

**DONALD A. FALK**  
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**School of Natural Resources and the Environment**  
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**JOINT APPOINTMENTS:**

- 2007 – Laboratory of Tree-Ring Research (Professor, Dendrochronology)
- 2007 – Institute for the Environment (Affiliated Faculty)
- 2015 – Global Change Graduate Interdisciplinary Program (Professor, Global Change)

**EDUCATION**

- Ph.D. University of Arizona, Ecology & Evolutionary Biology, 2004
- M.A. Tufts University, Environmental Policy, 1981
- B.A. Oberlin College, Interdisciplinary Studies, 1972

**RESEARCH INTERESTS**

Fire ecology, fire history, dendroecology, fire climatology, restoration ecology, ecological resilience, global change ecology, ecological scale.

**PREVIOUS POSITIONS**

- 1998 – 2007 **Laboratory of Tree-Ring Research, University of Arizona**
- 2004 – 2007 Adjunct Associate Professor
- 1998 – 2004 Graduate Associate in Research
  
- 1993 – 2002 **Society for Ecological Restoration**
- 2000 – 2002 Science & Policy Consultant.
- 1993 – 2000 Executive Director. First director of the leading international organization dedicated to the science and practice of ecological restoration.
  
- 1993 – 1994 **The Nature Conservancy of Arizona.** Field biologist and consultant for assessment of conservation status of rare plants in southern Arizona.
  
- 1984 – 1993 **Center for Plant Conservation, Co-Founder and Executive Director.** Co-founder of first national organization dedicated to conservation of endangered plants, at Arnold Arboretum (Harvard University (1984 – 1991), Missouri Botanical Garden (1991 – 2015), and San Diego Zoo Global (2015 – present).
  
- 1980 – 1984 **Cambridge Community Development Department, Energy Director.** Developed and managed \$1.5 million residential energy conservation program.

**AWARDS AND HONORS**

- 1991 – current Fellow, American Association for the Advancement of Science (AAAS)
  
- 2015 Research Delegate, University of Arizona, to Conference of Parties (COP21), UN Framework Convention on Climate Change (UNFCCC); Paris, France.
- 2014 – 15 Faculty Fellow, Udall Center for Studies in Public Policy
- 2013 Who's Who in Local Communities, Honorable Mention, News Digest International
- 2013 Outstanding Course (Introduction to Wildland Fire), School of Natural Resources and the Environment, University of Arizona

- 2012 Outstanding Scholarly Achievement, School of Natural Resources and the Environment, University of Arizona
- 2008 Outstanding Paper in Landscape Ecology, International Association for Landscape Ecology (US): Falk, Miller, McKenzie, and Black, 2007, *Ecosystems*
- 2004 Center for Plant Conservation, STAR Award
- 2004 International Association of Landscape Ecology (US), Student Presentation Award, Honorable Mention
- 2003 Edward S. Deevey Award, Ecological Society of America, Outstanding Presentation in Paleoecology
- 2001 – 02 Marshall Foundation Graduate Fellowship
- 2001 – 03 National Science Foundation, Doctoral Dissertation Improvement Grant
- 2001 – 02 Robert W. Hoshaw Scholar, Ecology & Evolutionary Biology, U. Arizona
- 1999 – 2000 William McGinnies Scholar, Arid Lands Studies, University of Arizona
- 1998 – 2001 Achievement Rewards for College Scientists (ARCS) Scholar
- 1996 Pinchot Institute for Conservation, U.S. Forest Service, Conservation Scholarship
- 1995 – 96 Lockwood Fellow, College of Forest Resources, University of Washington
- 1991 Fulbright Short-Term Scholars Award, Australian Fulbright Foundation
- 1990 – 91 Arboretum Associate, Arnold Arboretum, Harvard University
- 1990 Plant Conservation Award, New England Wild Flower Society
- 1981 Governor's Award for Energy Conservation, Commonwealth of Massachusetts

#### **TEACHING, LECTURES, AND INTERNSHIPS**

- 2013 – current Introduction to Natural Systems (DVP 620, Master's Program in Development Practice), teaching cadre
- 2008 – current Introduction to Wildland Fire (Renewable Natural Resources 355)
- 2009 – current Restoration Ecology (Renewable Natural Resources 496e/596e)
- 2010 – current Fire Ecology (Renewable Natural Resources 496a/696a)
- 2006 – current Instructor, Advanced Fire Effects (RX-510) and Fire in Ecosystem Management (M-580), National Advanced Fire and Resource Institute (NAFRI)
- 2005 – current Dendroecology (Geosciences/Ecology 497k/597k)
- 2003 – current Lectures and seminars in climate adaptation, conservation biology, dendroecology, restoration ecology, and sustainability in the UA College of Law, Department of Ecology & Evolutionary Biology, Laboratory of Tree-Ring Research, and School of Natural Resources and the Environment
- 2002 University of Arizona, Environmental History of the Southwest (Teaching Assistant), P. Sheppard
- 2000 – 1 Columbia University, Earth Semester Mentor, BioSphere II, Oracle, AZ.
- 1988 – 89 Conservation Botany (BOT 332), Arnold Arboretum of Harvard University
- 1981 – 89 Tufts University, Adjunct Assistant Professor, Dept. of Urban and Environmental Policy: Biological Diversity and Conservation Strategies, Environmental Policy, Environmental Political Economy
- 1979 – 80 The Nature Conservancy/Massachusetts Department of Environmental Management, Research Associate, Massachusetts Natural Heritage Program.
- 1979 Science Instructor, Charles River Academy, Cambridge, MA
- 1978 EarthWatch, Inc. and Massachusetts Department of Environmental Management.
- 1978 Research Assistant, Hummingbird Cay Field Station, Great Exuma, Bahamas
- 1978 Graduate Teaching Assistant, Environmental Planning and Design, Tufts University
- 1977 – 78 Lincoln Filene Center, New England Environmental Network, Tufts University.

#### **SELECTED PUBLICATIONS**

##### **Books**

- Palmer MA, **DA Falk**, and JB Zedler (Eds.). 2016. *Foundations of Restoration Ecology*. Second Edition. Island Press, Washington, DC.
- McKenzie D, C Miller, and **DA Falk** (Eds.). 2011. *The Landscape Ecology of Fire*. Ecological Studies Series No. 213, Springer, Dordrecht, Netherlands.
- Falk DA**, MA Palmer, and JB Zedler (Eds.). 2006. *Foundations of Restoration Ecology*. Island Press, Washington, DC.
- Falk DA**, CI Millar, and M Olwell (Eds.). 1996. *Restoring Diversity: Strategies for Reintroduction of Endangered Plants*. Island Press, Washington, DC.
- Falk DA** and KE Holsinger (Eds.). 1991. *Genetics and Conservation of Rare Plants*. Oxford University Press, New York.

### Dissertation

- Falk DA** 2004. *Scaling rules for fire regimes*. Ph.D. dissertation, Department of Ecology & Evolutionary Biology, and Laboratory of Tree-Ring Research, University of Arizona. Tucson. 305 pp.

### Peer reviewed publications

#### *In review/revision*

- Cortés Montaña C, J Kellerman, PZ Fulé, **DA Falk**, and EC Enkerlin Hoeflich. Thick-billed Parrot (*Rhynchopsitta pachyrhyncha*: Psittacidae) old-growth forest habitat associated with frequent fires in northwestern México. *Bird Conservation International*. Revised and resubmitted.
- Ektvedt TM, **DA Falk**, MN Evans, R Penniston, S White, and P Sheppard. Dendrochronology and isotope chronology of *Juglans neotropica* and its response to El Niño events in tropical highlands of Piura, northern Peru. *Dendrochronologia*. In revision.
- Garfin GM, **DA Falk**, CD O'Connor, K Jacobs, RD Sagarin, AC Haverland, A Haworth, A Baglee, J Weiss, JT Overpeck, and AA Zuñiga-Terán. A new mission: climate adaptation challenges and opportunities in the Department of Defense. *Frontiers in Ecology and the Environment*. Revised and resubmitted.
- Ketcham SL, JL Koprowski, and **DA Falk**. Differential Response of Native Arizona Gray Squirrels and Introduced Abert's Squirrels to a Mosaic of Burn Severities in the Santa Catalina Mountains. *Mammal Study*. Revised and resubmitted.
- Kitzberger T, **DA Falk**, AL Westerling, and TW Swetnam. Direct and indirect climate controls predict heterogeneous early-mid 21st century wildfire burned area across western and boreal North America. *PLoS One*. In revision.
- Marshall LA, **DA Falk**, and NG McDowell. Nitrogen rather than water limits overstory tree growth following extreme stand density increase in a ponderosa pine forest. *Tree-Ring Research*. In revision.
- Swetnam TL, **DA Falk**, BJ Enquist, AM Lynch, DP Guertin, and SR Yool. Assessing the generality of Metabolic Scaling Theory in differing forest disturbance regimes. *American Naturalist*. In revision.
- Van Mantgem P, A Das, EC Williams, DA Falk, and N Stephenson. Intermediate- and long-term growth predicts post-fire tree mortality for common conifers in western U.S. parks. *International Journal of Wildland Fire*. In review.

#### *Published*

- Conver JL, **DA Falk**, SR Yool, and RR Parmenter. 2017. Stochastic fire modeling of a montane grassland and ponderosa pine fire regime in the Valles Caldera National Preserve, New Mexico, USA. *Fire Ecology*. In press.
- Guiterman CH, EQ Margolis, CD Allen, **DA Falk**, and TW Swetnam. 2017. Long-term persistence and frequent fire suggest future increased landscape dominance of shrubfields in northern New Mexico. *Ecosystems*. <http://DOI:10.1007/s10021-017-0192-2>

- Evans MK, **DA Falk**, A Arizpe, TL Swetnam, F Babst, and KE Holsinger. 2017. Fusing tree-ring and forest inventory data to infer influences on tree growth. *EcoSphere* 8(7):e01889. <http://doi:10.1002/ecs2.1889>
- Falk DA**. 2017. Restoration ecology, resilience, and the axes of change. *Annals of the Missouri Botanical Garden* 102:201–216. <http://doi:10.3417/2017006>
- Minor J, **DA Falk**, and GA Barron-Gafford. 2017. Fire severity and regeneration strategy influence shrub patch size and structure following disturbance. *Forests* 8: 221. <http://doi:10.3390/f8070221>
- O'Connor CD, **DA Falk**, AM Lynch, TW Swetnam, and C Wilcox. 2017. Disturbance and productivity interactions mediate stability of forest composition and structure. *Ecological Applications* 27(3): 900–915. <http://doi:10.1002/eap.1492>
- Yocom Kent LL, PZ Fulé, PM Brown, J Cerano-Paredes, E Cornejo-Oviedo, C Cortes Montaña, SA Drury, **DA Falk**, J Meunier, HM Poulos, CN Skinner, SL Stephens, and J Villanueva-Díaz. 2017. Climate drives fire synchrony but local factors control fire regime change in northern Mexico. *Ecosphere* 8(3):e01709. <http://doi:10.1002/ecs2.1709>
- Triepke FJ, EH Muldavin, MM Wahlberg, TK Lowrey, **DA Falk**, MM Friggens, and KE Bagne. 2016. *Assessing the Climate Change Vulnerability of Ecosystem Types of the Southwestern U.S.* [http://digitalrepository.unm.edu/biol\\_etds/200](http://digitalrepository.unm.edu/biol_etds/200)
- Falk DA** and CI Millar. 2016. The Influence of Climate Variability and Change on the Science and Practice of Restoration Ecology. In Palmer MA, DA Falk, and JB Zedler (Eds.). *Foundations of Restoration Ecology*. Second Edition. Island Press, Washington, DC.
- Richards CM, **DA Falk**, and AM Montalvo. 2016. Population and Ecological Genetics in Restoration Ecology. In Palmer MA, DA Falk, and JB Zedler (Eds.). *Foundations of Restoration Ecology*. Second Edition. Island Press, Washington, DC.
- Palmer MA, JB Zedler, and **DA Falk**. 2016. Ecological Theory and Restoration Ecology. In Palmer MA, DA Falk, and JB Zedler (Eds.). *Foundations of Restoration Ecology*. Second Edition. Island Press, Washington, DC.
- Falk DA**, W van Leeuwen, and A McEwen. 2016. Low-cost high-resolution global pyrogenic thermal sensing: Critical information for biosphere-atmosphere interactions. *Decadal Survey for Earth Science and Applications from Space (ESAS 2017)*, National Academy of Science.
- Stevens JT, HD Safford, MP North, PM Brown, CR Dolanc, SZ Dobrowski, **DA Falk**, CA Farris, JF Franklin, JS Fried, PZ Fulé, AN Gray, RK Hagmann, EE Knapp, JD Miller, DF Smith, TW Swetnam, and AH Taylor. 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. <http://doi:10.1371/journal.pone.0147688>
- Swetnam TW, J Farella, CI Roos, MJ Liebmann, **DA Falk**, & CD Allen. 2016. Multi-Scale Perspectives of Fire, Climate and Humans in Western North America and the Jemez Mountains, U.S.A. *Philosophical Transactions of the Royal Society B* 371: 20150168. <http://dx.doi.org/10.1098/rstb.2015.0168>
- Falk DA**. 2016. The resilience dilemma: Incorporating global change into ecosystem policy and management. *Arizona Law Journal* 48(1): 145-156.
- Falk DA**. 2016. Review of *Fire on Earth: An Introduction*. AC Scott, DMJS Bowman, WJ Bond, SJ Pyne, and ME Alexander. 2014. Wiley Blackwell, Oxford, UK. *Quarterly Review of Biology* 91: 76-77.
- Smith KT, E Arbellay, **DA Falk**, and EK Sutherland. 2016. Macroanatomy and compartmentalization of recent fire scars in three North American conifers. *Canadian Journal of Forest Research*. 46: 535–542. <http://dx.doi.org/10.1139/cjfr-2015-0377> .
- Anhold J, B Mitchell, C Wilcox, T Mellin, M Merrick, AM Lynch, M Waltermann, **DA Falk**, J Koprowski, D Laes, D Evans, and H Fisk. 2015. Using LiDAR to Evaluate Forest Landscape and Health Factors and Their Relationship to Habitat of the Endangered Mount Graham Red Squirrel on the Coronado National Forest, Pinaleño Mountains, Arizona. Ch. 12, p. 133-142 in KM Potter and B Conkling, Eds. *Forest Health Monitoring: National Status, Trends, and Analysis 2014*.

- Gen. Tech. Rep. SRS-209. Asheville, NC: U.S. Department of Agriculture Forest Service, Southern Research Station.
- Swetnam TL and **DA Falk**. 2015. *Carbon Cycling in Southwestern Forests: Reservoirs, Fluxes, and the Effects of Fire and Management*. ERI Working Paper No. 35. Ecological Restoration Institute and Southwest Fire Science Consortium, Northern Arizona University, Flagstaff, AZ. 15 p. Synthesized as an ERI Fact Sheet: *Carbon Cycling in Southwestern Forests: Reservoirs, Fluxes, and the Effects of Fire and Management*. Ecological Restoration Institute and Southwest Fire Science Consortium, Northern Arizona University.  
<http://library.eri.nau.edu/gsd/collect/erilibra/index/assoc/D2015025.dir/doc.pdf>
- Keane RE, E Smithwick, D McKenzie, C Miller, **DA Falk**, and LB Kellogg. 2015. Representing Climate, Disturbance, and Vegetation Interactions in Landscape Simulation Models. *Ecological Modelling* 309–310: 33–47. <http://dx.doi.org/10.1016/j.ecolmodel.2015.04.009>
- Guerrant EO, K Havens, PL Fiedler, P Vitt, **DA Falk**, and K Dixon. Population Structure Integral to Seed Collection Guidelines: A Response to Hoban and Schlarbaum. 2015. *Biological Conservation* 184: 465–466. <http://dx.doi.org/10.1016/j.biocon.2015.02.020>
- Swetnam TL, AM Lynch, **DA Falk**, SR Yool, and DP Guertin. 2015. Discriminating natural variation from legacies of disturbance in semi-arid forests, Southwestern USA. *EcoSphere* 6(6):97. <http://dx.doi.org/10.1890/ES14-00384.1>
- Sidman G, DP Guertin, DC Goodrich, D Thoma, **DA Falk**, and IS Burns. 2015. A coupled modeling approach to assess the impact of fuel treatments on post-wildfire runoff and erosion. *International Journal of Wildland Fire*. <http://dx.doi.org/10.1071/WF14058>
- O'Connor CD, AM Lynch, **DA Falk**, and TW Swetnam. 2015. Post-fire forest dynamics and climate variability affect spatial and temporal properties of spruce beetle outbreaks on a Sky Island mountain range. *Forest Ecology and Management* 336: 148–162. <http://dx.doi.org/10.1016/j.foreco.2014.10.021>
- Yocom LL, P Z Fulé, C García-Domínguez, **DA Falk**, E Cornejo-Oviedo, PM. Brown, J Villanueva-Díaz, J Cerano, and C Cortés Montaña. 2014. Fine-scale factors influence fire regimes in mixed-conifer forests on three high mountains in Mexico. *International Journal of Wildland Fire* 23: 959–968. <http://doi.org/10.1071/WF13214>
- Arbellay E, M Stoffel, EK Sutherland, KT Smith, and **DA Falk**. 2014. Resin duct size and density as ecophysiological traits in fire scars of *Pseudotsuga menziesii* and *Larix occidentalis*. *Annals of Botany* 114(5): 973–980. <http://doi:10.1093/aob/mcu168>
- Higgs E, **DA Falk**, A Guerrini, M Hall, J Harris, RJ Hobbs, ST Jackson, JM Rhemtulla, and W Throop. 2014. The changing role of history in restoration ecology. *Frontiers in Ecology and the Environment* 12(9): 499–506. <http://doi:10.1890/110267>
- O'Connor CD, **DA Falk**, AM Lynch, and TW Swetnam. 2014. Fire severity, size, and climate associations diverge from historical precedent along an ecological gradient of the Pinaleno Mountains, Arizona, U.S.A. *Forest Ecology and Management* 329: 264–278. <http://dx.doi.org/10.1016/j.foreco.2014.06.032>
- Swetnam TL, **DA Falk**, AM. Lynch, and SR Yool. 2014. Estimating individual tree mid- and understory rank-size distributions from airborne laser scanning in semi-arid forests. *Forest Ecology and Management* 330: 271–282. <http://dx.doi.org/10.1016/j.foreco.2014.07.011>
- Arbellay E, M Stoffel, EK Sutherland, KT Smith, and **DA Falk**. 2014. Changes in tracheid and ray traits in fire scars of North American conifers and their ecophysiological implications. *Annals of Botany* 114(2): 223–232. <http://doi:10.1093/aob/mcu112>
- Swetnam TL and **DA Falk**. 2014. Application of Metabolic Scaling Theory to reduce error in local maxima tree segmentation from aerial LiDAR. *Forest Ecology & Management* 323: 158–167. <http://dx.doi.org/10.1016/j.foreco.2014.03.016>
- Heyerdahl EK, RA Loehman, and **DA Falk**. 2014. Lodgepole pine-dominated forest in central Oregon's Pumice Plateau: Historical mixed-severity fires are resistant to future climate change. *Canadian Journal of Forest Research* 44: 593–603. <http://dx.doi.org/10.1139/cjfr-2013-0413>

- Fulé PZ, TW Swetnam, PM Brown, **DA Falk**, DL Peterson, CD Allen, GH Aplet, MA Battaglia, D Binkley, C Farris, RE Keane, EQ Margolis, H Grissino-Mayer, C Miller, CH Sieg, C Skinner, SL Stephens, and AH Taylor. 2013. Unsupported and inaccurate inferences of high severity fire in historical western United States dry forests: Response to Williams and Baker. *Global Ecology and Biogeography* 23 (7): 825-830. <http://doi:10.1111/geb.12136>
- Falk DA**. 2013. Are Madrean ecosystems approaching tipping points? Anticipating interactions of landscape disturbance and climate change. In Gottfried GJ, Ffolliott PF, Gebow BS, Eskew LG, and Collins LC, *Merging science and management in a rapidly changing world: Biodiversity and management of the Madrean Archipelago III*. RMRS P-67. U.S. Department of Agriculture, Forest Service, Rocky Mountain Research Station. Fort Collins, CO.
- Friggens M, K Bagne, D Finch, **DA Falk**, J Triepke, AM Lynch. 2013. *Review and recommendations for climate change vulnerability assessment approaches with examples from the Southwest*. Gen. Tech. Rep. RMRS-GTR-309. Fort Collins, CO: U.S. Department of Agriculture, Forest Service, Rocky Mountain Research Station. 106 p.
- Malusa, J, L Laing, **DA Falk**, and B Gebow. 2013. Mapping Ecological Systems from the Ground Up in Southeastern Arizona. In Gottfried GJ, Ffolliott PF, Gebow BS, Eskew LG, and Collins LC, *Merging science and management in a rapidly changing world: Biodiversity and management of the Madrean Archipelago III*. RMRS P-67. U.S. Department of Agriculture, Forest Service, Rocky Mountain Research Station. Fort Collins, CO.
- Gebow B, C Stetson, **DA Falk**, and C Dolan. 2013. FireScope: A Program for Whole-Mountain Fire Management in the Sky Island Region. In Gottfried GJ, Ffolliott PF, Gebow BS, Eskew LG, and Collins LC, *Merging science and management in a rapidly changing world: Biodiversity and management of the Madrean Archipelago III*. RMRS P-67. U.S. Department of Agriculture, Forest Service, Rocky Mountain Research Station. Fort Collins, CO.
- Farris CA, CH Baisan, **DA Falk**, ML Van Horne, PZ Fulé, and TW Swetnam. 2013. A comparison of targeted and systematic fire-scar sampling for estimating historical fire frequency in southwestern ponderosa pine forests. *International Journal of Wildland Fire* 22(8): 1021-1033. <http://dx.doi.org/10.1071/WF13026> .
- Cortés Montaña C, PZ Fulé, **DA Falk**, J Villanueva-Díaz, and LL Yocom. 2012. Linking old-growth forest composition and structure to fire history, climate and land-use in a mountain range of northwestern México. *Ecosphere* 3(11): 106. <http://doi:10.1890/ES12-00161.1>
- Fulé PZ, LL Yocom, C Cortés Montaña, **DA Falk**, J Cerano, and J Villanueva-Díaz. 2012. Testing a pyroclimatic hypothesis on the México-U.S. border. *Ecology* 93(8): 1830–1840.
- Maschinski J, **DA Falk**, SJ Wright, J Possley, J Roncall, and KS Wendelberger. 2011. Optimal locations for plant reintroductions in a changing world. In J Maschinski and KE Haskins (Eds.), *Plant Reintroduction in a Changing Climate*. Island Press, Washington, DC.
- Falk DA**, EK Heyerdahl, PM Brown, CA Farris, PZ Fulé, D McKenzie, TW Swetnam, AH Taylor, and ML Van Horne. 2011. Multiscale controls of historical fire regimes: New insights from fire-scar networks. *Frontiers in Ecology and the Environment* 9(8): 446-454. <http://doi:10.1890/100052>
- O'Connor C, TW Swetnam, G Garfin, and **DA Falk**. 2011. Human Pyrogeography: A New Synergy of Fire, Climate and People is Reshaping Ecosystems across the Globe. *Geography Compass* 5/6: 329-350. <http://dx.doi.org/10.1111/j.1749-8198.2011.00428.x>
- McKenzie D, C Miller, and **DA Falk**. 2011. Toward a theory of landscape fire. In McKenzie D, C Miller, and **DA Falk** (Eds.). *The landscape ecology of fire*. Ecological Studies Series No. 213, Springer, Dordrecht, Netherlands.
- McKenzie D, C Miller, and **DA Falk**. 2011. Synthesis: Landscape ecology and changing fire regimes. In McKenzie D, C Miller, and **DA Falk** (Eds.). *The landscape ecology of fire*. Ecological Studies Series No. 213, Springer, Dordrecht, Netherlands.
- Swetnam TL, **DA Falk**, A Hessl, and CA Farris. 2011. Reconstructing landscape pattern of historic fires and fire regimes. In McKenzie D, C Miller, and **DA Falk** (Eds.). *The landscape ecology of fire*. Ecological Studies Series No. 213, Springer, Dordrecht, Netherlands.

- Farris CA, **DA Falk**, CH Baisan, SR Yool, and TW Swetnam. 2010. Spatial and temporal corroboration of fire-scar based fire history reconstructions in a frequently burned ponderosa pine forest in southern Arizona. *Ecological Applications* 20: 1598–1614.
- Falk DA**, EK Heyerdahl, PM Brown, TW Swetnam, EK Sutherland, Z Gedalof, LL Yocom, and TJ Brown. 2010. Fire and climate variation in western North America from fire scar networks. *Past Global Climates* 18(2): 70-72.
- Yocom LL, PZ Fulé, PM Brown, J Cerano, J Villanueva-Díaz, **DA Falk**, and E Cornejo-Oviedo. 2010. El Niño-Southern Oscillation effect on a fire regime in northeastern Mexico has shifted over time. *Ecology* 91(6): 1660-1671.
- Stevens J and **DA Falk**. 2009. Can buffelgrass Invasions Be Controlled in the American Southwest? Using invasion ecology theory to explain buffelgrass success and restoration potential in the American Southwest. *Ecological Restoration* 27(4): 417-427.
- Lenart M, **DA Falk**, FN Scatena, and WR Osterkamp. 2010. Estimating soil turnover rate from tree uprooting during hurricanes in Puerto Rico. *Forest Ecology & Management* 259: 1076–1084. <http://doi:10.1016/j.foreco.2009.12.014>
- Falk DA**, C Miller, D McKenzie, and AE Black. 2007. Cross-scale analysis of fire regimes. *Ecosystems* 10: 809–823. Awarded “Outstanding Paper in Landscape Ecology”, International Association for Landscape Ecology-US (2008).
- Zedler JB, **DA Falk**, and DJ Larkin. 2007. Upstart views of restoration icons. *Bulletin of the Ecological Society of America* 88(1): 104-112.
- Falk DA** 2006. Process-centred restoration in a fire-adapted ponderosa pine forest. *Journal for Nature Conservation* 14: 140-151.
- Palmer MA, **DA Falk**, and JB Zedler. 2006. Ecological theory and restoration ecology. Pp. 1-10 *In Falk DA, MA Palmer, & JB Zedler (Eds.), Foundations of Restoration Ecology*. Island Press, Washington, DC.
- Falk DA**, CM Richards, AM Montalvo, and EE Knapp. 2006. Population and ecological genetics in restoration ecology. Pp. 14-41 *In Falk DA, MA Palmer, & JB Zedler (Eds.), Foundations of Restoration Ecology*. Island Press, Washington, DC.
- Falk DA**, MA Palmer and JB Zedler. 2006. Integrating restoration ecology and ecological theory: A synthesis. Pp. 341-346 *In Falk DA, MA Palmer, & JB Zedler (Eds.), Foundations of Restoration Ecology*. Island Press, Washington, DC.
- Sisk TD, M Savage, **DA Falk**, CD Allen, E Muldavin, and P McCarthy. 2005. A landscape perspective for forest restoration. *Journal of Forestry* 103 (6): 319-320.
- Maunder M, K Havens, EO Guerrant, and **DA Falk**. 2004. *Ex situ* methods: A vital but underused set of conservation resources. Pp. 3-20 in Guerrant EO, K Havens, and M. Maunder (Eds.), *Ex situ plant conservation: Supporting species survival in the wild*. Island Press, Washington, DC.
- Falk, DA** and T. W. Swetnam. 2003. Scaling rules and probability models for surface fire regimes in Ponderosa pine forests. In *Fire ecology, fuel treatments, and ecological restoration*, PN Omi and LA Joyce (Eds.). US Forest Service, Rocky Mountain Research Station. General Technical Report RMRS-P-29, pp. 301-317. Ft. Collins, CO.
- Allen CD, M Savage, **DA Falk**, KF Suckling, TW Swetnam, T Schulke, PB Stacey, P Morgan, M Hoffman, and JT Klingel. 2002. Ecological restoration of southwestern Ponderosa pine ecosystems: A broad framework. *Ecological Applications* 12(5): 1418-1433.
- Falk DA**, EE Knapp, and EO Guerrant. 2002. *An introduction to restoration genetics*. Society for Ecological Restoration, Science & Policy Paper No. 1
- Thomas SC, CB Halpern, **DA Falk**, DA Ligouri, and KA Austin. 1999. Plant diversity in managed forests: understory responses to silvicultural thinning and fertilization. *Ecological Applications* 9(3): 864-879.
- Allen EB, WW Covington, and **DA Falk**. 1997. Developing the conceptual basis for restoration ecology. *Restoration Ecology* 5(4): 275-276.

- Falk DA.** 1995. Restoration priorities on the landscape scale. In Peterson, D. and C. Klimas (eds.), *The role of restoration in ecological management*. Society for Ecological Restoration/Parks Canada.
- Falk DA** and P Olwell. 1992. Scientific and policy considerations in restoration and reintroduction of endangered species. *Rhodora* 94:287-315.
- Falk DA** 1992. From Conservation Biology to Conservation Practice: Strategies for Protecting Plant Diversity. In Fiedler PL and SK Jain (Eds.), *Conservation Biology*. Chapman & Hall, pp. 397-425.
- Falk, DA** 1991. Joining biological and economic models for conserving plant diversity. In **Falk DA** and KE Holsinger (Eds.), *Genetics and Conservation of Rare Plants*. Oxford University Press, New York, pp. 209-223.
- Falk DA** 1990. Conserving the native diversity of the U.S. *Conservation Digest* 2(5): 10.
- Falk DA** 1990. Discovering the Future, Creating the Past: Some Reflections on Restoration. *Restoration & Management Notes* 8(2): 71-72.
- Falk DA** 1990. A Restorative Strategy for Endangered Species. In J Berger (ed.), *Environmental Restoration: Science of Strategies for Restoring the Earth*, pp. 328-334. University of California, Berkeley. Island Press, Washington, DC.
- Falk DA** 1990. Endangered Forest Genetic Resources in the U.S.: Integrated Strategies for Conservation. *Forest Ecology and Management*. 35:91-117.
- Falk DA** 1990. Integrated Strategies for Conserving Plant Genetic Diversity. *Annals of the Missouri Botanical Garden* 77:38-47.
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- McMahan LR and **DA Falk**. 1989. The Center for Plant Conservation: Collaborating with the National Plant Germplasm System to Save Seeds for the Future. *Diversity* 5:43.
- Falk DA** 1988. The Center for Plant Conservation: Conserving the Native Plant Genetic Diversity of the United States. *Diversity* 16:20-21.
- Falk DA** 1988. Helping to Ensure a Future in the Wild. *Plant Conservation* 3(2): 3.
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- Falk DA** 1987. Integrated Conservation Strategies for Endangered Plants. *Natural Areas Journal* 7(3): 118-123.
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#### Software

- Sutherland EK, PW Brewer, **DA Falk**, and ME Velásquez. 2015. *Fire History Analysis and Exploration System (FHAES) Version 2.0.0*. <http://www.fhaes.org> , <http://DOI:10.5281/zenodo.34142> .

#### General publications

- Falk DA**. 2016. Ecosystems are Critical to Solving the Global Climate Crisis. *SERNews* (Society for Ecological Restoration) v. 30, Issue 1, February. [http://c.ymcdn.com/sites/www.ser.org/resource/resmgr/Publications/SERNews/30-1\\_SERNews\\_\(2016\).pdf](http://c.ymcdn.com/sites/www.ser.org/resource/resmgr/Publications/SERNews/30-1_SERNews_(2016).pdf)
- Liverman DM and **DA Falk**. 2015. World waking up to climate change. *Arizona Daily Star* 19 December. Lead editorial about COP21 Paris climate summit. [http://tucson.com/news/opinion/column/guest/liverman-and-falk-world-waking-up-to-climate-change/article\\_2a6b6058-6242-57bd-9acd-87ba6b72bd77.html](http://tucson.com/news/opinion/column/guest/liverman-and-falk-world-waking-up-to-climate-change/article_2a6b6058-6242-57bd-9acd-87ba6b72bd77.html)

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- Falk DA.** 1984 – 1988. Reviews in *Choice* (American Library Association), eleven works.
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- Falk DA** and FR Thibodeau. 1985. A New Response to Endangerment. *The Public Garden* (Journal of the American Association of Botanical Gardens and Arboreta) 1(1):14-18.
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- Falk, DA** 1979. The Maker of Patterns. *Boston Phoenix* 27 November: 2-3. Interview and profile of Gregory Bateson.
- Falk, DA** 1979. A Delegation of Survivors: A Visit from Hiroshima/Nagasaki. *Boston Globe* 27 March.
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- Falk, DA** 1978. The Sleeper in Carter's Energy Plan. *Boston Phoenix* 28 February. Feature article on National Energy Plan. Reprinted: *Massachusetts Physician*, Spring 1978.

### Editorial Panels

- 1998 – current Co-founder (Associate Series Editor, 2000-2008; Editorial Board 2008 – present), Book Series: *Science & Practice of Ecological Restoration*, Island Press and Society for Ecological Restoration. Titles to date: 27.
- 1999 Review Panel, Interagency Guidance on Wetlands Restoration, White House Wetlands Working Group, Department of Defense.
- 1996 – 98 Section editor, Conservation and Ecological Management, *Encyclopedia of Ecology and Environmental Management*, P Calow (Ed.). 1998. Blackwell Science, Oxford, U. K.
- 1989 Contributor, *Loss of Biological Diversity: A Global Crisis Requiring International Solutions*. National Science Board, Committee on International Science, Task Force on Global Biodiversity.

## **RESEARCH SUPPORT**

Central Oregon Fire Management Service  
Collaborative Forest Restoration Program, US  
Forest Service  
Coronado National Forest  
Ecological Restoration Institute, Northern  
Arizona University  
Ecosystem Interest Group, College of Forest  
Resources, U. Washington  
Global Change Research Program, US Forest  
Service  
Joint Fire Science Program  
Mazamas Research Committee  
National Science Foundation

National Center for Ecological Analysis &  
Synthesis  
Rocky Mountain Research Station, US Forest  
Service  
T&E Foundation  
US Department of Defense  
USGS, Southwest Climate Science Center  
University of Arizona:  
Ecology & Evolutionary Biology  
Research Innovation Challenge, College of  
Agriculture and Life Sciences  
Institute of the Environment  
Faculty Seed Grant, VP for Research  
Zion National Park

## **SELECTED LECTURES AND KEYNOTE PRESENTATIONS**

American Association for the Advancement of  
Science (AAAS)  
American Geophysical Union (AGU)  
AmeriDendro  
Association of American Geographers (AAG)  
Association for Fire Ecology  
Center for Plant Conservation  
Central Oregon Fire Science Symposia  
Chicago Botanic Garden  
Collaborative Forest Restoration Program, US  
Forest Service  
Consultative Group on Biological Diversity  
Colorado State University  
Columbia University, Lamont-Doherty Earth  
Observatory  
Ecological Landscape Association  
Ecological Restoration Institute, Northern  
Arizona University  
Ecological Society of America  
Fire Learning Network, The Nature  
Conservancy  
Fire Sciences Laboratory, US Forest Service  
Forest Guild  
Gila River Basin Restoration Forum  
Institute of the Environment  
International Association for Landscape Ecology  
International Institute for Tropical Forestry,  
Puerto Rico

Joint Fire Science Program  
Missouri Botanical Garden, Fall Symposium  
Mountain Climate Sciences Symposium  
National Advanced Fire and Resource Institute  
National Center for Ecological Analysis &  
Synthesis  
Natural Areas Association  
New England Wildflower Society, Centennial  
Tour  
Oklahoma State University  
Pacific Southwest Research Station, US Forest  
Service  
Santa Fe Forest Forum  
Society of American Foresters  
Society for Ecological Restoration  
Society for Range Management  
Southwest Fire Science Consortium  
St. Albert Forum on Theology and Science,  
Newman Center, University of Arizona  
United States Congress  
University Corporation for Atmospheric  
Research (UCAR)  
University of Gröningen, Netherlands  
University of North Carolina  
USGS Southwest Climate Science Center and  
Wildland Fire Conference  
USGS Western Mountain Initiative

## **PEER REVIEW**

Blackwell Science  
Cambridge University Press

*Canadian Journal of Forest Research*  
*Canadian Journal of Water Resources*  
*Conservation Biology*

*Diversity and Distributions*

*Ecology*

*Ecological Applications*

*Ecological Modeling*

*Ecosphere*

*EcoScience*

*Fire Ecology*

*Forest Ecology & Management*

*Frontiers in Ecology and the Environment*

*Global Change Biology*

*International Journal of Wildland Fire*

Island Press

*Journal of Arid Environments*

*Journal of Biogeography*

*Journal of Vegetation Science*

*Landscape Ecology*

MacArthur Fellows Program

National Science Foundation (US)

*Oecologia*

Oxford University Press

*Quarterly Review of Biology*

*Restoration Ecology*

*Science*

*Turkish Journal of Agriculture and Forestry*

*Western Journal of Applied Forestry*

### **BOARDS AND COMMITTEES**

2017 – current Chair, Inclusive Diversity Committee, School of Natural Resources and the Environment, University of Arizona

2011 – current Chair, Global Change Ecology and Management Working Group, School of Natural Resources and the Environment, University of Arizona

2010 – current Executive Board, Southwest Fire Science Consortium

2008 – current Working Group, Fire History Analysis and Exploration (FHAES) program ([www.frames.gov/fhaes](http://www.frames.gov/fhaes))

2007 – current Advisor, Society for Ecological Restoration-Nepal

2003 – 11 Office of the Governor, Arizona Forest Health Council

2001 – 03 US Forest Service, Collaborative Forest Restoration Program, Technical Advisory Panel

1994 – current Indigenous Peoples Restoration Network

1993 – 2003 Native Seeds/SEARCH, Board of Directors

1991 – 94 IUCN Species Survival Commission, Reintroduction Specialist Group

1988 – 93 Society for Ecological Restoration, Madison, WI, Board of Directors

1984 – 93 American Association of Botanical Gardens & Arboreta, Plant Conservation Committee

### **PROFESSIONAL MEMBERSHIPS**

American Association for the Advancement of Science

Association for Fire Ecology

Ecological Society of America

International Association for Landscape Ecology

Society for Ecological Restoration  
Tree-Ring Society

### **MENTORS** (current affiliations shown)

W Wallace Covington (Northern Arizona University); Peter Dreier (Occidental College); Kenneth Geiser (University of Massachusetts-Lowell); Lisa Graumlich (University of Washington); Charles Halpern (University of Washington); Sheldon Krimsky (Tufts University); Norton Nickerson (Tufts University); Peter H. Raven (Missouri Botanical Garden); Robert Robichaux (University of Arizona); Thomas W. Swetnam (University of Arizona); D. Lawrence Venable (University of Arizona).

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**Current:** Lloyd, Rebecca (College of Forestry, University of Montana); Lepley, Kai (SNRE/LTRR); Loveless, Erana (Anthropology); Marshall, Laura (SNRE/LTRR); Minor, Jesse (Geography/LTRR); Sharma, Akanksha (SNRE); Webb, Amanda (SNRE).

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