forest Service International Programs, Washington, DC.
- Safford, H.D. 2018. Brazil trip report: fire management and climate change adaptation in Brazilian National Parks, June 3-13, 2018. 12 pp. USDA Forest Service International Programs, Washington, DC.
- Safford, H.D. 2017. Mexico trip report: LiDAR data delivery and workshop, Sierra de San Pedro Mártir National Park, and Binational Botany/Ecology Symposium, Universidad Autónoma de Baja California, December 10-16, 2017. 10 pp. USDA Forest Service International Programs, Washington, DC.
- McGarigal K, M Mallek, B Estes, H Safford, M Tierney, T Walsh, T Thane, S Cushman. 2016. Modeling historical range of variability and future land management scenarios in the Yuba River watershed, Tahoe and Plumas National Forests, California. 75 pp. Report to the USDA Forest Service, Region 5.
- Safford, H.D. 2016. Brazil trip report: management response to climate change in mountain parks of the Atlantic Forest, June 12-23, 2016. 8 pp. USDA Forest Service International Programs, Washington, DC.
- Safford, H.D. 2016. Colombia trip report: fire science workshop and forest restoration field review, June 23-July 2, 2016. 8 pp. USDA Forest Service International Programs, Washington, DC.
- Safford, H.D. 2015. Informe del viaje: taller de manejo de praderas y pastoreo, Reserva de la Biósfera Sierra de la Laguna, Baja California Sur, 30 de noviembre a 6 de diciembre, 2014. 12 pp. USDA Forest Service International Programs, Washington, DC.
- Bohlman, G.N. and H.D. Safford. 2014. Inventory and monitoring of current vegetation conditions, forest stand structure, and regeneration of conifers and hardwoods in the Freds Fire burn area - Final Report: 2009, 2012 & 2013 Field Seasons. University of California, Davis, CA
- Safford, H.D. 2013. Natural Range of Variation (NRV) for yellow pine and mixed conifer forests in the bioregional assessment area, including the Sierra Nevada, southern Cascades, and Modoc and Inyo National Forests. 151 pp. Unpublished report. USDA Forest Service, Pacific Southwest Region, Vallejo, CA.
- Safford, H.D. 2012. Trip Report: Fires, climate change, and forest and shrubland management in Mediterranean climate-zone ecosystems. USDA Forest Service Technical Assistance Trip to Israel and Spain, January 22-February 6, 2012. 32 pp. USDA Forest Service International Programs, Washington, DC.
- Williams, J.N., and H.D. Safford. 2012. Benefits of vegetation restoration in dryland ecosystems. Report to USDA Forest Service International Programs, Middle Eastern program. 7 pp.
- Safford, H.D. 2012. Brazil trip report: Climate change and high mountain vegetation in the Atlantic Forest biome, southeast Brazil. USDA Forest Service Technical Assistance Trip, November 27-December 5, 2011. 21 pp. USDA Forest Service International Programs, Washington, DC.
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- Ottmar, R.D., and H.D. Safford. 2011. FCCS Fuelbeds for the Lake Tahoe Basin. Final report P018. 26 pp. Fire and Environmental Research Applications, USDA Forest Service Pacific Northwest Research Station.

- Safford, H. D., and B. Brady. 2010. Mexico trip report: Fire and forest management. Mediterranean zone National Parks, Mexico. USDA Forest Service Technical Assistance Trip, November 8 – November 12, 2010. 20 pp. USDA Forest Service International Programs, Washington, DC.
- Anacker, B. L., S. P. Harrison, H. D. Safford, and S. Veloz. 2010. Predictive modeling of cheatgrass invasion risk for the Lake Tahoe Basin. 16 pp. Report submitted to the Lake Tahoe Basin Management Unit, USDA Forest Service.
- Carlson, C., S. Z. Dobrowski, and H. D. Safford. 2010. Angora fire vegetation monitoring, 3rd year annual progress report. 30 pp. Report submitted to the Tahoe Science Program, Incline Village, NV.
- Safford, H. D. 2009. Geography and biodiversity of the South Asia, Mekong, and Insular Southeast Asia Subregions. 25 pp. Report submitted to Asia Regional Biodiversity Conservation Assessment, US Agency for International Development, Regional Development Mission for Asia, Bangkok, Thailand.
- Safford, H. D., and P. Cannon. 2009. Paraguay trip report: Agroforestry and forest restoration, Paraguay. USDA Forest Service Technical Assistance Trip, March 7 – March 21, 2009. 42 pp. USDA Forest Service International Programs and US Agency for International Development, Washington, DC.
- Carlson, C., S. Z. Dobrowski, and H. D. Safford. 2009. Angora fire vegetation monitoring, 2nd year annual progress report. 33pp. Report submitted to the Tahoe Science Program, Incline Village, NV.
- Schmidtke, P., Safford, H. D., and Buchanan, J. 2008. Brazil trip report: National Incident Management System development, Brazil. USDA Forest Service Technical Assistance Trip, September 29, 2008 – October 10, 2009. c. 35 pp. USDA Forest Service International Programs and US Agency for International Development, Washington, DC.
- Anacker, B. L., Safford, H. D., and Harrison, S. P. 2008. Golden Trout Wilderness meadow inventory and monitoring: data analysis and assessment of current status. 32 pp. Report to the USDA Forest Service Pacific Southwest Region and the Inyo National Forest.
- Safford, H. D. 2008. Fire severity in fuel treatments, American River Complex Fire, Tahoe National Forest, California. 21 pp. Report to the USDA Forest Service, Pacific Southwest Region Fire and Aviation Management Staff.
- Safford, H. D., and Juergens, G. 2008. Paraguay trip report: Ecological restoration of burned areas, Paraguay. USDA Forest Service Technical Assistance Trip, April 26 – May 3, 2008. 26 pp. USDA Forest Service International Programs and US Agency for International Development, Washington, DC.
- Safford, H. D. 2008. Condition and trends in Angola forestlands. Report submitted to FAA 118-119 Tropical Forest and Biodiversity Assessment Team. 22 pp. USDA Forest Service International Programs and US Agency for International Development, Washington, DC.
- Safford, H. D. 2008. Potential impacts of climate change to the habitat of the California fisher: an initial assessment. 52 pp. Report for interagency California Fisher recovery program.
- Safford, H. D., and Lombardo, D. 2007. Trip report: Tree identification, vegetation assessment, and wildlife monitoring training, Divundu, Namibia, and Mucusso, Angola. USDA Forest Service Technical Assistance Trip, March 7-24, 2007. 21 pp. USDA Forest Service International Programs and US Agency for International Development, Washington, DC.
- Herbst, D. B., Roll, S. K., and Safford, H. D. 2007. Evaluation of livestock grazing effects and recovery in the Golden Trout Wilderness using macroinvertebrate bioassessment indicators and physical habitat surveys: contrast of grazed and ungrazed allotments. 53 pp. Final report to California Department of Fish and Game, US-Forest Service and California Trout.

- Zweede, M., H. D. Safford, and G. Juergens. 2006. Trip and assessment report: USDA Forest Service forest resource assessment trip, Kuando Kubango Province, Angola. USDA Forest Service Technical Assistance Trip, May 16-June 1, 2006. 64 pp. USDA Forest Service International Programs and US Agency for International Development, Washington, DC.
- Safford, H.D. 2006. Potential impacts of climate change to fisher habitat in California: a preliminary assessment, Unpublished report for the USDA Forest Service, Pacific Southwest Region. 29 pp.
- Slaton, M. R., A. J. Gallegos, H. D. Safford, and D. Downie. 2006. Lake Tahoe Basin Management Unit Terrestrial Ecological Unit Inventory. Users' Guide. 353 pp.
- Harrison, S. P. and Safford, H. D. 2001. Postfire recovery of serpentine chaparral at the Knoxville Public Lands (Napa and Lake Counties, CA). 4 pp. Draft report, prepared for the US Bureau of Land Management, Ukiah Field Office.
- Safford, H. D. August, 2000. The McLaughlin Reserve database: Summary of available data. 56 pp. Prepared for University of California Natural Reserve System, University of California-Davis.
- Richards, J. H., H.D. Safford, and J. Paulus, J. November, 2000. Plant, soil, and groundwater relations in *Distichlis spicata* on the Owens Lake Playa. 70 pp. Prepared for Great Basin Unified Air Pollution Control District, Bishop, CA.

GRANTS RECEIVED

2022	National Park Service, Sequoia-Kings Canyon National Parks: <i>Assessing Fire Impacts to Mixed Conifer Forests in Sequoia and Kings Canyon National Parks</i>	\$117,729
2022	California State Parks: <i>California State Parks Vegetation Treatment Monitoring Program</i>	\$799,999
2022	The Nature Conservancy/Betty Moore Foundation: <i>Dixie Fire fuels treatment effectiveness monitoring</i>	\$98,000
2022	California Department of Forestry and Fire Protection: <i>Development and improvement of wildfire baseline emissions, return interval departure, and post-fire recovery data and tools for California forest and wildfire management</i>	\$332,000
2022	League to Save Lake Tahoe. Project: <i>Caldor Fire fuel treatment effectiveness</i>	\$15,000
2022	California Department of Forestry and Fire Protection: <i>California Prescribed Fire Monitoring Program</i> (bridge funding)	\$438,000
2021	US Forest Service, Pacific Southwest Region. Project: <i>Postfire inventory of the Caldor Fire</i>	\$200,000
2021	Tahoe Fund. Project: <i>Fuel treatment effectiveness assessment in the Caldor Fire</i>	\$10,000
2021	Tahoe Science Advisory Council. Project: <i>Fuel treatment effectiveness assessment in the Caldor Fire, Lake Tahoe Basin</i>	\$75,000
2021	US Geological Survey, National Climate Adaptation Science Center. Project: <i>National synthesis of wildland fire under a changing climate</i> (Co-PI)	\$240,000
2020	Joint Fire Science Program. Project: <i>California Fire Science Delivery Consortium Support for technical assistant in Sierra Nevada section</i> (Co-PI)	\$53,553
2020	California Department of Forestry and Fire Protection: <i>Measuring Wildfire Impacts and Post-fire Recovery of Shrubland Biomass Under Different Climate Conditions</i>	\$333,869

	(Co-PI)	
2020	US Geological Survey, Southwest Climate Adaptation Science Center: <i>Southern California Montane Forests Conservation Strategy</i>	\$485,184
2019	California Department of Forestry and Fire Protection: <i>California Prescribed Fire Monitoring Program</i>	\$825,000
2018	Southern Nevada Public Lands Management Act, Tahoe Science Program Project: <i>Forest Successional Trends in the Showers and Gondola Fires</i>	\$111,000
2017	National Fish and Wildlife Foundation: <i>Developing a Decision Support Tool for Post-Fire Restoration</i>	\$169,020
2017	Western Wildlands Environmental Threats Assessment Center, USDA Forest Service: <i>Restoration Prioritization in Dry Forests</i>	\$85,410
2017	USDA Forest Service Pacific Southwest Region: <i>Grassland Species Indicators of Yosemite Toad Habitat</i>	\$8,000
2016	California Department of Forestry and Fire Protection-FRAP: <i>Fire perimeter updates for California Fire History Geodatabase.</i>	\$25,000
2016	US Fish and Wildlife Service: <i>Analysis of environmental drivers of rare plant distribution and abundance, Ash Meadows, Nevada.</i>	\$90,000
2016	US Bureau of Land Management California State Office: <i>Fire effects on postfire diversity and growth rates in serpentine and nonserpentine chaparral</i>	\$8,000
2015	USDA Forest Service Pacific Southwest Region: <i>Ecosystem services assessment of the Santa Clara River watershed, southern California</i>	\$170,000
2015	California Landscape Conservation Cooperative. Project: <i>Assessing the impacts of future climates and fire on hydrologic regimes in the Mediterranean-type ecosystems of southern California (Co-PI)</i>	\$120,275
2015	Joint Fire Science Program. Project: <i>Vegetation succession in an old-growth ponderosa pine forest following structural restoration with fire: implications for retreatment and maintenance (Co-PI)</i>	\$164,000
2014	USDA Forest Service Pacific Southwest Region: <i>Ecosystem services assessment of the Santa Clara River watershed, southern California</i>	\$320,000
2014	USDA Forest Service Pacific Southwest Region Postfire Restoration Fund: <i>Development of spatial predictive models of postfire tree regeneration in Sierra Nevada wildfires.</i>	\$350,000
2014	USDA Forest Service Pacific Southwest Region Postfire Restoration Fund: <i>Inventory of vegetation and fuels conditions in the area of the Power Fire.</i>	\$315,000
2013	Joint Fire Science Program. Project: <i>California Fire Science Delivery Consortium Support for technical assistant in Sierra Nevada section</i>	\$70,750
2013	Joint Fire Science Program. Project: <i>Effects of fuel treatments and wildfire on winter snowpack accumulation and depletion</i>	\$25,000
2012	Joint Fire Science Program. Project: <i>California Fire Science Delivery Consortium Support for technical assistant in Sierra Nevada section</i>	\$38,000

2012	USDA Forest Service-International Programs. Project: <i>Forest fuels assessment of the Sierra San Pedro Mártir and Constitución de 1857 National Parks, Baja California, Mexico</i>	\$60,000
2011	USDA Forest Service-International Programs. Project: <i>Field-based accuracy assessment of vegetation maps of the Sierra San Pedro Mártir and Constitución de 1857 National Parks, Baja California, Mexico</i>	\$13,000
2011	California Energy Commission. Project: <i>Monitoring the ecological effects of forest fuel treatments in wildfire areas</i>	\$120,000
2010	Joint Fire Science Program. Project: <i>California Fire Science Delivery Consortium Support for technical assistant in Sierra Nevada section</i>	\$38,000
2010	USDA Forest Service, Tahoe National Forest. Project: <i>Installation and monitoring of a vegetation plot grid in the Pendola Fire watershed, Tahoe and Plumas National Forests</i>	\$58,000
2010	USDA Forest Health Protection Program, Spatial Technology Development Program. Project: <i>Creating a spatially-dependent model for probability of Jeffrey Pine Beetle-caused mortality in the Lake Tahoe Basin (Co-PI)</i>	\$45,500
2009	USDA Forest Service-International Programs, and USDA Foreign Agricultural Service. Project: <i>A comparison of current patterns of fire severity in the conifer forests of Baja California, Mexico with the eastern Sierra Nevada, California, USA.</i>	\$55,000
2009	USDA Forest Service, Lake Tahoe Basin Management Unit Project: <i>Vegetation, fuels, and tree survival monitoring, Angora Fire, Lake Tahoe Basin</i>	\$60,000
2008	Southern Nevada Public Lands Management Act, Tahoe Science Program Project: <i>Spatially Explicit Reference Conditions for Forest Landscapes in the Lake Tahoe Basin, USA (Co-PI)</i>	\$197,348
2008	Southern Nevada Public Lands Management Act, Tahoe Science Program Project: <i>Developing FCCS Fuelbeds for the Angora Fire Region. (Co-PI)</i>	\$73,130
2008	Southern Nevada Public Lands Management Act, Tahoe Science Program Project: <i>Predictive modeling of cheatgrass invasion risk for the Lake Tahoe Basin (Co-PI)</i>	\$71,100
2008	USDA Forest Service, Cleveland National Forest Project: <i>Postfire monitoring of conifer and hardwood regeneration after the 2003 Cedar Fire, San Diego County</i>	\$68,000
2008	USDA Forest Service, Lake Tahoe Basin Management Unit Project: <i>Vegetation, fuels, and tree survival monitoring, Angora Fire, Lake Tahoe Basin</i>	\$65,000
2006	CalTrout Project: <i>Golden Trout Wilderness meadow monitoring: Comparison of grazed and ungrazed sites</i>	\$8,000
2006	Joint Fire Science Program Project: <i>Restoring fire to endemic Cypress populations in northern California (Co-PI)</i>	\$98,000
2004	CalTrout/Orvis Golden Trout Habitat Restoration Initiative Project: <i>Stream Condition Inventory of Golden Trout Wilderness streams:</i>	\$40,460

	<i>Comparison of grazed and ungrazed allotments. (Includes \$30,345 procured from matching Federal Fish Habitat Restoration funds)</i>	
2003	National Fire Plan Project: <i>Postfire monitoring of old and young chaparral stands in the MacNally Fire, Sequoia National Forest, California.</i>	\$20,000
2001	National Fire Plan Project: <i>Serpentine habitats and fire: patterns of survival and regeneration in sensitive plant species and their application to postfire restoration planning.</i>	\$90,000
2000	Cowrote successful proposal to National Science Foundation; \$275,000 awarded to S. P. Harrison Project: <i>Regional and local diversity in an insular environment: Serpentine plants in California.</i>	
1998	University of California University Grant Project: <i>Brazilian páramos: Geoecological studies in the campos de altitude.</i>	\$1,500
1996	University Research Expeditions Program (UREP), University of California-Berkeley, financial support for field research plus volunteer field help. Project: <i>Brazilian páramos: Geoecological studies in the campos de altitude.</i>	\$2,800
1994-1996	University of California Graduate Studies Fee Grant	

AWARDS-SCHOLARSHIPS-FELLOWSHIPS

- 2022 Award: USDA Forest Service, Performance Award
- 2022 Award: USDA Forest Service, Travel Gainsharing Award
- 2021 Award: USDA Forest Service, Performance Award
- 2021 Award: USDA Forest Service, Travel Gainsharing Award
- 2020 Award: USDA Forest Service, Performance Award
- 2020 Award: USDA Forest Service, Travel Gainsharing Award
- 2017-2019 Scholarship: Fulbright Global Scholar Award. Project: Postfire restoration in Mediterranean ecosystems. Research carried out in Spain, France, and Portugal.
- 2019 Award: USDA Forest Service, Travel Gainsharing Award
- 2018 Award: USDA Forest Service, Travel Gainsharing Award
- 2017 Award: USDA Forest Service, Travel Gainsharing Award
- 2017 Award: USDA Forest Service, Washington Office International Programs, for support to Mediterranean Initiative and Middle Eastern Program
- 2016 Award: USDA Forest Service, Travel Gainsharing Award
- 2016 Award: Tahoe Regional Planning Agency, Best in Basin 2015 Award, to Lake Tahoe Basin Management Unit for Angora Fire Restoration Project Phase III.
- 2015 Award: USDA Forest Service, Washington Office International Programs, for support to Mediterranean Initiative and Middle Eastern Program

- 2015 Award: USDA Forest Service, Travel Gainsharing Award
- 2014 Award: USDA Forest Service, Travel Gainsharing Award
- 2013 Award: USDA Forest Service, Travel Gainsharing Award
- 2013 Award: USDA Forest Service Pacific Southwest Region, quality salary-step increase for outstanding performance rating
- 2012 Award: US Department of Justice, Certificate of Commendation, for technical assistance to the USDOJ Environment and Natural Resources Division
- 2012 Award: USDA Forest Service Pacific Southwest Region, SPOT Award, for general support to Ecosystem management in Region 5
- 2012 Award: USDA Forest Service, Travel Gainsharing Award
- 2011 Award: USDA Forest Service, Washington Office International Programs, SPOT Award, for support to Middle Eastern Program
- 2011 Award: USDA Forest Service Pacific Southwest Region, SPOT Award, for input to Regional Ecological Restoration Statement of Intent
- 2010 Award: USDA Forest Service, Travel Gainsharing Award
- 2010 Award: USDA Forest Service, recognition for overall achievement in providing ecological support to land and resource management in the Pacific Southwest Region
- 2009 Award: USDA Forest Service, Travel Gainsharing Award
- 2008 Award: USDA Forest Service Pacific Southwest Region, SPOT Award, for support to the Sierra Nevada Forest Plan Amendment litigation
- 2008 Award: USDA Forest Service Pacific Southwest Region, recognition for outstanding accomplishment in support of the Storrie Fire litigation
- 2007 Award: USDA Forest Service Pacific Southwest Region, recognition for outstanding dedication and achievement, annual Vegetation Management Conference
- 2007 Award: USDA Forest Service, Special Service Award
- 2007 Award: USDA Forest Service, Travel Gainsharing Award
- 2006 Award: ESRI User Conference, San Diego, CA. First Place: Best Software Integration Project: *Spatially integrated reporting of environmental criteria for resource management: an example from Lake Tahoe*. Authors: N. E. Roth, J. H. Viers, M. R. Slaton, H. D. Safford
- 2005 Award: USDA Forest Service, Travel Gainsharing Award
- 2004 Award: USDA Forest Service, Travel Gainsharing Award
- 2003 Award: USDA Forest Service, Travel Gainsharing Award
- 2002 Award: USDA Forest Service, Travel Gainsharing Award
- 1999 Award: Graduate Studies Travel Award, University of California-Davis
- 1998-1999 Fellowship: Ecology Graduate Group Fellowship, University of California-Davis

- 1998 Scholarship: Jastro Research Scholarship, University of California-Davis. Project: *Brazilian páramos: Geoecological studies in the campos de altitude.*
- 1998 Award: University of California-Davis Graduate Research Award. Project: *Brazilian páramos: Geoecological studies in the campos de altitude.*
- 1998 Award: Association for Tropical Biology Travel Award
- 1997-1998 Fellowship: Tracy and Ruth Risdon Storer Fellowship, University of California-Davis
- 1997 Fellowship: Eisenhower Graduate Fellowship, University of California-Davis
- 1997 Scholarship: Jastro Research Scholarship, University of California-Davis. Project: *Brazilian páramos: Geoecological studies in the campos de altitude.*
- 1997 Award: University of California-Davis Graduate Research Award. Project: *Brazilian páramos: Geoecological studies in the campos de altitude.*
- 1996-1997 Fellowship: Ecology Graduate Group Fellowship, University of California-Davis
- 1994 Scholarship: California Native Plant Society, *Myrtle Wolf* Scholarship, for most outstanding graduate botanical research conducted in the greater E. San Francisco Bay region. Project: *Woody vegetation and succession at the Garin Woods Ecol. Field Station, CSU-Hayward, CA.*

INVITED LECTURES-PRESENTED PAPERS-WEBINARS

- September, 8, 2022. *Impacts of global change on forests and soils in the Mediterranean climate regions and their implications for ecosystem management and restoration.* XII MEDECOS conference, Langebaan, South Africa.
- April 28, 2022. *Fire and vegetation trends in California: Where are they taking us?* Agricultural University of Georgia, Tbilisi, Georgia.
- April 14, 2022. *Introduction to Land Tender and other forest management and restoration decision support tools from California.* Joint meeting of KKL-Forest Division and Nature and Parks Authority, KKL-JNF Northern Galilee HQ, Israel.
- March 23, 2022. *Prioritization tools for post-fire restoration in Mediterranean-type ecosystems in California.* 7th Mediterranean Forest Week, Kemer, Turkey.
- March 16, 2022. *Climate change and post-fire restoration in Mediterranean-type ecosystems in California.* European Forest Institute-Mediterranean Suboffice, Barcelona, Spain.
- March 3, 2022. *Wildfire risk reduction and postfire recovery in the Sierra Nevada. It is time to get serious.* Sierra Nevada Conservancy Watershed Improvement Program annual summit, virtual presentation.
- November 11, 2022. *Climate change and post-fire restoration in Mediterranean-type ecosystems in California.* United Nations Climate Change Conference – COP 26, Glasgow, Scotland.
- September 30, 2021. *Fire trends in California.* Council on Watershed Health and UC Cooperative Extension webinar, virtual presentation.
- March 3, 2021. *California fire trends and potential management responses.* California State Parks annual meetings, virtual presentation.

- February 25, 2021. *Some ruminations on fire trends in California*. SCALE quarterly meeting, virtual presentation.
- February 24, 2021. *Some ruminations on fire trends in California*. California Department of Fish and Wildlife lecture series, virtual presentation.
- February 5, 2021. *Some ruminations on fires trends in California*. Plenary session, The Wildlife Society Western Section annual conference, virtual presentation.
- November 24, 2020. *Fire trends and management responses in California*. South African Functional Climate Change Research Network, Conversations on Climate Change lecture series, virtual presentation.
- November 19, 2020. *Fuels management and forest restoration in the Sierra Nevada: the case for active forest management on the Valentine Reserve*. University of California-Santa Barbara Natural Reserve System lecture series, virtual presentation.
- February 21, 2020. *California fire regimes and modern fire “departure”: understanding geographic differences in fire trends and ecosystem management*. California Polytechnical University, San Luis Obispo, California
- January 31, 2020. *California fire regimes and modern fire “departure”: understanding geographic differences in fire trends and ecosystem management*. University of Western Australia, Perth, Australia.
- February 14, 2019. *Cambio climático, bosques, y fuego en la Sierra Nevada, California: implicaciones para la gestión actual y futuro de recursos naturales*. Universidad Politécnica de Madrid, Madrid, Spain.
- January 17, 2019. *Current climate and fire trends in California*. European Forest Institute-Mediterranean Suboffice, Barcelona, Spain
- December 18, 2018. *Fear and loathing in the Sierra Nevada: confronting a wicked problem*. Centro de Estudos Florestais, Instituto Superior da Agronomia, Universidade de Lisboa, Lisbon, Portugal.
- December 3, 2018. *Das Klima der Vergangenheit und der Zukunft in den campos de altitude Brasiliens: Auswirkungen auf die Erhaltung und Bewirtschaftung von Ressourcen in einem einzigartigen Ökosystem*. University of Göttingen, Göttingen, Germany
- October 31, 2018. *Past and future climates in the campos de altitude of Brazil: implications for conservation and resource management in a unique ecosystem*. Northern Arizona University, Flagstaff, Arizona.
- October 8, 2018. *Fire use in California ecosystem management: replacing the missing link*. MedPine 6 Conference, Hebrew University, Rehovot, Israel.
- June 5, 2018. *Uso do fogo no manejo de ecossistemas na Califórnia: reestabelecendo o elo perdido*. Instituto Brasileiro do Meio-Ambiente e dos Recursos Naturais (IBAMA) and PREVFOGO, Brasília, Brazil
- May 14, 2018. *Making fuels management compatible with restoration objectives in an age of global change: case studies from the US Mediterranean-climate zone*. 3rd Southern California Chaparral Symposium, Angeles National Forest, Arcadia, California.

- February 19, 2018. *Changements climatiques, forêts et incendies dans la Sierra Nevada, Californie, USA: implications pour la gestion actuelle et future des ressources*. Institut National de Recherche en Sciences et Technologies pour l'Environnement et l'Agriculture (IRSTEA), Aix-en-Provence, France.
- October 26, 2017. *The campos de altitude of southeastern Brazil: the ramifications of global change for conservation and management of a unique ecosystem*. University of California-Santa Cruz Arboretum, Ray Colette Lecture Series. UC-Santa Cruz, Santa Cruz, California.
- September 21, 2017. *Ecological science and Forest Service management in the Sierra Nevada: the fundamental role of agency-university collaborations*. University of Nevada, Reno, Nevada.
- April 18, 2017. *Cambio climático, bosques, y fuego en la Sierra Nevada, California, USA, y implicaciones para la actual y futuro gestión de recursos*. Universidad de Castilla-La Mancha, Toledo, Spain.
- April 5, 2017. *Apoyo ecológico a la restauración y la gestión de fuego y combustibles en los Bosques Nacionales de California, USA*. Centro para la Investigación y Experimentación Forestal, Valencia, Spain.
- March 17, 2017. *An introduction to the world's Mediterranean climate regions and their susceptibility to global warming*. Escola Andorrana de Batxillerat, Sant Julià de Lòria, Andorra.
- March 16, 2017. *Apoyo ecológico a la gestión de fuego y combustibles en los Bosques Nacionales de California, USA*. Universidad de Barcelona, Facultad de Biología, Barcelona, Spain.
- February 23, 2017. *Valuing ecosystem services in chaparral-dominated watersheds of southern California*. Centre de Recerca Ecològica i Aplicacions Forestals (CREAF), Cerdanyola del Vallès, Spain.
- June 24, 2016. *Climas del pasado y del futuro en los campos de altitude: implicaciones para la conservación e gestión de recursos naturales en un ecosistema único*. Instituto Alexander von Humboldt, Bogotá, Colombia.
- June 14, 2016. *Climate change, forests, and fire in California: implications for current and future resource management*. Universidade Estadual do Rio de Janeiro, Rio de Janeiro, Brazil.
- May 25, 2016. *The California Fire Science Consortium. Delivering fire science to the "Pyrostate"*. ForestFire 2016 Conference, Aix-en-Provence, France.
- April 27, 2016. *Past, present, and future in the forests of the Sierra Nevada: variability in forest response to environmental change, and management strategies to promote ecosystem resilience*. University of California-Merced, Merced, CA
- March 18, 2015. *Cambios climáticos, bosques, y fuego en la Sierra Nevada, California, EEUU*. Universidad de Barcelona, Barcelona, Spain.
- March 4, 2015. *Climate change, forests and fire in the Sierra Nevada, California*. "Save California: The Urgency to Restore Our Primary Watershed." Summit meeting organized by the Sierra Nevada Conservancy, Sacramento, CA.
- January 15, 2015. *US-Mexico collaborative efforts in Mediterranean-zone fire and resource management*. California Native Plant Society Conservation Conference, San Jose, CA.
- October 15, 2014. *Deeply rooted in reality: bringing federal lands conservation and restoration into the*

- 21st century. Plenary address, Natural Areas Association annual conference, Dayton, OH.
- October 7, 2014. *Using conifer forests in Baja California, Mexico, as reference sites for restoration in Alta California, USA*. MEDECOS XIII conference, Olmué, Chile.
- March 28, 2014. *Past, present, and future in the forests of the Sierra Nevada: variability in forest response to environmental change, and management strategies to promote ecosystem resilience*. University of Montana, Plum Creek Invited Lecture and Northwest Science Conference, Missoula, MT.
- March 19, 2014. *Climate change, forests, and fire in the Sierra Nevada, California: implications for resource management*. University of Athens, Athens, Greece.
- September 23, 2013. *Modern departures in fire severity and area vary by forest type in the Sierra Nevada*. Fire Ecology Seminar Series, University of California, Berkeley, CA.
- June 18, 2013. *Restoration and chaparral landscapes: Forest Service strategic goals and funding opportunities*. Southern California Chaparral Restoration Workshop, Arcadia, CA.
- May 27, 2013. *Esfuerzos de colaboración entre México y los USA en el manejo de los recursos naturales y el manejo del fuego en la zona mediterránea de Norteamérica*. Meeting of the resource staffs of the Parques Nacionales Sierra de San Pedro Mártir and Constitución de 1857 and the Sierra de la Laguna Biosphere Reserve, PN Sierra de San Pedro Mártir, Baja California, Mexico.
- May 7, 2013. *Assessing the ecological effects of forest fuel treatments in the Sierra Nevada*. California Fuels Committee Annual Meeting, Sacramento, CA.
- April 12, 2013. *BRBNA: climate change, fire, and future vegetation conditions*. Blue Ridge-Berryessa Partnership Fire Restoration Workshop, Yountville, CA.
- February 21, 2013. *Change adaptation strategies*. Southern Sierra Nevada Climate Change Adaptation Workshop, Visalia, CA.
- December 6, 2012. *Sword and shield strategies in frequent-fire conifer forests of California*. 5th International Fire Ecology and Management Congress, Portland, OR.
- December 5, 2012. *Patterns in fire return interval departure (FRID) on federal forestlands in California, USA*. 5th International Fire Ecology and Management Congress, Portland, OR.
- November 8, 2012. *Fire regimes and ecological restoration in the Lake Tahoe Basin*. Northern California Prescribed Fire Council annual meeting, South Lake Tahoe, CA.
- October 9, 2012. *Climate change, forests, and fire in California's Sierra Nevada*. Western International Forest Disease Work Conference, Granlibakken, CA.
- March 21, 2012. *Ecological restoration and global change*. Webinar presentation to USDA Forest Service Southern Region Climate Change Committee.
- January 25, 2012. *Making fuels management compatible with restoration objectives in an age of global change: case studies from the US Mediterranean-climate zone*. Conference on Climate Change and Forest Fires in the Mediterranean Basin: Management and Risk Reduction. Nir Ezion, Israel.
- December 1, 2011. *Climas do passado e do futuro nos campos de altitude: implicações para a conservação e gestão de recursos em um ecossistema único*. 9th Annual National Park Science Meeting, Serra dos Órgãos National Park, Teresópolis, RJ, Brazil
- June 24, 2011. *Fire regimes and forest restoration in the Lake Tahoe Basin*. Tahoe Wildfire Summit, Granlibakken, CA.
- June 14, 2011. *Fire in ultramafic vegetation, California, USA*. 7th International Conference on Serpentine Ecology, Universidade de Coimbra, Coimbra, Portugal
- May 11, 2011. *Forest fuel treatments, climate change, and restoration: connecting the dots*. Forest Biology

- seminar series, University of California, Davis, CA
- March 17, 2011. *Managing fire and fuels in the Wildland-Urban Interface*. Presentation to Mt. Carmel Forest interagency postfire restoration group, Yoqne'am, Israel.
- February 22, 2011. *Climate change, forests, and fire: resource management in the California National Forests*. Conservation and Climate Change lecture series, University of Montana, Missoula, MT.
- April 27, 2010. *Climate change, fire and the National Forests: issues in current and future resource management in the California Central Coast Region*. California State University-Monterey Bay, Monterey, CA
- April 6, 2010. *As influências atuais e futuras do clima e do fogo sobre a gestão das Florestas Nacionais em California, USA*. Universidade do Estado do Rio de Janeiro, Rio de Janeiro, RJ, Brazil.
- March 3, 2010. *Climate, forests, and fire: issues in current and future resource management in the California National Forests*. Biological Sciences lecture series, San Jose State University, San Jose, CA.
- February 10, 2010. *Ecological implications of future fire regimes in California*. Conference on Pre- and Post-Wildfire Forest Management For Ecological Restoration and Fire Resilience, Sacramento, CA.
- September 22, 2009. *The ecological effects of climate change in the eastern Sierra Nevada*. Evaluating Climate Change in the Eastern Sierra Nevada Symposium, Bishop, CA.
- September 11, 2009. *Martens and fishers in a changing climate*. 5th International Martes Symposium, Seattle, WA.
- March 18, 2009. *Protocolos del monitoreo para la agroforesteria: experiencias en Latinoamerica*. Universidad Nacional de Asunción, Asunción, Paraguay.
- March 17, 2009. *Manejo del fuego: estudios de caso de Latinoamerica*. Universidad Nacional de Asunción, Asunción, Paraguay.
- January 23, 2009. *Ecological and biomass effects of forest fuel thinning in the Angora Fire, Lake Tahoe Basin, California*. Forest carbon management symposium, California Interagency Forest Working Group, Davis, CA.
- December 3, 2008. *What role does fire suppression play in recent increases in fire activity, size and severity in the western United States?* Annual meeting of the Association for Fire Ecology, San Diego, CA.
- November 19, 2008. *Fuels treatments and their ecological effects: the Angora Fire as a case study*. Annual meeting of the California Pest Council, Woodland, CA.
- October 9, 2008. *Sistema Nacional de Manejo de Incidentes: Resultados da visita técnica do Serviço Florestal dos EUA*. Instituto Brasileiro do Meio Ambiente e dos Recursos Naturais Renováveis, Brasília, Brazil.
- April 28, 2008. *Restauración de áreas de bosques quemados en Paraguay*. Asociación Rural de Paraguay, Asunción, Paraguay.
- February 29, 2008. *Tendências atuais em incêndios florestais na Serra Nevada, California, USA*. Universidade de Coimbra, Coimbra, Portugal.
- August 10, 2007. *Effects of fuels treatments on fire severity in the Angora Fire and summary of regional patterns in fire severity*. Summer meeting of the Society of American Foresters, California Chapter, Placerville, CA.

- August 8, 2007. *Spatiotemporal trends in fire severity in the Sierra Nevada, California, 1984-2004*. Annual meeting of the Ecological Society of America, San Jose, CA.
- August 1, 2007. H. Behling, principal author; M. Oliveira, L. Dupont. *Late Quaternary vegetation, biodiversity, fire and climate dynamics in the Atlantic mountain region of eastern Brazil*. Annual meeting of the International Union for Quaternary Research, Cairns, Australia
- November 14, 2006. *Southern California and fire: a separate reality*. 3rd International Fire Ecology and Management Congress, San Diego, CA.
- May 27, 2006. *Taxonomic and geographic patterns in the serpentine endemic flora of California, USA*. 5th International Conference on Serpentine Ecology, Università di Siena, Siena, Italy.
- May 5, 2006. S. Dobrowski, principal author; S. Ustin. *Incorporating Ecological Context into Object Oriented Vegetation Classification through Regression Based Distribution Modeling*. Annual meeting of the American Society for Photogrammetric Engineering and Remote Sensing, Reno, NV.
- January 28, 2006. *Power Fire restoration: Development of historical reference conditions and applications to restoration planning*. Annual meeting of the Society of American Foresters, California and Intermountain Chapters, Reno, NV
- April 21, 2005. *Vegetation and Fire Regime Condition Class in the North Fork Middle Fork American River watershed*. American River Watershed Conference, Sacramento State University, Sacramento, CA.
- October 14, 2004. *Fire, water and four-wheelin': Contemporary issues in Research Natural Area management in California*. Annual meeting of the Natural Areas Association, Chicago, IL.
- August 5, 2004. *Seeing the forest and the trees: Ecology and land management in the National Forest System*. Annual meeting of the Ecological Society of America, Portland, OR.
- July 2, 2003. *Grazing and invasion in roadside plant communities: Interactions with habitat productivity and evolutionary history*. Monterey Pine Forest Ecology Cooperative, Carmel, CA.
- April 23, 2003. *Disturbance ecology of ultramafic vegetation in California and implications for management*. 4th International Conference on Serpentine Ecology, Jardín Botánico Nacional, Havana, Cuba.
- December 7, 2002. *Plant species diversity in California serpentines: Regional patterns and possible causative factors*. Annual State meeting, California Native Plant Society, University of California, Berkeley, CA.
- December 5, 2002. *The effects of fire on serpentine vegetation and implications for management*. Annual meeting of the Association for Fire Ecology, San Diego, CA.
- November 23, 2002. *Disturbance ecology of serpentine habitats and implications for management*. Department of Environmental Science and Policy, University of California, Davis, CA.
- November 4, 2002. *Patterns of plant species diversity in the serpentine flora of the Sierra Nevada*. California Native Plant Society, Chico, CA.
- October 30, 2002. *Geoecology: Historical roots and contemporary practice*. Annual meeting of the Geological Society of America, Denver, CO.
- October 9, 2002. C. Millar, principal author. *Research Natural Areas in the Sierra Nevada bioregion Contribution to biodiversity conservation and opportunities for research*. Sierra Nevada Science Symposium, Kings Beach, CA.
- June 15, 2002. *Botany and geoecology of northern Sierra Nevada serpentines*. Joint field workshop, Chico State University Herbarium and Plumas National Forest, N. Fork Feather River, California.

- March 19, 2002. *Plant species diversity in California serpentine: Regional patterns and possible causative factors*. California Native Plant Society, Fresno, CA.
- February 20, 2002. H. Behling, principal author. *Paläoökologische Studien in den tropischen Gebirgsregionen Südostbrasiens*. Annual meeting of the Gesellschaft für Tropenökologie, Göttingen, Germany.
- August 8, 2001. *Fire effects on plant diversity in serpentine versus nonserpentine chaparral and grassland*. Annual meeting of the Ecological Society of America, Madison, WI.
- August 6, 2000. *Ungrazed road verges in a grazed landscape: Interactive effects of grazing, invasion and substrate on grassland diversity*. Annual meeting of the Ecological Society of America, Snowbird, UT.
- March 24, 1999. *Geoecological studies in the tropical highlands of southeastern Brazil*. Annual meeting of the American Association of Geographers, Honolulu, HI.
- October 20, 1998. *Páramos brasileños: Estudios geoecológicos en los campos de altitud*. VII Congreso Latinoamericano de Botánica, Mexico City, Mexico.
- August 4, 1998. *Conflagration in the campos de altitud: Patterns and rates of postfire regeneration in the Brazilian páramos*. Annual meeting of the Association for Tropical Biology, Baltimore, MD.
- September 7, 1997. *Formas de vida e evolução convergente em sistemas tropic-alpinas*. Universidade do Estado de Minas Gerais, Carangola, MG, Brazil.
- September 6, 1997. *Geografia, geologia, e climatologia das terras altas do sudeste do Brasil*. Universidade do Estado de Minas Gerais, Carangola, MG, Brazil.
- September 9, 1996. *Ecologia e biogeografia dos campos de altitud do sudeste do Brasil*. Universidade do Estado do Rio de Janeiro, Rio de Janeiro, RJ, Brazil.

RECENT OUTREACH ACTIVITIES

Event	Date/location/attendance	Notes	Safford roles
California Postfire Restoration Symposium	January 26, 2022; Virtual event; 435		Editor and author of Forest Service Region 5 postfire restoration guidance, spoke at the event
UC Jepson Herbarium Field Course: Fire ecology	April 22-24, 2019; Hopland NREC; 16		Devised the course, lecturer and field trip leader
Conference: Living with Fire in California's Central Coast Ranges	May 7-9, 2018; Sonoma State University; 460	In response to 2017 Wine Country fires, focused on state and local agencies, public, policy makers; CFSC played major role	Devised the event, conference chair, head of conference program committee, conference MC, fund raising and promotion
Symposium: The Angora Fire 10 years Later: What have we learned?	June 22-23, 2017; Lake Tahoe Community College; 60	Lecture and field trip overview of Angora Fire effects and ecosystem recovery, lessons for managers and landowners; CFSC played major role	Devised the event, event co-chair, program committee; co-led field trip

Natural Areas Conference 2016; Climate Change Adaptation and Natural Areas Management: Turning Words to Action	October 18-21, 2016; UC-Davis Conference Center; 625	Largest and best-funded Natural Areas conference ever; CFSC and Safford lab played major role	Conference chair, head of conference program committee, conference MC, fund raising and promotion
California Chaparral Symposium	Spring 2013, 2015, 2018; Angeles NF Training Center, Arcadia; average attendance = 150	Planning next event for early 2023; CFSC plays major role	Devised the event, conference chair for first two events, conference program committee, event MC, fund raising and promotion
Workshop: Aspen Ecology and Restoration Management in California	October 28-29, 2014; Lake Tahoe Community College; 65	Workshop for managers and the public; CFSC played major role	Devised the event, program committee, promotion, co-led field trip
California Fire Science Consortium (CFSC) field trips	One to three events per year since 2013; various locations; average attendance = 25	Field visits with managers, students,	Overall supervisor of Sierra Nevada section, led some of the events
Forest and Fire Ecology Random Lecture (FFERAL) series	Two to four events per year since 2013; held at UC-Davis with streaming; average attendance = 40	CFSC sponsored	Devised the event, supervise the staff who run the series
Field course: Forestry for Lawyers	Held every other year since 2012; UC-Berkeley Forestry Field Camp; average attendance = 35	Field course for federal environmental lawyers involved in forest management related case work	Lecturer and field trip leader
California Fire Science Retreat	Held every year since 2010, various locations; average attendance = 50	3-day field workshop for fire scientists and managers; CFSC sponsored some years	Lead organizer of the event
International Climate Change and Natural Resource Management Seminar	2010 to present; three weeks in May; Washington, DC, and various California locations; average attendance = 30	For international managers from the developing world. Partnership with UC-Davis Information Center for the Environment and USFS International Programs	On team that devised the event; lecturer and field trip leader; lead segments on climate change and forest management

SERVICE AND LEADERSHIP ACTIVITIES

- 2011-present Sierra Nevada region director, California Fire Science Consortium
- 2012-present Member, Advisory Board, University of California Center for Fire Research and Outreach
- 2015-present Associate editor, *Natural Areas Journal*
- 2018-present Principal Investigator, Cal Fire Prescribed Fire Monitoring Program
- 2020-present Member, Science Advisory Committee, Natural Areas Association

- 2021-2022 Member, Science Advisory Board, California Wildfire and Forest Resilience Action Plan
- 2012-2022 Member, Science Advisory Committee, Point Blue Conservation Science
- 2001-2021 Regional Ecology Program Manager, USDA-Forest Service, Pacific Southwest Region
- 2001-2021 Chairperson, Regional Research Natural Area Committee, USDA-Forest Service, Pacific Southwest Region
- 2011-2021 US Forest Service liaison to the executive board, Natural Areas Association
- 10/2020 Organized two symposia at 2020 Natural Areas Conference (virtual): *Global change and ecosystem resilience: managing threats to sustainability*, and *Fire restoration and consequences for ecosystem management*
- 9/2019 Organized and presided at symposium at 2019 Society for Ecological Restoration International Restoration Congress, Cape Town, South Africa: *Linking fire and ecosystem restoration in Mediterranean climate-region shrublands and forests: a view from five continents*
- 2018 Conference organizing committee co-chair, *Living with Fire in California's Coast Ranges: Promoting Fire-Resilient Communities and Landscapes in an Era of Global Change*, Sonoma State University, Rohnert Park, CA
- 2018 Member, organizing committee, 3rd Southern California Chaparral Symposium, Arcadia, CA
- 2015-2016 Conference chair, Natural Areas Conference: *Climate Change Adaptation and Natural Resources Management: Turning Words to Action*, University of California-Davis, CA
- 2015 Chaired organizing committee for Southern California Chaparral Ecosystem Services Symposium, Arcadia, CA
- 2013 Chaired organizing committee for Southern California Chaparral Restoration Workshop, Arcadia, CA
- 2011 Member, organizing committee, MEDECOS XII conference, Los Angeles, CA
- 9/2011 Organized and presided at two organized oral sessions at 2011 MEDECOS XII conference, Los Angeles, CA: *Topics in ecosystem management in the Mediterranean-climate zone of México; Restoration in Mediterranean-climate ecosystems: linking science and management in an era of global change*
- 2011-2016 Member, US Forest Service Pacific Southwest Region Climate Change Integration Team
- 2009-2013 Member, Regional Interdisciplinary Team for Forest Plan Revision, USDA-Forest Service Pacific Southwest Region
- 12/2008 Coorganized and presided at organized oral session at 2008 Association for Fire Ecology annual meeting, San Diego, CA: *The ecological and environmental effects of fire suppression*.
- 2008-2011 Member, North American Forest Commission, Watershed Working Group
- 11/2008 Organized and presided at topical session at 2008 California Pest Council annual

- meeting, Woodland, CA: *The status of forests in the Lake Tahoe Basin*.
- 2006-2012 Coach, American Youth Soccer Organization, Davis, CA
- 2006-2008 Chairperson, Regional Vegetation Information Steering Committee, USDA-Forest Service, Pacific Southwest Region
- 8/2004 Coorganized and presided at organized oral session at 2004 Ecological Society of America annual meeting, Portland, OR: *From idea to reality: Applied science and ecological problem solving in the National Forest System*.
- 2002-2007 Chairperson, National Association of Regional Vegetation Ecologists, USDA-Forest Service
- 10/2002 Coorganized and presided at topical session at 2002 Geological Society of America annual meeting, Denver, CO: *Geoecology: The emergence of an old concept to solve problems in the 21st century*.
- 6/2002 Coorganized and directed field workshop *Botany and geoecology of northern Sierra Nevada serpentines*, sponsored by Chico State University Herbarium and US-Forest Service, Plumas National Forest.
- 2002-2004 Regional Coordinator, Natural Resource Information System – TERRA module, US-Forest Service, Pacific Southwest Region
- 2001-2003 Member, Regional Vegetation Mapping Team, US-Forest Service, Pacific Southwest Region
- 1993-1994 Member, Garin Woods Ecological Field Station steering committee, California State University, Hayward, CA
- 1992-1993 Group Leader, Science and Mathematics Department accreditation committee, Escola Americana de Brasília, Brasília, Brazil
- 1990-1993 Head Coach, Varsity Women's Basketball, Escola Americana de Brasília, Brasília, Brazil.
- 1987-1988 Member, Science Department accreditation committee, Bishop O'Dowd High School, Oakland, CA
- 1986-1989 Director, Ski Club, Bishop O'Dowd High School, Oakland, CA
- 1986-1987 Faculty advisor, Junior Statesmen of America, Bishop O'Dowd High School, Oakland, CA

STUDENTS ADVISED*

<u>Student</u>	<u>Degree</u>	<u>Year</u>	<u>Institution</u>	<u>Current position</u>
Solomon Dobrowski	Ph.D.	2007	UC-Davis	Professor, University of Montana
Tim Kuhn	M.S.	2007	UC-Davis	Biologist, Yosemite National Park
Brian Levine	M.S.	2009	UC-Berkeley	Fire management officer, Australia
Erik Frenzel	M.S.	2011	UC-Davis	Biologist, Sequoia-Kings Canyon National Park
Chris Mallek	Ph.D.	2011	UC-Davis	Fire ecologist, US Forest Service

Chris Dolanc	Ph.D.	2011	UC-Davis	Associate Professor, Mercyhurst University
Sarah Dalrymple	Ph.D.	2013	UC-Davis	Clinical Asst. Professor, Boise State University
Jens Stevens	Ph.D.	2013	UC-Davis	National Program Lead, Wildland Fire and Fuels Research, US Forest Service
Kevin Welch	Ph.D.	2013	UC-Davis	Air quality/carbon mgt specialist, CALFIRE
Mila Hickenbottom	M.S.	2014	UC-Davis	Environmental consultant, Driggs, Idaho
Melissa DeSiervo	M.S.	2014	Humboldt St Univ.	Post-doc, University of Wyoming
Gabrielle Bohlman	M.S.	2015	UC-Davis	Ecologist, US Forest Service
Hiram Rivera Huerta	Ph.D.	2016	UABC-Ensenada	Asst Professor, Universidad Autónoma de Baja California
Erin Alvey	M.S.	2016	Humboldt St Univ.	GIS specialist, Spatial Informatics Group
Zack Steel	Ph.D.	2018	UC-Davis	Post-doc, University of California-Berkeley
Clark Richter	Ph.D.	2021	UC-Davis	Teacher, Staten Island Academy, New York
Jonah Weeks	Ph.D.	2022	UC-Davis	
Emily Brodie	Ph.D.	2022	UC-Davis	
Tara Ursell	Ph.D.	2022	UC-Davis	(Co-advised with Jim Sanchirico)
Sarah Winsemius	Ph.D.	2023	UC-Davis	(Co-advised with Yufang Jin)
Ashley Grupenhoff	Ph.D.	2025	UC-Davis	
Gabe Foote	Ph.D.	2025	UC-Davis	
Marie Fleming	Ph.D.	2026	UC-Davis	(Co-advised with Beth Rose Middleton)
Saba Saberi	Ph.D.	2027	UC-Davis	
Tessa Putz	Ph.D.	2027	UC-Davis	

*Until 2014, the nature of my affiliation with UC-Davis did not allow me to serve as a major professor. Before 2014 students listed are those for whom I served on their thesis committee, where their thesis project was directly related to Forest Service management issues, and where I played the central role in obtaining thesis project funding.

POSTGRADUATE RESEARCHERS SUPERVISED

<u>Researcher</u>	<u>Degree</u>	<u>Year(s)</u>	<u>Current position</u>
Joe Stewart	Ph.D.	2022-	
Nina Fontana	Ph.D.	2021-	
Quinn Sorenson	Ph.D.	2019-	
Alison Paulson	Ph.D.	2020-2021	Ecologist, USFS, Humboldt-Toiyabe National Forest
Mark de Guzman	Ph.D.	2019-2020	Post-doc, San Diego State University
Carrie Levine	Ph.D.	2017-2019	Ecologist and analyst, Spatial Informatics Group
Jesse Miller	Ph.D.	2016-2018	Lecturer, Stanford University
Christina Restaino	Ph.D.	2014-2018	Asst professor/extension specialist, Univ. of Nevada-Reno
Gabrielle Bohlman	M.S.	2016-2017	Ecologist, US Forest Service, Klamath National Forest
Chris Dolanc	Ph.D.	2012-2014	Associate Professor, Mercyhurst University
Zack Steel	M.S.	2012-2014	Research ecologist, US Forest Service
Chris Mallek	Ph.D.	2011-2012	Fire ecologist, US Forest Service
Sam Veloz	Ph.D.	2008-2009	Quantitative ecologist, Point Blue Conservation Science

LANGUAGE SKILLS

Full fluency: English, German, Portuguese, Spanish

Semifluency: French, Italian, Swedish

Survival skills: Bahasa Indonesia, Hindi (spoken only)

INTERNATIONAL PROJECTS: NATIONS WORKED IN*

North America

- Canada, Mexico, United States

Central America and Caribbean

- Costa Rica, Cuba

South America

- Brazil, Chile, Colombia, Paraguay, Peru, Venezuela

Europe

- Andorra, England, France, Germany, Greece, Italy, Portugal, Scotland, Spain, Switzerland, Wales

Middle East and North Africa

- Israel, Lebanon, Morocco, Tunisia, Turkey

Subsaharan Africa

- Angola, Botswana, Madagascar, Namibia, South Africa

Asia

- China, Georgia, Indonesia, Thailand

Oceania

- Australia

*this list only includes educational and professional projects and events that took place in the nation identified. I have also carried out support to projects in many nations where my work was virtual.

Examples include:

- Cambodia, East Timor, India, Madagascar, Nepal, Jordan, Russia, Vietnam

PROFESSIONAL AFFILIATIONS

- Association for Fire Ecology
- Association Internationale des Forêts Méditerranéennes
- American Geophysical Union
- American Institute for Biological Sciences
- Association for Tropical Biology
- California Botanical Society
- Ecological Society of America
- Geological Society of America
- International Association of Wildland Fire
- International Society of Serpentine Ecologists

- Natural Areas Association
- Society for Conservation Biology
- Society for Ecological Restoration

MANUSCRIPTS REVIEWED

- *American Journal of Botany*
- *Austral Ecology*
- *Biotropica*
- *Biological Invasions*
- *Botanical Journal of the Linnean Society*
- *Diversity and Distributions*
- *East African Journal of Forestry and Agroforestry*
- *Ecology*
- *Ecology Letters*
- *Ecological Applications*
- *Ecological Modelling*
- *Ecosphere*
- *Fire Ecology*
- *Forest Ecology and Management*
- *Frontiers in Ecology and the Environment*
- *Global Change Biology*
- *Global Environmental Change*
- *International Journal of Wildland Fire*
- *Journal of Applied Ecology*
- *Journal of Biogeochemistry*
- *Journal of Biogeography*
- *Journal of Environmental Management*
- *Journal of Vegetation Science*
- *Madroño*
- *Mountain Research and Development*
- *Natural Areas Journal*
- *Northeastern Naturalist*
- *Oecologia*
- *Oecologia Australis*
- *Palaeoecology – Data and Modelling*
- *Perspectives in Plant Ecology, Evolution and Systematics*
- *Plant and Soil*
- *Plant Ecology*
- *Plant Ecology and Diversity*
- *Proceedings of the National Academy of Sciences (PNAS)*
- *Revista Brasileira de Botânica*
- *Saudi Journal of Agricultural Sciences*
- *Science Advances*

- *Science of the Total Environment*
- *Trends in Ecology and Evolution*
- *Vegetatio*
- *Western North American Naturalist*