

## Curriculum Vitae

### THOMAS WILLIAM SWETNAM

December 2022

**BIRTHDATE & PLACE:** December 9, 1955, Ruidoso, New Mexico, U.S.A

#### EDUCATION

- University of Arizona, M. S., 1983, Ph.D. 1987, Watershed Management, Geosciences
- University of New Mexico, B. S., 1977, General Biology, Chemistry

#### EMPLOYMENT

- 2015 to present: Regents Professor of Dendrochronology, Emeritus
- 2012 to 2015: Regents Professor of Dendrochronology
- 2000 to 2014: Director, Laboratory of Tree-Ring Research
- 2000 to 2012: Professor of Dendrochronology, Laboratory of Tree-Ring Research; joint academic appointments of Professor of Watershed Management in School of Natural Resources & Environment, Professor of Ecology in Ecology & Evolutionary Biology, and Professor of Geography in School of Geography & Development
- 1994-1999: Associate Professor of Dendrochronology, Laboratory of Tree-Ring Research
- 1988-1994: Assistant Professor of Dendrochronology, Laboratory of Tree Ring Research
- 1987-1988: Research Associate, Laboratory of Tree-Ring Research
- 1980-1987: Graduate Assistant in Research, subsequently Graduate Associate in Research, Laboratory of Tree-Ring Research, University of Arizona
- 1978-1980: Forestry Technician, U. S. Forest Service, Gila Wilderness, New Mexico
- 1976-1977: Park Technician, National Park Service, Grand Canyon National Park, Arizona

#### AWARDS & HONORS

- Harold Biswell Lifetime Achievement Award, Association for Fire Ecology, 2016
- Harold C. Fritts Lifetime Achievement Award, Tree-Ring Society, 2016
- American Association for the Advancement of Science, Fellow, elected 2015
- Zurich Financial Services Distinguished Visitor, Bren School of Environmental Science & Management, University of California Santa Barbara, 2014
- Regents Professor University of Arizona, 2012 (highest academic rank, and limited to 3% of all faculty in the Arizona University system)
- E.J. Taaffe Distinguished Lecturer, Dept. of Geography, Ohio State University, 2010
- Henry Cowles Award, The Association of American Geographers, Biogeography Specialty Group, for outstanding paper with James Speer and others, 2002
- William Skinner Cooper Award, Ecological Society of America, for outstanding paper in geobotany, with Julio Betancourt, 2001

- E.H. Weaver Lecturer, School of Forestry and Wildlife Science, Auburn University, 2000
- Walter Orr Roberts Public Lecturer, Aspen Global Change Institute, 1999
- Visiting Fellow at Aldo Leopold Wilderness Research Institute, Missoula, Montana 1994
- A. E. Douglass Scholarship Award University of Arizona, 1983

#### **APPOINTMENTS & ADVISORY BOARDS (selected)**

- Jemez Mountains FireWise Association, Board of Directors, Treasurer, 2018-present
- Member, Board of Trustees, The Nature Conservancy, New Mexico, 2016-2020
- Member, Advisory Group, FireScape, a collaboration of Coronado National Forest, Saguaro National Park, The Nature Conservancy and University of Arizona, 2007-2013
- Member (and founder), Board of Advisors, International Multiproxy Paleofire Database, National Climate Data Center, NOAA, 2002-present
- Member, Governor's Climate Change Advisory Group (appointed by Arizona Governor Janet Napolitano), 2005-2006
- Member, Board of Advisors, NSF-EPSCOR Ecology Program, Wyoming, 2005-2007
- Member & Chair, Board of Advisors, NOAA Paleoclimatology Program, 2004-2005
- Member of Executive Committee, Consortium for Integrated Climate Research in Western Mountains (CIRMOUNT), 2003-2010
- Member, Governor's Forest Health Advisory Council (appointed by Arizona Governor Janet Napolitano), 2003-2006
- Member, Science Advisory Board, Malpais Borderlands Group, New Mex., 2003-2006
- Member, Board of Advisors, Institute for Natural Resource Management, NSF-EPSCOR Program, New Mexico, 2003-2005
- Member, Board of Trustees, Valles Caldera National Preserve (appointed by U.S. President William J. Clinton), 2000-2004

#### **CONGRESSIONAL TESTIMONY**

- Field hearing before U.S. House of Representatives Committee on Natural Resources, Subcommittee on National Parks, Forests and Public Lands, April 7, 2009 at Joshua Tree National Park, California
- Hearing before the U.S. Senate Energy & Natural Resources Committee: To consider scientific assessments of the impacts of global climate change on wildfire activity in the United States. Written testimony co-authored with A.L. Westerling, September 24, 2007 in Washington DC
- Field Hearing before the U.S. House of Representatives, Natural Resources Subcommittee on Forest Health on Preventing Wildfires through Proper Management of the National Forests, August 14, 2000 in Albuquerque New Mexico
- Hearing before the U.S. House of Representatives Natural Resources Subcommittee on Forest Health, Written testimony co-authored with P. Morgan and L. Neuenschwander, June 7th, 2000 in Washington DC

## **EDITORIAL**

- Associate Editor, *Fire Ecology*, 2009-present
- Associate Editor, *International Journal of Wildland Fire*, 1993-present
- Associate Editor, *Dendrochronologia*, 2005-2012
- Editor, *Tree-Ring Research*, 2000-2001
- Associate Editor, *Canadian Journal of Forest Research*, 1998
- Editorial Board, *Ecological Applications*, 1998-1999
- Co-Editor with J. Dean and D. Meko on special issue of *Radiocarbon*, 1996
- Associate Editor, *EcoScience*, 1994-1998

## **KEYNOTE LECTURES**

(selected list, since 1994)

- 4th Landscape Ecology Conference, Tucson, AZ, March 24, 1994
- 6<sup>th</sup> International Dendrochronology Conference, Quebec City, Canada, August 27, 2002
- Fire & Society Workshop, University of Arizona, Tucson, AZ January 11, 2003
- Ecological Integration Symposium, Texas A&M Univ., College Station TX, Feb. 22, 2003
- Climate Change Impacts on Forest Ecosystems Symposium, Sedona, AZ, February 10, 2004
- 3<sup>rd</sup> International Fire Ecology & Management Conference, San Diego, CA, Nov. 13-17, 2006
- Western International Forest Insect & Disease Work Conference, Sedona, AZ, Oct. 17, 2007
- Ameridendro Conference, Vancouver, British Columbia, Canada, June 26, 2008
- Natural History of the Gila Conf., NM Native Plants Society, Silver City, NM Oct 16, 2008
- Annual All Scientist Meeting, U.S. Forest Service, Rocky Mountain Research Station, Fort Collins, CO, March 24, 2010
- National Weather Association Annual Meeting, Tucson, AZ, October 5, 2010
- AmeriDendro Conference, Tucson, AZ, May 13, 2013
- Gila River Festival, Western New Mexico University, Silver City, NM, September 19, 2013
- Tree Farmer's National Leadership Conference, Albuquerque, NM, February 1, 2018
- University of New Mexico, Biology Department Research Day, Tucson, AZ May 23, 2018

## **INVITED PLENARY TALKS**

(selected list, since 1994)

- International Tree-Ring Conference, Tucson, AZ, May 17, 1994
- Soil Conservation Society Conference, Albuquerque, NM, December 2, 1994
- Symposium on Effects of Fire in Madrean Province Ecosystems, Tucson, AZ, Mar 11, 1996
- Land Use History of North America, US Geological Survey, Denver, CO, May 2, 1996
- Inter-American Institute Workshop on Fire and Global Change in the Americas, Chile and Argentina, Valdivia, Chile, December 30-January 7, 1997
- George Wright Society Annual Meeting, Albuquerque, NM March 21, 1997
- Fire in California Ecosystems Symposium, San Diego, CA, Nov. 17, 1997
- Pole-to-Equator-to-Pole I meeting, Inter-American Institute and NSF sponsored, Merida, Venezuela, March 15-21, 1998

- American Quaternary Assoc. Biennial meeting, Puerto Vallarta, Mexico, Sept. 3-6, 1998
- Wilderness Science Conference, U.S. Forest Service, Missoula, MT, May 24-25, 1999
- Aspen Global Change Workshop on Ecological and Agricultural Impacts of Climate Change, Aspen, CO, August 13-21, 1999
- National Research Council Meeting, Abrupt Climate Change Impacts, Washington, DC, March 21-23, 2000
- Eurodendro Meeting in Slovenia, June 6-9, 2001
- Climate Change at High Elevation Sites: Emerging Impacts, Highest II, Academies of Sciences/NCCR-Climate Workshop, 25–28 June 2001, Davos, Switzerland, June 25-28, 2001
- Mountain Climate/CIRMOUNT meeting, Lake Tahoe, NV, May 24-28, 2003
- Forest Health & Biodiversity Symposium, National Council on Science for Sustainable Forestry, Denver, CO, June 4-5, 2003
- Xeriscape Conference, “Water, Our Future, Our Legacy”, Albuquerque, NM, Oct. 17, 2003
- Madrean Archipelago Conference, U.S. Forest Service, Tucson, AZ, May 12, 2004
- National US Geological Survey Fire Sciences Symposium, Tucson, AZ, December 5-9, 2005
- National Council on Science for Sustainable Forestry, Denver, CO, April 26, 2006
- Academic Program Chair address to 7<sup>th</sup> International Conference on Dendrochronology, Beijing, China, June 11-17 2006
- American Quaternary Association biannual meeting, Bozeman, MT, August 17, 2006
- Association for Fire Ecology Conference, Tucson, AZ, January 30, 31, 2008
- National Press Club, Washington, DC, on climate change, sponsored by Potomac Institute for Policy Studies, March 5, 2008
- Yellowstone Fire 2008 conference, Jackson Hole, WY, September 25, 2008
- California Association for Fire Ecology conference, San Diego, CA, December 2-4, 2008
- Society for Range Management So. Arizona Chapter, Sierra Vista, AZ January 13, 2009
- National Meeting of National Park Service fire managers, San Antonio, TX, Jan. 28, 2009
- 4<sup>th</sup> International Fire Ecology & Management Congress, Fire as a Global Process, Savanna, GA, November 30-December 4, 2009
- Collaborative Adaptive Management Network Symposium, Tucson, AZ, March 8, 2010
- Forests At Risk: Climate Change & the Future of the American West, Aspen Colorado, February 18, 2011
- Southwest Fire and Hydrology Conference, at BioSphere2, April 3, 2012
- National Forest Health Monitoring Conference, Tucson, AZ, April 17, 2012
- Royal Society, Fire & Mankind Symposium, London, UK, September 15, 2015
- World Wildlife Fund 10th anniversary Fuller Symposium "2 Degrees Later: Resilience in a changing world", Washington DC, November 15, 2016
- Association for Fire Ecology, Tucson, AZ, November 18, 2019

#### **INVITED LECTURES/SEMINARS AT UNIVERSITIES AND INSTITUTES**

(other than University of Arizona, since 1989):

- Instituto de Ecología, Univ. Nacional Autónoma de México, Mexico City, May 24, 1989
- University of Washington, Forest Resources, October 25, 1989
- University of California at Davis, Ecological Seminar Series, January 17, 1991

- Sukachev Institute Forest and Wood, Siberian Branch of Russian Academy of Sciences, Krasnoyarsk, Siberia, July 22, 1991
- University of São Paulo, Agric. School Luiz de Queiroz/Piracicaba, Brazil, May 19-25, 1992
- Colorado State University, Fort Collins, CO, October 12, 1992
- Utah State University, Logan, November 10, 1993
- Universidad Austral de Chile, Valdivia, Chile, January 4, 1994
- University of Minnesota, Global Change Seminar Series, Minneapolis-St Paul, Apr. 13, 1994
- University of California at Berkeley, Dept. of Environmental Science, May 28, 1994
- University of California at Davis, Dept. of Ecology, (two talks) Oct 31, Nov. 1, 1996
- Montana State University, Geography, Bozeman, MT, Sept. 30, 1997
- Swedish University of Agricultural Sciences, Umeå, Sweden, February 27, 1998
- Auburn University, School of Forestry and Wildlife Science, Auburn, AL, January 20, 2000
- University of California at Davis, Dept. of Ecology, April 19, 2000
- Arizona State University, Law School, Tempe, November 13, 2000
- Stanford University, Dept. of Bio. Sciences, Palo Alto, CA, February 9, 2001
- Los Alamos National Laboratory, University of California, Los Alamos, NM, April 19, 2001
- Columbia University, Lamont-Doherty Earth Observatory, Palisades, NY, October 25, 2002
- University of Minnesota, Dept. of Ecology, St. Paul-Minneapolis, Geography, April 15, 2005
- Oklahoma State University, Dept. of Botany, Stillwater, April 11, 2006
- Colorado State University, Dept. of Forest, Rangeland, Fort Collins, CO, April 28, 2006
- Norwegian University of Life Sciences, Oslo, September 13, 2006
- Northern Arizona University, School of Forestry, Flagstaff, AZ, October 19, 2007
- University of Utah, Dept. of Geography, Salt Lake City, March 1, 2007
- University of Quebec, Forest Resources, Montreal, Canada, November 7, 2007
- University of California at Merced, Environmental Systems, February 20, 2008
- University of California at Davis, Dept. of Ecology, February 21, 2008
- Ohio State University, Dept. of Geography, Columbus, February 28, 2010
- Univ. Southern. Calif., Arnold Schwarzenegger Institute, April 8, 2013
- University of California at Santa Barbara, Bren School of Environ. Science, March 5, 2014
- Northern Arizona University, School of Forestry, Flagstaff, AZ, April 2014
- Los Alamos National Laboratory, Los Alamos, NM, April 2016

## TEACHING

Courses taught at University of Arizona:

Course Name	Course Number
Introduction to Dendrochronology	GEOS 464a/564a
Dendrochronology Workshop	GEOS 464b/564b
Dendrochronology Seminar	GEOS 596v
Fire Climatology Colloquium	GEOS 595E
Dendroecology Colloquium	GEOS 595E
Fire Climatology Colloquium	GEOS 595E
Environmental History of the Southwest	GEOS 220 (Gen Ed Tier2)

Course Name	Course Number
DendroEntomology	GEOS 595E
Dendrochronology (Journal Club)	GEOS 595E
Sustainability & Environmental Law	LAW 603J

Invited Lectures in other University of Arizona Courses:

WSM 462 Watershed Management; EEB 500A Advanced Population Biology; WSM Silviculture; EEB 406R Conservation Biology; GEOG Fire-Climate-Society colloquium; EEB 206 Environmental Biology; GEOS 595 Dendroclimatology summer pre-session course; GEOG 408/508 Arizona & the Southwest; GEOG 696C, Drought Seminar; GEOS 478/578 Global Change; Traditions 104 Sonora; GEOS NATS 101 Geological Hazards; GC572 Global Biogeochemical Cycles; Introduction to Wildland Fire RNR 355; Heritage and Traditions A ED 195

Course Lectures for other Institutions:

- National Science Foundation Chautauqua Course on Using Tree-Rings in Environmental Education, for Science teachers in small colleges and universities
- Continuing Education in Ecosystem Management course at Northern Arizona University
- Forest Ecology Field Course, Cortina D’Ampezzo, Italy
- S-580 Advanced Fire Management Applications course, National Advanced Fire & Resource Institute (NAFRI, formerly known as NARTC), Tucson, AZ, 100 to 120 students/year, fire managers, USDA Forest Supervisors, USDI National Park Superintendents
- M-580 Fire in Ecosystem Management course, NARTC/NAFRI Tucson, AZ, 100 to 120 students /year, fire managers, USDA Forest Supervisors, USDI National Park Superintendents. (most recent Jan 12, 2019)
- Webinar” to fire managers across the US, hosted by Joint Fire Sciences Program (USDA/USGS)
- Short Course on Fire and Climate at Bren School, University of California, Santa Barbara, March 2014

**ADVISING & MENTORING**

Ph.D. Dissertation and Master’s Thesis Supervision at University of Arizona:

Name	Degree and Year	Thesis/Dissertation Title	Current Position
Peter M. Brown	MS, Watershed Management, 1991	Dendrochronology and fire history in a stand of Northern California Coast redwood	Dendrochronologist, Rocky Mountain Tree-Ring Lab; Adjunct Professor, Colorado State University
Linda S. Mutch	MS, Watershed Management, 1994	Growth responses of giant sequoia to fire and climate in Sequoia and Kings Canyon National Parks, California	Inventory & Monitoring Coordinator, Sequoia & Kings Canyon National Parks, NPS, CA

Name	Degree and Year	Thesis/Dissertation Title	Current Position
Dana Perkins	MS, Renewable Natural Resources, 1995	A dendroecological assessment of whitebark pine in the Sawtooth Salmon River region, Idaho	Ecologist, Bureau of Land Management, Idaho
Henri D. Grissino-Mayer	Phd, Watershed Management, 1995	Tree-ring reconstructions of climate and fire history at El Malpais National Monument, New Mexico	Professor, Department of Geography, University of Tennessee, retired
Kiyomi Morino	MS, Watershed Management, 1996	Reconstruction and interpretation of historical patterns of fire occurrence in the Organ Mountains, New Mexico	Research Scientist, University of Arizona
Rena Ann Abolt (Stricker)	MS, Renewable Natural Resources, 1997	Surface and crown fire histories of upper elevation forests via fire scar and stand age structure analyses	President, Watershed Sustainability, LLC, Atlanta, GA
Margot Wilkinson Kaye	MS, Watershed Management, 1997	Reconstruction of historical fire regimes along an elevation and vegetation gradient in the Sacramento Mountains, New Mexico	Assoc. Professor, School of Forest Ecology, Penn State University
James H. Speer	MS, Geosciences, 1997	Dendrochronological record of pandora moth ( <i>Coloradia pandora</i> , blake) outbreaks in central Oregon	Professor, Geography and Geology, Indiana State University
Shelly Danzer	MS, Watershed Management, 1998	Fire history and stand structure in the Huachuca Mountains of Southeastern Arizona	Land manager, Integrated Training Area, US National Guard, Phoenix, AZ
Mark Kaib	MS, Watershed Management, 1998; MS, Arid Lands Resource Sciences, 2004	Fire history in riparian canyon pine-oak forests and the intervening desert grasslands of the southwest borderlands: a dendroecological, historical, and cultural inquiry	Deputy Regional Fire Management Coordinator, U.S. Fish & Wildlife Service, NM, retired
Daniel E. Ryerson	MS, Watershed Management, 1998	Tree-ring reconstruction of western spruce budworm outbreaks in the Rio Grande National Forest, Colorado	Forest Health and GIS Specialist, Southwest Region Office, U.S. Forest Service, , NM
Matthew G. Rollins	PhD, Watershed Management, 2000	Twentieth century fire patterns in the Gila/Aldo Leopold Wilderness areas, New Mexico, and the	Program Leader, USFS Rocky Mtn Res. Station, Wenatchee, WA

Name	Degree and Year	Thesis/Dissertation Title	Current Position
		Selway-Bitterroot Wilderness area, Idaho/Montana	
June Psaltis	MS, Renewable Natural Resources, 2001	Climate response, age distribution, and fire history of a Corkbark Fir ( <i>Abies lasiocarpa</i> Var. <i>Arizona</i> ) stand in the Santa Catalina Mountains, Arizona	Attorney, NY
Kurt F. Kipfmüller	PhD, Geography, 2003	Fire-climate-vegetation interactions in subalpine forests of the Selway-Bitterroot Wilderness Area, Idaho and Montana, USA	Assoc. Professor, Department of Geography, University of Minnesota
David E. Grow	PhD, Watershed Management, 2003	Effects of substrate on dendrochronologic streamflow reconstruction: Paria River, Utah with fractal application to dendrochronology	Natural resources consultant, IN
Donald A. Falk	PhD, Ecology & Evolutionary Biology, 2004	Scaling rules for fire regimes	Professor, School of Natural Resources & Environment, University of Arizona
Jose M. Iñiguez	PhD, Watershed Management, 2006	Landscape fire history and age structure patterns in the sky islands of southeastern Arizona	Research Ecologist, Rocky Mountain Research Station, U.S. Forest Service, AZ
Elis Q. Margolis	MS, Watershed Management, 2003; PhD, Watershed Management, 2007	Fire history and fire-climate relationships in upper elevation forests of the Southwestern United States	US Geological Survey, Research Ecologist, Santa Fe, NM
Calvin A. Farris	PhD, Geography, 2009	Spatial and temporal validation of fire-scar fire histories	Lead Fire Ecologist, South Cascades Networks Parks, National Park Service, OR & CA
Keith J. Lombardo	PhD, Geography, 2012	Fire and climate history of Southern California from tree rings	Chief of Natural Resources, Cabrillo National Monument, National Park Service, CA



Name	Degree and Year	Thesis/Dissertation Title	Current Position
Erica Bigio	MS, Geosciences, 2006; PhD, Geosciences, 2013	Tree ring and alluvial records of fire history in the southern Rocky Mountains	Teaching Assistant Professor & Academic Advisor, Univ. of Nevada, Reno
Troy Knight	PhD, Geography, 2011	Dendroclimatology and woodland demography dynamics in northeastern Utah	Assoc. Professor, Environmental Studies, St. John's University, MN
Alison Macalady	PhD, Geography, 2015	Drought associated tree mortality: Global patterns and insights from tree-ring studies in the Southwest USA	United States Agency for Intern. Dev, USAID, Office of Water, Wash. DC
Joshua Farella	MS, Geography, 2011-2015	Fire and human history in the Jemez Mountains, NM	Assistant in Extension, Univ. AZ
Christopher Guiterman	PhD, SNRE, 2010-2016	Climate and human drivers of forest vulnerability in the U.S. Southwest	Research Scientist, National Oceanic & Atmo. Admin. Boulder, CO

Post Doctoral Associates at University of Arizona:

Name	Dates	Topics	Current Position
Antonio Lara	1992	Tree-ring studies of Alerce, <i>Fitzroya cupressoides</i>	Professor, Universidad de Valdivia, Chile
Ramzi Touchan	1990-1995	Giant sequoia fire history and Southwestern fire history	Research Professor, LTRR, University of Arizona
Chris Fastie	1995	Spruce bark beetle outbreaks on Kenai Peninsula, AK	Adjunct Professor, Middlebury College, VT
Henri Grissino-Mayer	1995-1997	Southwestern climate and fire history	Professor, University of Tennessee, retired
Ed Wright	2002	Southwestern fire history studies	Research Scientist, LTRR, University of Arizona
Don Falk	2004-2007	Multi-scale fire history, fire climate, and restoration ecology	Professor, School of Natural Res. & Environment, UA
Ellis Margolis	2009-15	Southwestern fire and climate studies	USGS Research Ecologist
Erica Bigio	2013-pres.	Siberian fire & climate studies	Assist. Prof., Univ. NV

Other Teaching, Advising and Mentoring Activities:

Other UA graduate students -- advised, mentored, and served on their dissertation committees, and their current positions (selected list):

- Kathryn M. Gregory-Wodzicki, PhD Geosciences 1992, independent consultant, formerly with Lamont-Doherty Earth Observatory of Columbia University
- Franco Biondi, PhD Watershed Management 1994, Associate Professor, Department of Geography, University of Nevada, Reno
- José Villanueva-Díaz, PhD 1996, University of Arizona, Professor, Instituto Nacional de Investigaciones Forestales, Agrícolas y Pecuarias (INIFAP), San Luis Potosí, Mexico
- Michael Medlar, PhD Geography 1997, Associate Professor, Department of Geography, Western Washington University, Bellingham
- John Maingi, PhD Arid Lands Resource Sciences 1998, Associate Professor, Department of Geography, Miami University, Oxford, OH
- Amy Hessler, PhD Geography 2000, Associate Professor, Department of Geography, University of West Virginia,
- Mary Henry, PhD Geography 2002, Associate Professor, Miami University, Department of Geography, Oxford, OH
- Chris Roos, PhD Anthropology, 2008, Assistant Professor, Southern Methodist University, Department of Anthropology, Dallas, TX

Graduate students at other institutions to whom I provided advising, training in my lab, internships, review of theses, and their current positions (selected list):

- Drew Barton, PhD 1991, Univ. of Michigan, Assoc. Professor, Univ. of Maine, Farmington
- Thomas Kitzberger, PhD 1994, University of Colorado, Professor at Universidad Nacional del Comahue, Bariloche, Argentina.
- Yves Jardon, PhD 1994, Université Laval, Quebec, Research Scientist, Université Laval
- Craig Allen, PhD 1995, University of California, Berkeley, Research Scientist, U.S. Geological Survey, Jemez Mountains Field Station
- Pete Fulé, PhD 1996, Northern Arizona University, Professor, Northern Arizona University
- Brendan Buckley, PhD 1997, University of Tasmania, Australia, Research Scientist, Lamont Doherty Tree-Ring Lab, Columbia University
- Marco Carrer, PhD 1997, University of Padova, Italy, Assistant Professor, Univ. of Padova
- Rosalyn Wu, MS 1997, Colorado State University, Fire Ecologist, U.S. Forest Service
- Andrew DeVolder, MS 1998, Northern Arizona University, Biologist/GIS Manager, U.S. Fish & Wildlife Service, Alaska
- Sara Cecilia Díaz Castro, PhD 1998, Universidad Nacional Autónoma de México, Research Scientist, Centro de Investigaciones Biológicas del Noroeste, La Paz
- Matts Niklasson, PhD 1998, Agriculture Sciences, Umeå, Sweden, Assistant Professor, Swedish Agricultural University, Alnarp
- James Bouldin, PhD 1999, University of California, Davis, Research Ecologist, UC, Davis
- Emily Heyerdahl, PhD 2001, University of Washington, Research Ecologist, U.S. Forest Service, Missoula, MT Fire Sciences Lab
- Peter Brown, PhD 2003, Colorado State University, Director and founder of Rocky Mountain Tree-Ring Lab, Adjunct Professor Colorado State University
- James Riser, MS 2004 Colorado State Univ., PhD graduate student, Washington State Univ.
- Megan Van Horne, MS 2005, Northern Ariz. Univ., Ecological Restoration Institute, NAU

- Steve Wathen, PhD 2006, University of California, Davis, Postdoc, Univ. Florida

External Examiner (Opponent) at PhD defense for:

- Matts Niklasson -- University of Agriculture Sciences, Umeå, Sweden, 1998
- Kenneth Olaf Storaunet -- Norwegian University of Life Sciences, 2006
- Elizabeth M. Campbell -- Université du Quebec a Montreal, 2007

PUBLICATIONS (by type and chronological order)

[Google Scholar profile](#) as of December 19, 2022:

Citations 31,898; 11,551 since 2017

h-index 67; 42 since 2017

i10-index 141; 96 since 2017

h-index is the largest number h such that h publications have at least h citations.

i10-index is the number of publications with at least 10 citations.

#### Edited Books

1. Dean, J. S., D. M. Meko, and **T.W. Swetnam**, editors. 1996. Tree Rings, Environment, and Humanity, Proceedings of the International Conference, Tucson, Arizona, 17-21 May, 1994. Radiocarbon, Tucson Arizona. 889 pp.
2. Veblen, T. T., W. Baker, G. Montenegro, and **T.W. Swetnam**, editors. 2003. Fire and Climatic Change in Temperate Ecosystems of the Western Americas. Ecological Studies Vol. 160. Springer, New York. 444 pp.
3. Hughes, M.K., **T.W. Swetnam**, and H.F. Diaz, editors. 2011. Dendroclimatology: Progress and Prospects, Springer, New York, 340pp.

#### Chapters in Books

1. **Swetnam, T.W.** and 9 other authors (all listed alphabetically). 1991. Biosphere-Climate Interactions during the past 18,000 years: Towards a Global Model of the Terrestrial Biosphere. pages 25-42, In: R. S. Bradley, ed., Global Changes of the Past, Papers arising from the 1989 OIES Global Change Institute, Snowmass, Colorado, 24 July - 4 August, 1989. UCAR/Office for Interdisciplinary Earth Studies.
2. **Swetnam, T.W.**, and J. L. Betancourt. 1992. Temporal patterns of El Niño/Southern Oscillation - wildfire patterns in the southwestern United States. pages 259-270 In Diaz H. F. and V. M. Markgraf, eds., El Niño: Historical and Paleoclimatic Aspects of the Southern Oscillation, Cambridge University Press, Cambridge.
3. Wickman, B. E., R. R. Mason, and **T.W. Swetnam**. 1994. pages 251-261. Searching for long-term patterns of forest insect outbreaks. In: S. R. Leather, K. F. A. Walters, N. J. Mills, and A. D. Watt, eds., Individuals, Populations and Patterns in Ecology, Intercept Press, Andover, United Kingdom.
4. **Swetnam, T.W.** 1996. Fire and climate history in the Central Yenisey Region, Siberia. pages 90-104, In J. G. Goldammer and V. V. Furyaev, eds., Fire in Ecosystems of Boreal Eurasia. Kluwer Academic Publishers, London.

5. Goldammer, J. G. and **Swetnam, T.W.** (listed alphabetically with 8 other authors). 1996. Fire in ecosystems of Boreal Eurasia: The Bor Island Fire Experiment Fire Research Campaign: Asia-North (FIRESKAN). Chapter 81, pages 848-873, In J. S. Levine, Biomass Burning and Global Change, Vol. 2. The MIT Press, Cambridge, Massachusetts.
6. Allen, C. D., J. L. Betancourt, and **T.W. Swetnam.** 1998. Landscape Changes in the Southwestern United States: Techniques, Long-term Data Sets, and Trends. Pages 71-84, In T. Sisk, editor, Perspectives on the Land Use History of North America: A Context for Understanding our Changing Environment. U.S. Geological Survey, Biological Science Report USGS/BRD/BSR-1998-0003. 104 pp.
7. Kipfmüller, K. F. and **T.W. Swetnam.** 2001. Using dendrochronology to reconstruct the history of ecosystems. Chapter 8, pages 199-228, In D. Egan and E. A. Howell eds., Techniques for Discovering Historic Ecosystems. Island Press, Washington.
8. **Swetnam, T.W.**, C. H. Baisan, and J. M. Kaib. 2001. Forest fire histories in the sky islands of La Frontera. Chapter 7, pages 95-119, In G. L. Webster and C. J. Bahre eds., Changing Plant Life of La Frontera: Observations on Vegetation in the United States/Mexico Borderlands. University of New Mexico Press, Albuquerque.
9. **Swetnam, T.W.** and C. H. Baisan. 2003. Tree-ring reconstructions of fire and climate history in the Sierra Nevada and Southwestern United States. pages 158-195, In: T. T. Veblen, W. Baker, G. Montenegro, and **T.W. Swetnam**, editors. Fire and Climatic Change in Temperate Ecosystems of the Western Americas. Ecological Studies Vol. 160. Springer, New York.
10. Milne, B. T., D. I. Moore, J. L. Betancourt, J. A. Parks, **T.W. Swetnam**, R. R. Parmenter, and W. T. Pockman. 2003. Multidecadal drought cycles in south-central New Mexico: Patterns and consequences. In: Climate Variability and Ecosystem Response at Long Term Ecological Research (LTER) Sites, Eds., D. Greenland, D. Goodin, and R. Smith. Oxford University Press, New York.
11. Morehouse, B., G. Christopherson, M. Crimmins, B. Orr, J. Overpeck, **T. Swetnam** and S. Yool. 2006. Modeling interactions among wildland fire, climate and society in the context of climatic variability and change in the Southwest US. pages 58-78, In: Regional Climate Change and Variability, Impacts and Responses, M. Ruth, K. Donaghy, P. Kirshen. Edward Elgar, Cheltenham, UK.
12. **Swetnam, T.W.**, C. H. Baisan, H. D. Grissino-Mayer. 2009. Chapter 3: Tree-ring perspectives on fire regimes and forest dynamics in mixed conifer and spruce-fir forests on Mt. Graham. Pages 55-67, In: H. R. Sanderson and J. L. Koprowski, editors. The Last Refuge of the Mt. Graham Red Squirrel: Ecology of Endangerment, University of Arizona Press, Tucson. 427p.
13. **Swetnam, T.W.** and P. M. Brown. 2011. Climatic inferences from dendroecological reconstructions. Chapter 9, In: Hughes, M.K., **T.W. Swetnam**, and H.F. Diaz, editors, Dendroclimatology: Progress and Prospects, Springer, New York.
14. Hughes, M.K., H.F. Diaz, and **T.W. Swetnam.** 2011. Tree Rings and Climate: Sharpening the Focus. Pages 331-353, In: Hughes, M.K., T.W. Swetnam, and H.F. Diaz (editors), Dendroclimatology: Progress and Prospects. Springer, New York.
15. **Swetnam, T.W.** and C. Whitlock. 2013. Chapter 3: Paleofire and Climate History: Western America and Global Perspectives, pages 21-37 In: Vegetation Fires and Global Change – Challenges for Concerted International Action, A White Paper directed to the United Nations and International Organizations (Johann Georg Goldammer, ed.); A publication of the Global Fire Monitoring Center (GFMC), Kessel Publishing House, Germany.

16. Westerling, A., T. Brown, T. Schoennagel, **T. Swetnam**, M. Turner, and T. Veblen. 2014. Briefing: Climate and Wildfire in Western U.S. Forests, pages IN: Forest Conservation in the Anthropocene, edited by V. Alaric Sample, R. Patrick Bixler, and Char Miller. USFS Rocky Mountain Research Station, USDA Forest Service RMRS-P-71. 2014.

#### Refereed Journal Articles

1. Madany, M. H., **T.W. Swetnam**, and N. West. 1982. Comparison of two approaches for determining fire dates from tree scars. *Forest Science* 28(4):856-861.
2. **Swetnam, T.W.** 1983. Gila fire history suggests restoration may require planned ignitions. *Restoration and Management Notes* 1(4):286.
3. **Swetnam, T.W.**, E. K. Sutherland, and M. A. Thompson. 1983. Comment on dating forest disturbances. *Quaternary Research* 19:400-401.
4. **Swetnam, T.W.** 1984. Peeled ponderosa pine trees: A record of inner bark utilization by Native Americans. *Journal of Ethnobiology* 4(2):177-190.
5. Dieterich, J. H., and **T.W. Swetnam**. 1984. Dendrochronology of a fire scarred ponderosa pine. *Forest Science* 30(1):238-247.
6. Biondi, F., and **T.W. Swetnam**. 1988. Box-Jenkins models of forest interior tree-ring chronologies. *Tree-Ring Bulletin* 47:71-96
7. **Swetnam, T.W.**, A. M. Lynch. 1989. A Tree-Ring reconstruction of western spruce budworm outbreaks in the Southern Rocky Mountains. *Forest Science* 35(4):962-986.
8. Fritts, H. C., and **T.W. Swetnam**. 1989. Dendroecology: A tool for evaluating variations in past and present forest environments. *Advances in Ecological Research* 19:111-189.
9. **Swetnam, T.W.**, and J. L. Betancourt. 1990. Fire-Southern Oscillation relations in the Southwestern United States. *Science* 249:1017-1020.
10. Van Pelt, N. S., and **T.W. Swetnam**. 1990. Conservation and stewardship of tree-ring study resources: Subfossil wood and living trees. *Natural Areas Journal* 10(1):19-27.
11. Baisan, C. H., and **T.W. Swetnam**. 1990. Fire history on a desert mountain range: Rincon Mountain Wilderness, USA. *Canadian Journal of Forest Research* 20:1559-1569.
12. Savage, M., and **T.W. Swetnam**. 1990. Early and persistent fire decline in a Navajo ponderosa pine forest. *Ecology* 70(6):2374-2378.
13. Brown, P. M., M. K. Hughes, C. H. Baisan, **T.W. Swetnam**, and A.C. Caprio. 1992. Giant sequoia ring-width chronologies from the central Sierra Nevada, California. *Tree-Ring Bulletin* 52:1-14.
14. Huante, P., E. Rincon, and **T.W. Swetnam**. 1993. Dendrochronology of *Abies religiosa* in Michoacan, Mexico. *Tree-Ring Bulletin* 50:15-28.
15. **Swetnam, T.W.**, and A. M. Lynch. 1993. Multi-century, regional-scale patterns of western spruce budworm history. *Ecological Monographs* 63(4):399-424).
16. **Swetnam, T.W.** 1993. Fire history and climate change in giant sequoia groves. *Science* 262:885-889.
17. Brown, P. M., and **T.W. Swetnam**. 1994. A crossdated fire history in a coast redwood forest near Redwood National Park, California. *Canadian Journal of Forest Research* 24:21-31.
18. Goldammer, J. G. and **Swetnam, T.W.** (listed alphabetically with 26 other authors). 1994. Fire in the boreal ecosystems of Eurasia: First results of the Bor Forest Island Fire Experiment, Fire Research Campaign Asia-North (FIRESCAN). *World Resources Review* 6(4):499-523.

19. Ortloff, W., J. G. Goldammer, F. H. Schweingruber, and **T.W. Swetnam**. 1995. Fire history study in a stand of *Pinus ponderosa* Dougl. ex LAWS. in the Santa Rita Mountains, Arizona, U.S.A., by means of tree-ring analysis. *Forstarchiv* 66:206-214. [in German].
20. Perkins, D., and **T.W. Swetnam**. 1996. A Dendroecological assessment of whitebark pine (*Pinus albicaulis*) in the Sawtooth-Salmon River region of Idaho. *Canadian Journal of Forest Research* 26:2123-2133.
21. Grissino-Mayer, H. D. and **T.W. Swetnam**. 1997. Multi-century history of wildfire in the ponderosa pine forests of El Malpais National Monument. *New Mexico Bureau of Mines & Mineral Resources Bulletin* 156:163-171.
22. Grissino-Mayer, H. D., **T.W. Swetnam**, and R. K. Adams. 1997. The rare, old-aged conifers of El Malpais – Their role in understanding climatic change in the American Southwest. *New Mexico Bureau of Mines & Mineral Resources Bulletin* 156:155-161.
23. **Swetnam, T.W.**, and J. L. Betancourt. 1998. Mesoscale disturbance and ecological response to decadal climatic variability in the American Southwest. *Journal of Climate* 11:3128-3147.
24. **Swetnam, T.W.**, C. D. Allen, and J. L. Betancourt. 1999. Applied historical ecology: Using the past to manage for the future. *Ecological Applications* 9(4):1189-1206.
25. Kaye, M. W. and **T.W. Swetnam**. 1999. An assessment of fire, climate, and Apache history in the Sacramento Mountains, New Mexico, USA. *Physical Geography* 20(4):305-330.
26. Grissino-Mayer, H. D., and **T.W. Swetnam**. 2000. Century scale changes in fire regimes and climate in the Southwest. *The Holocene* 10(2):207-214.
27. Markgraf, V., and **T.W. Swetnam** (listed alphabetically with 7 other authors). 2000. Paleoclimate reconstruction along the Pole-Equator-Pole transect of the Americas. *Quaternary Sciences Reviews* 19:125-140.
28. Speer, J. H., **T.W. Swetnam**, B. E. Wickman, and A. Youngblood. 2001. Changes in pandora moth outbreak dynamics during the past 622 years. *Ecology* 82:679–697.
29. Kitzberger, T., **T.W. Swetnam**, and T. T. Veblen. 2001. Inter-hemispheric synchrony of forest fires and the El Niño-Southern Oscillation. *Global Ecology and Biogeography* 10 (3): 315-326.
30. Barton, A. M., **T.W. Swetnam** and C. H. Baisan. 2001. Arizona pine (*Pinus arizonica*) stand dynamics: local and regional factors in a fire-prone madrean gallery forest of Southeast, Arizona, USA. *Landscape Ecology* 16 (4): 351-369.
31. Morgan, P., C. Hardy, **T.W. Swetnam**, M. G. Rollins, and D. G. Long. 2001. Mapping fire regimes across time and space: Understanding coarse and fine-scale patterns. *International Journal of Wildland Fire* 10 (3-4): 329-342.
32. Díaz, S. C., R. Touchan, and **T.W. Swetnam**. 2001. A tree-ring reconstruction of past precipitation in northwest Mexico. *International Journal of Climatology* (8): 1007-1019.
33. Rollins, M., **T.W. Swetnam** and P. Morgan. 2001. Evaluating a century of fire patterns in two Rocky Mountain wilderness areas using digital fire atlases. *Canadian Journal of Forest Research* 31(12): 2107-2123.
34. Allen, C. D., M. Savage, D. A. Falk, K. F. Suckling, **T.W. Swetnam**, T. Schulke, P. B. Stacey, P. Morgan, M. Hoffman, and J. Klingel. 2002. Ecological restoration of southwestern ponderosa pine ecosystems: a broad perspective. *Ecological Applications* 12(5):1418-1433.
35. Betancourt, J. L., H. D. Grissino-Mayer, M. W. Salzer, and **T.W. Swetnam**. 2002. A test of "annual resolution" in stalagmites using tree rings. *Quaternary Research* 58:197-199.

36. Ryerson, D., **T.W. Swetnam**, and A. M. Lynch. 2003. Tree-ring reconstruction of western spruce budworm outbreaks in the San Juan Mountains of Colorado. *Canadian Journal of Forest Research* 33:1010-1028.
37. Betancourt J. L., H. D. Grissino-Mayer, M. W. Salzer, and **T.W. Swetnam**. 2003. Reply to Baker and Gentry's comments on "A test of annual resolution in stalagmite using tree rings". *Quaternary Research* 59: 479-479.
38. Westerling, A. L., and **T.W. Swetnam**. 2003. Interannual to decadal drought and wildfire in the Western US. *EOS, Transactions of the American Geophysical Union* 84(49):545, 554-555.
39. Hessburg, P. F., E. E. Kuhlman, and **T.W. Swetnam**. 2005. Examining the recent climate through the lens of ecology: Inferences from temporal pattern analysis. *Ecological Applications* 15(2):440-45
40. Westerling, A. L., H. G. Hidalgo, D. R. Cayan, and **T.W. Swetnam**. 2006. Warming and earlier spring increase western U.S. wildfire activity. *Science* 313:940-943.
41. Kitzberger, T., P. M. Brown, E. K. Heyerdahl, **T.W. Swetnam**, and T. T. Veblen. 2007. Contingent Pacific-Atlantic ocean influence on multi-century wildfire synchrony over western North America. *Proceedings of the National Academy of Sciences* 104(2):543-548.
42. Margolis, E. Q., **T.W. Swetnam** and C. D. Allen. 2007. A stand-replacing fire history in upper montane forests of the Southern Rocky Mountains. *Canadian Journal of Forest Research* 37:2227-2241.
43. Kaufmann, M. R., D. Binkley, P. Z. Fulé, M. Johnson, S. L. Stephens and **T.W. Swetnam** 2007. Defining Old Growth for Fire-adapted Forests of the Western United States. *Ecology and Society* 12 (2): 15.
44. Iniguez, J.M., **T.W. Swetnam** and S.R. Yool. 2008. Topography affected landscape fire history patterns in southern Arizona, USA. *Forest Ecology and Management* 256:295-303.
45. Iniguez, J.M., **T.W. Swetnam**, and C.H. Baisan. 2009. Spatially and temporally variable fire regimes in Rincon Peak Sky Island, Arizona. *Fire Ecology* 5(1):3-21.
46. Bowman, D.M.J.S., J.K. Balch, P. Artaxo, W.J. Bond, J.M. Carlson, M.A. Cochrane, C.M. D'Antonio, R.S. DeFries, J.C. Doyle, S.P. Harrison, F.H. Johnston, J.E. Keeley, M.A. Krawchuk, C.A. Kull, J.B. Marston, M.A. Moritz, I. C. Prentice, C.I. Roos, A.C. Scott, **T.W. Swetnam**, G.R. van der Werf, S J. Pyne. 2009. Fire in the Earth system. *Science* 324:481-484.
47. Romme, W.H., C.D. Allen, J.D. Bailey, W.L. Baker, B.T. Bestelmeyer, P.M. Brown, K.S. Eisenhart, L. Floyd-Hanna, D.W. Huffman, B.F. Jacobs, R.F. Miller, E.H. Muldavin, **T.W. Swetnam**, R.J. Tausch, and P.J. Weisberg. 2009. Historical and modern disturbance regimes, stand structures, and landscape dynamics in piñon-juniper vegetation of the western U.S. *Rangeland Ecology and Management* 62(3):203-222.
48. **Swetnam, T.W.**, C. H. Baisan, A. C. Caprio, P. M. Brown, R. S. Anderson, and D. W. Hallett. 2009. Multi-millennia fire history of the Giant Forest, Sequoia National Park, USA. *Fire Ecology* 5(3):117-147.
49. Lombardo, K. J., **T.W. Swetnam**, C. H. Baisan, and M. I. Borchert. 2009. Using bigcone Douglas-fir fire scars and tree rings to reconstruct interior chaparral fire history. *Fire Ecology* 5(3):32-51.
50. Farris, C. A., C. H. Baisan, D. A. Falk, S. R. Yool, and **T.W. Swetnam**. 2010. Spatial and temporal corroboration of a fire-scar based history reconstruction in a frequently burned ponderosa pine forest in Arizona. *Ecological Applications* 20(6):1598-1614.

51. Bigio, E., **T.W. Swetnam** and C. H. Baisan. 2010. A Comparison and Integration of Tree-Ring and Alluvial Records of Fire History at the Missionary Ridge Fire, Durango, Colorado, USA. *The Holocene* 20(7):1047-1061.
52. Williams, A.P. C. D. Allen, C. I. Millar, **T.W. Swetnam**, J. Michaelsen, C. J. Still, and S. W. Leavitt. 2010. Forest responses to increasing aridity and warmth in the southwestern United States. *Proceedings of the National Academy of Sciences* 107(50):21289-21294.
53. O’Conner, C.D., G.M. Garfin, D.A. Falk, and **T.W. Swetnam**. 2011. Human Pyrogeography: A new synergy of fire, climate and people is reshaping ecosystems across the globe. *Geography Compass* 5/6:329-350.
54. Falk, D.A., E.K. Heyerdahl, P.M. Brown, C. Farris, PZ Fule, D. McKenzie, **T.W. Swetnam**, A.H. Taylor, and M.L. Van Horne. 2011. Multiscale controls of historical fire regimes: New insights from fire scar networks. *Frontiers in Ecology & Environment* 9(8): 446–54.
55. Bowman, D.M.J.S., J. Balch, P. Artaxo, W.J. Bond, M.A. Cochrane, C.M. D’Antonio, R. DeFries, F.H. Johnston, J.E. Keeley, M.A. Krawchuk, C.A. Kull, M. Mack, M.A. Moritz, S. Pyne, C.I. Roos, A.C. Scott, N.S. Sodhi, and **T.W. Swetnam**. 2011. The human dimension of fire regimes on Earth. *Journal of Biogeography* 3(12):2223-2236.
56. Roos, C.I., and **T.W. Swetnam**. 2011. A 1,416-year reconstruction of annual, multi-decadal, and centennial variability in area burned for ponderosa pine forests of the southern Colorado Plateau region, Southwest USA. *The Holocene* 22(3):281-290.
57. Margolis, E.Q., **T.W. Swetnam**, and C.D. Allen. 2011. Historical stand-replacing fire in upper montane forests of the Madrean Sky Islands and Mogollon Plateau, southwestern USA. *Fire Ecology* 7(3):88-107.
58. Sánchez-Salguero, R., R.M. Navarro-Cerrillo, **T.W. Swetnam**, M.A. Zavala. 2012. Is drought the main decline factor at the rear edge of Europe? The case of southern Iberian pine plantations. *Forest Ecology & Management* 270:158-279.
59. Sanchez-Salguero, R., R.M. Navarro-Cerrillo, J.J. Camarero, A. Fernández-Cancio, **T.W. Swetnam**, and M.A. Zavala. 2012. Vulnerabilidad frente a la sequía de repoblaciones de dos especies de pinos en su límite meridional en Europa. *Revista Ecosistemas* 21(3):31-40.
60. Williams, A.P., C.D Allen, A.K. Macalady, R.D. Griffin, C.A. Woodhouse, D.M. Meko, **T.W. Swetnam**, S.A. Rauscher, R. Seager, H.D. Grissino-Mayer, J.S Dean, E.R. Cook, C. Gangogadagamage, M.Cai, and N.G. McDowell. 2012. Temperature as a Potent Driver of Regional Forest Drought Stress and Tree Mortality. *Nature Climate Change* 2(10): 1–6.
61. Farris, C.A., C.H. Baisan, D.A Falk, M.L. Van Horne, P.Z. Fule, and **T.W. Swetnam**. 2013. A Comparison of Targeted and Systematic Fire-Scar Sampling for Estimating Historical Fire Frequency in South-Western Ponderosa Pine Forests. *International Journal of Wildland Fires* 22 (8), 1021-1033.
62. Margolis, E.Q, and **T.W. Swetnam**. 2013. Historical Fire-Climate Relationships of Upper Elevation Fire Regimes in the South-Western United States. *International Journal of Wildland Fires* 22(5).
63. Diaz, H.F, and **T.W Swetnam**. 2013. The Wildfires of 1910: Climatology of an Extreme Early 20<sup>th</sup> Century Event and Comparison with More Recent Extremes. *Bulletin of the American Meteorological Society* 94(9):1361-1370.
64. Stephens, S. L., Agee, J. K., Fulé, P. Z., North, M. P., Romme, W. H., **Swetnam, T. W.**, & Turner, M. G. 2013. Land use. Managing forests and fire in changing climates. *Science* 342(6154): 41–2.



65. Fule, P. Z., **Swetnam, T. W.**, P.M. Brown, D.A. Falk, D.L. Peterson, C.D. Allen, G.H. Aplet, M.A. Battaglia, D. Binkley, C. Farris, R.E. Keane, E.Q. Margolis, H. Grissino-Mayer, C. Miller, C. Hull Sieg, C. Skinner, S.L. Stephens, A. T. 2014. Unsupported inferences of high-severity fire in historical dry forests of the western United States: response to Williams and Baker. *Global Ecology and Biogeography* 23(7):825-830.
66. Roos, C.I., D.M.J.S. Bowman, J.K. Balch, P. Artaxo, W.J. Bond, M. Cochrane, C.M. D'Antonio, R. DeFries, M. Mack, F.H. Johnston, M.A. Krawchuk, C.A. Kull, M.A. Moritz, S. Pyne, A.C Scott, and **T.W Swetnam**. 2014. Pyrogeography, historical ecology, and the human dimensions of fire regimes. *Journal of biogeography* 41(4):833-836.
67. Williams, A.P., R. Seager, M. Berkelhammer, A.K. Macalady, M.A. Crimmins, **T.W. Swetnam**, A.T. Trugman, N. Buening, N. Hryniw, N.G. McDowell, D. Noone, C.I. Mora, and T. Rahn. 2014. Causes and Implications of Extreme Atmospheric Moisture Demand during the Record-Breaking 2011 Wildfire Season in the Southwestern United States. *Journal of Applied Meteorology and Climatology* 53(12):2671-2684.
68. O'Connor, C.D., D.A. Falk, A.M. Lynch, and **T.W. Swetnam**. 2014. Fire severity, size, and climate associations diverge from historical precedent along an ecological gradient in the Pinaleno Mountains, Arizona, USA *Forest Ecology and Management* 329: 264-278.
69. Williams, A.P., R. Seager, A.K. Macalady, M. Berkelhammer, M.A. Crimmins, **T.W. Swetnam**, A.T. Trugman, N. Buening, N. Hryniw, N.G. McDowell, D. Noone, C.I. Mora, and T. Rahn. 2015. Correlations between components of the water balance and burned area reveal new insights for predicting forest fire area in the southwest United States. *International Journal of Wildland Fire* 24(1):14-26.
70. O'Connor, C.D., A.M. Lynch, D.A. Falk, and **T.W. 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.
71. Guiterman, C.H., E.Q. Margolis, and **T.W. Swetnam**. 2015. Dendroecological Methods For Reconstructing High-Severity Fire In Pine-Oak Forests. *Tree-Ring Research* 71(2):67-77.
72. Guiterman, C.H., **T.W. Swetnam**, and J.S. Dean. 2015. Eleventh-century shift in timber procurement areas for the great houses of Chaco Canyon. *Proceedings of the National Academy of Sciences* 113(5):1186-1190.
73. Iniguez, J.M., **T.W. Swetnam**, and C.H. Baisan. 2016. Fire history and moisture influences on historical forest age structure in the sky islands of southern Arizona, USA. *Journal of Biogeography* 43(1):85-95.
74. Liebmann, M.J., J. Farella, C.I. Roos, A. Stack, S. Martini, and **T.W. Swetnam**. 2016. Native American depopulation, reforestation, and fire regimes in the Southwest United States, 1492–1900 CE. *Proceedings of the National Academy of Sciences* 113 (6) E696-E704; published ahead of print January 25, 2016
75. **Swetnam, T.W.**, J. Farella, C.I. Roos, M.J. Liebmann, D.A. Falk and C.D. 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>
76. Bigio, E.R., **T.W. Swetnam**, and C.H. Baisan. 2016. Local-scale and regional climate controls on historical fire regimes in the San Juan Mountains, Colorado. *Forest Ecology and Management* 360: 311–322.
77. Stevens J.T., et al. (**T.W. Swetnam**, and 16 other co-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.  
doi:10.1371/journal.pone.0147688
78. O'Connor, C.D., D.A. Falk, A.M. Lynch, **T.W. Swetnam**, and C.P. Wilcox. 2017. Disturbance and productivity interactions mediate stability of forest composition and structure. *Ecological Applications* 27 (3): 900-915.
  79. Margolis, E.Q., C.A. Woodhouse, and **T.W. Swetnam**. 2017. Drought, multi-seasonal climate and wildfire in northern New Mexico. *Climatic Change* 142 (3): 433-446.
  80. Bigio, E.R., **T.W. Swetnam**, P.A. Pearthree. 2017. Late Holocene fire–climate relationships of the western San Juan Mountains, Colorado. *International Journal of Wildland Fire* 26 (11): 944-962
  81. Kitzberger, T., D.A. Falk, A.L. Westerling, and **T.W. Swetnam**. 2017. Direct and indirect climate controls predict heterogeneous early-mid 21st century wildfire burned area across western and boreal North America. *PloS One* 12 (12), e0188486.
  82. Guiterman, C.H., E.Q. Margolis, C.D. Allen, D.A. Falk, and **T.W. Swetnam**. 2018. Long-term persistence and fire resilience of oak shrubfields in dry conifer forests of northern New Mexico. *Ecosystems* 21 (5): 943-959.
  83. Power, M.J., B.F. Coddling, A.H. Taylor, **T.W. Swetnam**, K.E. Magargal, D.W. Bird, and J.F. O'connell. 2018. Human fire legacies on ecological landscapes. *Frontiers in Earth Science* 6, 151.
  84. Hanna, D.P., D.A. Falk, **T.W. Swetnam**, and W. Romme. 2018. Age-related climate sensitivity in *Pinus edulis* at Dinosaur National Monument, Colorado, US. *Dendrochronologia* 52: 40-47.
  85. Guiterman, C.H., E.Q. Margolis, C.H. Baisan, D.A. Falk, C.D. Allen, and **T.W. Swetnam**. 2019. Spatiotemporal variability of human–fire interactions on the Navajo Nation. *Ecosphere* 10 (11), e02932.
  86. Guiterman, C.H., C.H. Baisan, N.B. English, J. Quade, J.S. Dean, and **T.W. Swetnam**. 2020. Convergence of Evidence Supports a Chuska Mountains Origin for the Plaza Tree of Pueblo Bonito, Chaco Canyon. *American Antiquity* 85 (2): 331-346.
  87. Roos, C.I., T.M. Rittenour, **T.W. Swetnam**, R.A. Loehman, K.L. Hollenback, M.J. Liebmann, D.D. Rosenstein. 2020. Fire suppression impacts on fuels and fire intensity in the western US: insights from archaeological luminescence dating in northern New Mexico. *Fire* 3 (3), 32.
  88. Arizpe, A.H., D.A. Falk, C.A. Woodhouse, and **T.W. Swetnam**. 2021. Widespread fire years in the US–Mexico Sky Islands are contingent on both winter and monsoon precipitation. *International Journal of Wildland Fire* 29 (12), 1072-1087.
  89. Roos, C.I., **T.W. Swetnam**, T.J. Ferguson, M.J. Liebmann, R.A. Loehman, J.R. Welch, E.Q. Margolis, C.H. Guiterman, W.C. Hockaday, M.J. Aiuvalasit, J. Battillo, J. Farella, and C.A. Kiahtipes. 2021. Native American fire management at an ancient wildland–urban interface in the Southwest United States. *Proceedings of the National Academy of Sciences* 18 (4) e2018733118.
  90. Dewar, J.J., D.A. Falk, **T.W. Swetnam**, C.H. Baisan, C.D. Allen, R.R. Parmenter, E.Q. Margolis, and E.J. Taylor. 2021. Valleys of fire: historical fire regimes of forest-grassland ecotones across the montane landscape of the Valles Caldera National Preserve, New Mexico, USA. *Landscape Ecology* 36 (2): 331-352.
  91. Margolis, E.Q. [and **T.W. Swetnam**, plus 81 other authors]. 2022. The North American fire scar network. *Ecosphere* 13(7):e4195.

92. Roos, C.I., C.H Guiterman, E.Q. Margolis, **T.W. Swetnam**, N.C. Laluk, K.F. Thompson, C. Toya, C.A. Farris, P.Z. Fulé, J.M. Iniguez, J.M. Kaib, C.D. O'Connor, and L. Whitehair. 2022. *Science Advances* 8(49): eabq3221.

Published Technical Reports (\*independently reviewed and refereed)

1. **Swetnam, T.W.** 1984. Radial growth analysis of western spruce budworm infested Douglas-fir trees on the Carson National Forest, New Mexico. *USDA Forest Service, Southwestern Region Forest Pest Management Report R-3 84-11:38-66.*
2. \***Swetnam, T.W.**, M. A. Thompson, and E. K. Sutherland. 1985. Using dendrochronology to measure radial growth of defoliated trees. *USDA Forest Service, Agriculture Handbook 639.* 39 pgs.
3. **Swetnam, T.W.** 1986. Radial growth losses in Douglas-fir and white fir caused by western spruce budworm in Northern New Mexico: 1700 to 1983. *USDA Forest Service, Southwestern Region Forest Pest Management Report R-3 86-2.* 61 pp.
4. **Swetnam, T.W.**, C. H. Baisan, P. M. Brown, and A. C. Caprio. 1989. Fire history of Rhyolite Canyon, Chiricahua National Monument. *USDI National Park Service, Cooperative Park Service Studies Unit Technical Report No. 32*, University of Arizona, Tucson. 38 pp.
5. Allen, C. D., R. Touchan, and **T.W. Swetnam.** 1995. A landscape-scale fire history study supports fire management actions at Bandelier National Monument. *Park Science* Summer 1995, pages 18-19.
6. \***Swetnam, T.W.**, B. E. Wickman, H. G. Paul, and C. H. Baisan. 1995. Historical patterns of western spruce budworm and Douglas-fir tussock moth outbreaks in the Northern Blue Mountains, Oregon since A.D. 1700. *USDA Forest Service, Research Paper PNW-RP-484.*
7. \*Gottfried, G. J., **T.W. Swetnam**, C. D. Allen, J. L. Betancourt, and A. L. Chung-McCoubrey. 1995. Chapter 6, Pinyon-juniper woodlands, pages 95 to 132, In D. M. Finch and J. A. Tainter, tech. eds., *Ecology, Diversity, and Sustainability of the Middle Rio Grande Basin.* *USDA Forest Service, General Technical Report RM-GTR-268.*
8. Allen, C. D., R. Touchan, and **T.W. Swetnam.** 1996. Overview of fire history in the Jemez Mountains, New Mexico. pp.35-36, in *The Jemez Mountains Region : New Mexico Geological Society, Forty-seventh Annual Field Conference, September 25-28*, eds. F. Goff, B. S. Kues, M. A. Rogers, L. D. McFadden, and J. N. Gardner. Albuquerque, N.M.
9. \*Baisan, C. H., and **T.W. Swetnam.** 1997. Interactions of fire regimes and land use in the Central Rio Grande Valley. *USDA Forest Service, Research Paper RM-RP-330* 27 pgs.
10. CIRMOUNT Committee (led by H.F. Diaz, C.I. Millar and 12 authors, including **T.W. Swetnam**). 2006. Mapping New Terrain: Climate Change and America's West. Report of the Consortium for Integrated Climate Research in Western Mountains (CIRMOUNT), *Misc. Pub., PSW-MISC-77*, Albany, CA, Pacific Southwest Research Station, Forest Service, U.S. Department of Agriculture, 29 pp.
11. Wilkinson-Kaye, M., **T. Swetnam**, and C. Baisan. 2006. Chapter 5. Borderlands Fire Regimes, In: Fish, P.R., S.K. Fish, and J.H. Madsen, Prehistory and early history of the Malpais Borderlands: Archeological syntheses and recommendations. *USDA Forest Service, General Technical Report RMRS-GTR-176.*
12. Romme, C.D. Allen, J.D. Bailey, W.L. Baker, B.T. Bestelmeyer, P.M. Brown, K.S. Eisenhart, L. Floyd-Hanna, D.W. Huffman, B.F. Jacobs, R.F. Miller, E.H. Muldavin, **T.W.**

- Swetnam, R.J.** Tausch, and P.J. Weisberg. 2008. Historical and modern disturbance regimes, stand structures, and landscape dynamics in piñon-juniper vegetation of the western U.S. Colorado Forest Restoration Institute, Colorado State University, Fort Collins. 35 pp
13. Falk, D., C. Cox, D. Hill, T. McKinnon, E. Rosenberg, K. Siderits, and **T. Swetnam** 2008. Fire on the Landscape: Planning for Communities, Fire, and Forest Health. Report of the Arizona Forest Health Council to the Office of the Governor. Tucson, AZ. 29 pages + vii.
  14. \*Keeley, J.E., G.H. Aplet, N.L. Christensen, S.G. Conard, E.A. Johnson, P.N. Omi, D.L. Peterson, and **T.W. Swetnam**. 2009. Ecological foundations for fire management in North American forest and shrubland ecosystems. *USDA Forest Service, General Technical Report PNW-GTR-779*. 92 pgs.

### Proceedings Papers

1. **Swetnam, T.W.**, and J. H. Dieterich. 1985. Fire history of ponderosa pine forests in the Gila Wilderness, New Mexico. In: J. E. Lotan, B. M. Kilgore, W. C. Fischer, and R. W. Mutch, Tech. Coords., Proceedings-Symposium and Workshop on Wilderness Fire, November 15-18, 1983, Missoula, Montana. *USDA Forest Service, General Technical Report INT-182*; pages 390-397.
2. **Swetnam, T.W.** 1987. Western spruce budworm outbreaks in northern New Mexico: occurrence and radial growth impacts from 1700 to 1983. In: G. C. Jacoby and J. W. Hornbeck, Compilers, Proceedings of the International Symposium on Ecological Aspects of Tree-Ring Analysis, August 17-21, 1986, Marymount College, Tarrytown, New York, U. S. DOE CONF-8608144, pages 130-141.
3. **Swetnam, T.W.** 1987. Western spruce budworm outbreaks in Northern New Mexico: A dendroecology case study. In: A. A. Lucier, ed., *Tree Rings and Forest Mensuration: How Can They Document Trends in Forest Health?*, Proceedings of a workshop, April 9-11, 1987, Tucson, Arizona. National Council of the Paper Industry for Air and Stream Improvement, Technical Bulletin 523.
4. **Swetnam, T.W.** 1990. Fire History and climate in the Southwestern United States in J. S. Krammes, Tech. Coord, Proceedings of Symposium on Effects of Fire in Management of Southwestern U. S. Natural Resources, November 15-17, 1988, Tucson, Arizona. *USDA Forest Service, General Technical Report. RM-191*; pages 6-17.
5. **Swetnam, T.W.**, and J. L. Betancourt. 1990. ENSO variability and forest fires in the Southwestern United States. In J. L. Betancourt and A. M. MacKay, eds., Proceedings of the Pacific Climate (PACLIM) Workshop, Asilomar, California, March 5-8, 1989: California Department of Water Resources, *Interagency Ecological Studies Program Technical Report 32*: ; pages 129-134.
6. Hughes, M. K., B. Richards, **T.W. Swetnam**, and C. H. Baisan. 1990. Can a climate record be extracted from giant sequoia tree rings? In J. L. Betancourt and A. M. MacKay, eds., Proceedings of the Pacific Climate (PACLIM) Workshop, Asilomar, California, March 5-8, 1989: California Department of Water Resources, *Interagency Ecological Studies Program Technical Report 32*: ; pages 111-114.
7. Stephenson, N. L., D. J. Parsons, and **T.W. Swetnam**. 1991. Restoring natural fire to the sequoia-mixed conifer forest: Should intense fire play a role? pages 321-337 In Proceedings of 17th Tall Timbers Fire Ecology Conference, Tallahassee Florida, May 18-21, 1989.

8. **Swetnam, T.W.**, R. Touchan, C. H. Baisan, A. C. Caprio, P. M. Brown. 1991. Giant sequoia fire history in the Mariposa Grove, Yosemite National Park. pages 249-255 In: Yosemite Centennial Symposium: Prospects for the Future, October 13-20, 1990. *National Parks Service, Denver Service Center, NPS D-374*.
9. **Swetnam, T.W.**, and P. M. Brown. 1992. Oldest known conifers in the Southwestern United States: Temporal and spatial patterns of maximum age. In: M. R. Kauffman, W. H. Moir, and R. L. Bassett, tech. coords., Old Growth Forests in the Southwest an Rocky Mountain Regions, Proceedings of a Workshop, March 9-13, 1992, Portal, Arizona. *USDA Forest Service General Technical Report RM-213*; pages 24-38.
10. **Swetnam, T.W.**, C. H. Baisan, A. C. Caprio, and P. M. Brown. 1992. Fire history in a Mexican oak-pine woodland and adjacent montane conifer gallery forest in southeastern Arizona. In: P. F. Ffolliott, G. J. Gottfried, D. A. Bennett, V. M. Hernandez, A. Ortega-Rubio, and R. H. Hamre, tech. coords., Ecology and Management of Oak and Associated Woodlands: Perspectives in the Southwestern United States and Northern Mexico, April 27-30, 1992, Sierra Vista, Arizona. *USDA Forest Service, General Technical Report RM-218*; pages 165-173.
11. Lynch, A. M., and **T.W. Swetnam**. 1992. Old-growth mixed conifer and western spruce budworm in the Southern Rocky Mountains. In: M. R. Kauffman, W. H. Moir, and R. L. Bassett, tech. coords., Old Growth Forests in the Southwest an Rocky Mountain Regions, Proceedings of a Workshop, March 9-13, 1992, Portal, Arizona. *USDA Forest Service, General Technical Report RM-213*; pages 66-80.
12. Perkins, D.L., and **T.W. Swetnam**. 1994. Long-term dynamics of whitebark pine: tree-ring studies in central Idaho. In: K.C. Kendall, B. Coen, B. Keane, B. Donner, and K. Brewer, tech. coords. Workshop Proceedings: Research and Management in Whitebark Pine Ecosystems, Glacier National Park, Montana, National Biological Survey and USDA Forest Service Intermountain Research Station; pages 25-29.
13. Baisan, C. H., and **T.W. Swetnam**. 1995. Management implications of historical fire occurrence patterns in remote mountains of Southwestern New Mexico and northern Mexico. In: J. K. Brown, R. W. Mutch, C. W. Spoon, and R. H. Wakimoto, tech. coords., Proceedings: Symposium on Fire in Wilderness and Park Management, Missoula, MT, March 30-April 1, 1993. *USDA Forest Service, General Technical Report INT-320*; pages 153-156.
14. Caprio, A. C., and **T.W. Swetnam**. 1995. Historic fire regimes along an elevational gradient on the west slope of the Sierra Nevada, California. In: J. K. Brown, R. W. Mutch, C. W. Spoon, and R. H. Wakimoto, tech. coords., Proceedings: Symposium on Fire in Wilderness and Park Management, Missoula, MT, March 30-April 1, 1993. *USDA Forest Service, General Technical Report INT-320*; pages 173-179.
15. Grissino-Mayer, H. D., and **T.W. Swetnam**. 1995. Effects of habitat diversity on fire regimes in El Malpais National Monument, New Mexico. In: J. K. Brown, R. W. Mutch, C. W. Spoon, and R. H. Wakimoto, tech. coords., Proceedings: Symposium on Fire in Wilderness and Park Management, Missoula, MT, March 30-April 1, 1993,. *USDA Forest Service, General Technical Report INT-320*; pages 195-200.
16. Grissino-Mayer, H. D., C. H. Baisan, and **T.W. Swetnam**. 1995. Fire history in the Pinaleno Mountains of Southeastern Arizona: Effects of human-related disturbances. In L. DeBano et al. tech. coords., Biodiversity and Management of the Madrean Archipelago: The Sky Islands of Southwestern United States and Northwestern New Mexico, September 19-23, 1994,

- Tucson, Arizona, *USDA Forest Service, General Technical Report RM-GTR-264*; pages 399-407.
17. Mutch, L., and **T.W. Swetnam**. 1995. Effects of fire severity and climate on ring-width growth of giant sequoia after burning. In: J. K. Brown, R. W. Mutch, C. W. Spoon, and R. H. Wakimoto, tech. coords., *Proceedings: Symposium on Fire in Wilderness and Park Management*, Missoula, MT, March 30-April 1, 1993. *USDA Forest Service, General Technical Report INT-320*; pages 241-246.
  18. Touchan, R., **T.W. Swetnam**, and H. D. Grissino-Mayer. 1995. Effects of livestock grazing on pre-settlement fire regimes in New Mexico. In: J. K. Brown, R. W. Mutch, C. W. Spoon, and R. H. Wakimoto, tech. coords., *Proceedings: Symposium on Fire in Wilderness and Park Management*, Missoula, MT, March 30-April 1, 1993. *USDA Forest Service, General Technical Report INT-320*; pages 268-272.
  19. Touchan, R., C. D. Allen, and **T.W. Swetnam**. 1996. Fire history and climatic patterns in ponderosa pine and mixed-conifer forests of the Jemez Mountains, Northern New Mexico. In C. Allen, editor, *Fire effects in Southwestern Forests*, *Proceedings of the Second La Mesa Fire Symposium*, Los Alamos, New Mexico, March 29-31, 1994. *USDA Forest Service, General Technical Report RM-GTR-286*; pages 33-46.
  20. Seklecki, T. M., H. D. Grissino-Mayer, and **T.W. Swetnam**. 1996. Fire history and the possible role of Apache-set fires in the Chiricahua Mountains of Southeastern Arizona. In P. F. Ffolliott et al. tech. coords., *Effects of fire on Madrean Province Ecosystems*, A symposium proceedings, *USDA Forest Service, General Technical Report RM-GTR-289*; pages 238-246.
  21. Kaib, J. M., C. H. Baisan, H. D. Grissino-Mayer, and **T.W. Swetnam**. 1996. Fire history in the gallery pine-oak forests and adjacent grasslands of the Chiricahua Mountains, Arizona. In P. F. Ffolliott et al. tech. coords., *Effects of fire on Madrean Province Ecosystems*, A symposium proceedings, *USDA Forest Service, General Technical Report RM-GTR-289*; pages 253-264.
  22. **Swetnam, T.W.** and C. H. Baisan. 1996. Historical fire regime patterns in the Southwestern United States since AD 1700. In C. Allen, editor, *Fire effects in Southwestern Forests*, *Proceedings of the Second La Mesa Fire Symposium*, Los Alamos, New Mexico, March 29-31, 1994. *USDA Forest Service General Technical Report RM-GTR-286*; pages 11-32.
  23. **Swetnam, T.W.** and C. H. Baisan. 1996. Fire histories of montane forests in the Madrean Borderlands. In P. F. Ffolliott et al. tech. coords., *Effects of fire on Madrean Province Ecosystems*, A symposium proceedings, *USDA Forest Service, General Technical Report RM-GTR-289*; ; pages 15-36.
  24. Wickman, B. E. and **T.W. Swetnam**. 1997. Interactions of fire and defoliating insects in western forests: some multi-century patterns. In *Diverse forests, abundant opportunities, and evolving realities*, *Proceedings of the 1996 Society of American Foresters Convention*, Albuquerque, NM November 9-13, 1996. Society of American Foresters, Bethesda, MD. Pages 222-227.
  25. Rollins, M. and **T.W. Swetnam**, and P. Morgan. 2000. Twentieth century fire patterns in the Gila/Aldo Leopold Wilderness Complex New Mexico and the Selway-Bitterroot Wilderness Area Idaho/Montana. In Cole, D. N., S. McCool, W. T. Borrie, and J. O'Laughlin, compilers. *Wilderness science in a time of change conference -- Volume 5: Wilderness ecosystems, threats, and management*; 1999 May 23-27; Missoula, MT. *USDA Forest Service, Proceedings RMRS-P-0-VOL5*.

26. Kipfmuller, K.F. and **T.W. Swetnam**. 2000. Fire-climate interactions in the Selway-Bitterroot Wilderness Area. In Cole, D. N., S. McCool, W. T. Borrie, and J. O'Laughlin, compilers. Wilderness science in a time of change conference -- Volume 5: Wilderness ecosystems, threats, and management; 1999 May 23-27; Missoula, MT. *USDA Forest Service, Proceedings RMRS-P-0-VOL5*.
27. Falk, D. A. and **T.W. Swetnam**. 2002. Scaling rules and probability models for surface fire regimes in ponderosa pine forests. In: Omi, Philip N.; Joyce, Linda A., technical editors. Fire, fuel treatments, and ecological restoration: Conference proceedings; 2002 16-18 April; Fort Collins, CO. *USDA Forest Service, Proceedings RMRS-P-29*; pages 301-318.
28. **Swetnam, T.W.** 2005. Fire histories from pine-dominant forests in the Madrean Archipelago. In: Connecting mountain islands and desert seas: biodiversity and management of the Madrean Archipelago II. Gottfried, Gerald J.; Gebow, Brooke S.; Eskew, Lane G.; and Edminster, Carleton B., compilers. 2004 May 11-15; Tucson, AZ. *USDA Forest Service, Proceedings RMRS-P -36*; pages 35-43.

Other Publications (opinion-editorials, introductions to special issues, etc.):

1. **Swetnam, T.W.** 1988. Forest fire primeval. *The World and I* 3:236-241.
2. Parsons, D. J., **T.W. Swetnam**, and N. L. Christensen, Jr. 1999. Introduction to Invited Feature on Historical Variability Concepts in Managing Ecosystems. *Ecological Applications* 9(4):1177-1178.
3. **Swetnam, T.W.** 2000. Defusing time bombs. Op-Ed in the *Albuquerque Journal*, Sunday June 4, 2000
4. **Swetnam, T.W.** 2000. Climate and the western wildfire problem. Op-Ed in the *Arizona Daily Star* (Tucson), Sunday September 10, 2000.
5. **Swetnam, T.W.** 2002. Fire and climate history in the western Americas from tree rings. *PAGES News* (International Geosphere Biosphere Program), 10(1) April 2002.
6. Betancourt, J.L., **T.W. Swetnam**, C. Allen, and M. Savage. 2003. Fire in the West: It's no Simple Story, Op-Ed in *High Country News*, July 7, 2003.
7. **Swetnam, T.W.** 2003. Living with Fire. Op-Ed published in the *Arizona Daily Star*, and *Arizona Republic*, Sunday August 10, 2003.
8. Barrett, S. W., **T.W. Swetnam**, and W. L. Baker. 2005. Indian fire use: deflating the legend. *Fire Management Today* 65(3): 31-33.
9. **Swetnam, T.W.** and K. Flessa. 2005. The US needs the best science, not political intimidation of scientists. Guest column in *Arizona Daily Star*, Sunday July 23, 2005.
10. CIRMOUNT Committee [14 authors including **T.W. Swetnam**]. 2006. Mapping New Terrain: Climate Change and America's West. Report of the Consortium for Integrated Climate Research in Western Mountains (CIRMOUNT), *USDA Forest Service, Misc. Pub., PSW-MISC-77*. 29 pp.
11. **Swetnam, T.W.** 2007. Climate change and the changing landscape. *Sky Island Alliance Newsletter*, Summer 2007.
12. **Swetnam, T.W.** and R. S. Anderson. 2008. Fire climatology in the western United States: Introduction to special issue. *International Journal of Wildland Fire* 17:1-7.
13. **Swetnam, T.W.** 2008. The perfect firestorm. *Wildland Firefighter* May 2008.
14. M. Skroch and **T. Swetnam**. 2008. The public should accept more frequent, but less destructive forest fires. Op-Ed in *Arizona Daily Star*, Sunday July 6, 2008.

15. **Swetnam, T.W.** 2009. Fire history in California, Introduction to special issue. *Fire Ecology* 5(3):1-3.
16. **Swetnam, T.W.** 2010. Marvin A. Stokes, In Memoriam. *Tree-Ring Research* 66(2):143-144.
17. Falk, D.A., E. K. Heyerdahl, P. M. Brown, **T.W. Swetnam**, E. K. Sutherland, Z. Gedalof, L. Yocom, and T. J. Brown. 2010. Fire and climate variation in western North America from fire-scar and tree-ring networks (International Geosphere-Biosphere Program) PAGES news Vol 18(2):70-72, August 2010.
18. **Swetnam, T.W.** Wildfire, Climate & People: Perspectives and Warnings from the Past. Forests at Risk: Climate Change and the Future of the American West, February 18, 2011, Aspen, Colorado, Aspen Center for Environmental Studies. Island Press, Pgs 16-20.
19. **Swetnam, T.W.** 2013. Thomas P. Harlan, In Memoriam. *Tree-Ring Research* 69(2):101-102.
20. Roos, C.I., and **T.W. Swetnam**. 2016. The Jemez FHiRE Project: An Introduction. *Archaeology Southwest Magazine* 30(4):3-4.
21. Farella, J., and **T.W. Swetnam**. 2016. *Terminus Ante Quem* Dating of the Depopulation of Jemez Ancestral Villages. *Archaeology Southwest Magazine* 30(4):12-14.
22. **T.W. Swetnam**. 2016. Tree-Ring Records of Forests, People, and Fire in the Jemez Mountains. *Archaeology Southwest Magazine* 30(4):18-20.
23. **T.W. Swetnam** and C.I. Roos. 2016. Lessons from Four Centuries of Local Management for Contemporary Fire Challenges. *Archaeology Southwest Magazine* 30(4):24-25.
24. O'Connor, C.D., D.A. Falk, A.M. Lynch, **T.W. Swetnam**, and C.P. Wilcox. 2017. Tree demography records and last recorded fire dates from the Pinaleño Demography Project, Arizona USA. Fort Collins, CO: Forest Service Research Data Archive. <https://doi.org/10.2737/RDS-2017-0001>.

Published Congressional Testimony:

- Swetnam T.W.** and A.L. Westerling. Hearing before the Committee on Energy and Natural Resources, United States Senate, One Hundred Tenth Congress, First Session, To Consider Scientific Assessments of the Impacts of Global Climate Change on Wildfire Activity in the United States, September 24, 2007. S. HRG. 110-228, U.S. Government Printing Office, Wash. D.C.
- Swetnam T.W.** Oversight Field Hearing before the Subcommittee on National Parks, Forests and Public Lands, of the Committee on Natural Resources, U.S. House of Representatives, One Hundred Eleventh Congress, First Session, on The Impacts of Climate Change on America's National Parks, April 7, 2009. Serial No. 111-16. Government Printing Office, Wash. D.C.

Graduate Theses:

- 1983 Fire History of the Gila Wilderness, New Mexico, MS Thesis, School of Renewable Natural Resources, University of Arizona. 140 pgs.
- 1987 A dendrochronological assessment of western spruce budworm, *Choristoneura occidentalis* Freeman, in the southern Rocky Mountains, Ph.D. Dissertation, School of Renewable Natural Resources, University of Arizona. 213 pgs.



**RESEARCH GRANTS & CONTRACTS (1983 to 2013; Swetnam is PI, unless name is listed with \*)**

<b>Project Title</b>	<b>Funding Source</b>	<b>Co-PIs, PIs*, Students &amp; Postdoc#</b>	<b>Duration</b>	<b>Funding Amount</b>
Radial Growth Analysis of Western Spruce Budworm Damage	USDA Forest Service Southwestern Region		1/83-1/84	\$7,600
Development of a manuscript describing the field and techniques for assessing effects of western spruce budworm defoliation on radial growth of infested trees	USDA Forest Service Pacific Northwest Forest Experiment Station		1/84-12/84	\$3,000
Assessment of Impacts to Tree Radial Growth Caused by Western Spruce Budworm Defoliation	USDA Forest Service Southwestern Region, and Canada-United States Spruce Budworm Research Program		1/84-12/85	\$12,895
Radial Growth Assessment of Defoliated Trees in the Colorado Front Range	USDA Forest Service, Rocky Mountain Region		5/85-8/86	\$9,582
Development of a manuscript on dendroecology	Utility Air Regulatory Group, Acid Deposition Committee, Washington, D C	H Fritts*	06/86-06/87	\$4,000
Evaluation of Severity of Spruce Budworm in Mixed Conifer Habitat Types of the Southwest	USDA Forest Service, Rocky Mountain Forest and Range Experiment Station		8/86-9/87	\$15,000
Preliminary Tree -Ring Chronology Development of Redwood National Park	USDI National Park Service, Redwood NP		1/87-4/87	\$3,000
Dendrochronological Assessment of the Severity of Western Spruce Budworm Outbreaks	USDA Forest Service, Rocky Mountain Forest And Range Experiment Station	A Lynch	4/87-12/88	\$27,000
Giant Sequoia Fire History: A Feasibility Study	USDI National Park Service, Sequoia National Park	C Baisan	7/87-6/88	\$19,711

Analysis of Growth Trends and Variations in Conifers in the Southwestern United States	Environmental Protection Agency, Western Conifers Research Cooperative, National Acid Precipitation Program	D Graybill*	7/87-2/90	\$222,327
Fire History Study of Rhyolite Canyon, Chiricahua National Monument	USDI National Park Service, Southern Arizona Group Office	C Baisan	9/87-9/88	\$9,988
Tree-Ring Dating of Peeled Ponderosa Pines from Dolores River, Colorado	Goodson and Associates, Denver Colorado		11/87-3/88	\$1,000
Dating of Fire History Specimens from Bandelier National Monument	USDI National Park Service, Bandelier NM	C Baisan	3/88-9/88	\$4,500
Tree-Ring Reconstruction of Giant Sequoia Fire Regimes	USDI National Park Service, Sequoia, Kings Canyon and Yosemite NPS	C Baisan, T Caprio, R Touchan#	7/88-12/91	\$195,260
Tree-Ring Dating of Fire Scarred White Bark Pine from Yellowstone	University of Idaho	C Baisan	4/89-6/89	\$2,000
Tree-Ring Dating of Fire Scarred Coast Redwood Specimens	USDI National Park Service, Redwood NP	P Brown#	8/89-9/89	\$4,000
Tree-Ring Dating of Fire Scarred Ponderosa Pine from Walnut Canyon National Monument, Arizona	USDI National Park Service, Southern Arizona Group Office	C Baisan	10/89-3/90	\$2,700
Reconstruction of Fire and Flood History in Rhyolite Canyon, Chiricahua National Monument, Arizona	Southwest Parks and Monuments Association	C Baisan	10/89-12/90	\$5,048
Tree-Ring Investigation to Reconstruct Western Spruce Budworm Outbreak History in the Sacramento Mountains, New Mexico	USDA Forest Service, Southwestern Region Office	A Lynch	5/90-6/92	\$9,950
Fire History for Northern New Mexico	USDI National Park Service, Bandelier NM and USDA National Forest Service, Santa Fe NF	R Touchan#, C Allen	9/90-5/91	\$38,000

Assessment of Phenological Growth Patterns in Conifer Species in Chiricahua National Monument, Arizona	Southwest Parks and Monuments Association	C Baisan	10/90-12/93	\$16,313
A tree-ring history of western spruce budworm and Douglas-fir tussock moth history in the Blue Mountains, Oregon	US Forest Service, Pacific Northwest Research Station	B Wickman, C Baisan	11/90-06/95	\$42,000
Dendroecological Research on Mt Graham	USDA Forest Service	H Grissino-Mayer#	5/91-2/92	\$4,048
Fire history and climatology in the southern and central Sierra Nevada	USDI, National Park Service, Global Change Program	C Baisan, K Morino#	6/91-5/97	\$302,887
Dendrochronology and Paleoenvironmental Research of El Malpais National Monument	USDI National Park Service, El Malpais NM	H Grissino-Mayer#	6/91-6/94	\$38,677
Organ Mountain Fire History	State of New Mexico, Natural Heritage Program, and The Nature Conservancy	K Morino#	12/91-6/94	\$39,891
Radial Growth Response of Giant Sequoia to High Intensity Fire	State of California, Department of Forestry	T Caprio, L Mutch#, C Baisan	1/92-12/93	\$13,284
Fire history of Desert-Island Mountain Ranges in the Mexican Borderlands Region	The Nature Conservancy	C Baisan	3/92-12/94	\$56,276
Long-term Dynamics of Whitebark Pine in the Sawtooth Wilderness, Idaho	USDA Forest Service, Intermountain Forest Experiment Station	D Perkins#	5/92-6/96	\$41,000
The influence of Fire-Climate Interactions on the Growth of Giant Sequoias	USDI National Park Service, Interagency Fire Center	L Mutch#	6/92-12/93	\$31,416
Sandia and Manzano Mountain Fire History	USDA Forest Service, Cibola NF	C Baisan	9/92-9/95	\$25,000
Climatic variation in the Sonoran desert from instrumental climate data and tree rings	USDI, National Biological Service and National Park Service	D Meko*, C Baisan	3/93-3/98	\$215,000
Fire History of the Calaveras Giant Sequoia Groves	State of California, State Parks Department	C Baisan	7/93-12/98	\$65,000
Dendrochronology/Paleoenvironmental research at Bandelier National Monument	USDI, National Park Service	C Allen, C Baisan	7/93-6/94	\$7,400

Paleofire and climate history in Siberia	National Science Foundation		7/93-12/94	\$15,000
Role of climate in masting, recruitment and mortality of pinyon pine	USDA Forest Service, Rocky Mountain Research Station	J Betancourt, G Gottfried	6/94-6/96	\$48,500
A millennial length reconstruction of climate for the middle Rio Grande Basin from tree rings	USDA Forest Service, Rocky Mountain Research Station	H Grissino-Mayer#, C Baisan	6/94-5/98	\$20,000
The long-term role of wildfire and spruce bark beetle outbreaks in forest dynamics at the Kenai National Wildlife Refuge, Alaska	US Fish & Wildlife Service	C Fastie#	7/94-5/97	\$69,720
Mapping past and potential fire regimes in Rocky Mountain wilderness landscapes	USDA Forest Service, Aldo Leopold Research Institute	P Morgan, M Rollins	8/94-5/98	\$76,609
Regional dendroecology research	USDA Forest Service, Rocky Mountain Research Station	C Baisan, K Morino#, R Abolt#, M Wilkinson#, S Danzer#, D Ryerson#	9/94-9/99	\$217,810
Fire regime reconstruction in the Southwestern borderlands	USDA Forest Service, Rocky Mountain Research Station	M Kaib#, C Baisan	9/94-8/97	\$78,849
Development of dendroclimatic reconstructions	Department of Defense and US Geological Survey	H Grissino-Mayer#	2/95-2/95	\$9,028
Develop tree-ring chronologies from the areas of west Texas, northern Mexico, and southern New Mexico	Department of Defense and US Geological Survey	H Grissino-Mayer#	7/95-2/96	\$46,840
Expanded fire regime studies in the Jemez Mountains, New Mexico	USDI, National Biological Service	C Allen, C Baisan, K Morino#	8/95-1/97	\$35,692
A tree-ring reconstruction of pandora moth population history in central and southern Oregon	USDA Forest Service, Pacific Northwest Research Station	J Speer#, M Hughes, G Garfin, A Youngblood, C Baisan	9/95-12/97	\$45,800
Expanded fire history in Chiricahua National Monument	USDI National Park Service, Southern Arizona Group Office	C Baisan, S Danzer#	8/96-12/98	\$29,000

Fire regime assessment for Coronado National Memorial	USDI National Park Service, Southern Arizona Group Office	C Baisan, K Morino#	8/96- 12/98	\$12,500
Climate-fire ecosystem linkages on decadal-centennial time scales in the northern Rockies	National Science Foundation, Geography and Atmospheric Dynamics Programs	K Kipfmuelle# M Rollins#, P Morgan, C Whitlock	8/97- 7/00	\$196,463
Fire effects on Huachuca mountain mixed-conifer forests and associated species of concern	The Nature Conservancy	K Morino#	7/98- 10/98	\$4,300
Climate change and the stability of sky-island conifer populations in the Sonoran desert	USDI US Geological Survey, Biological Resources Division, Global Change program	D Meko*, J Kirkby#, C Baisan	8/98- 12/99	\$19,944
Fire History Inventories-Assist Administration Planning for the Tonto National Forest, Central Arizona	Tonto National Forest, USDA Forest Service	M Kaib#	8/98-8/03	\$40,000
Crown fire histories, bog fire scar histories and drought-induced ecotone shifts	USDI US Geological Survey, National Biological Service, and Global Change Program	C Baisan, C Allen, S Anderson	4/99- 12/04	\$245,621
Sierra Nevada forest dynamics	USDI US Geological Survey, National Biological Service, Global Change Program	C Baisan	5/99- 4/04	\$165,056
Fire history and restoration research in Monument Canyon Research Natural Area	USDA Forest Service, Interagency Joint Fire Science Program	D Falk#	7/99- 3/03	\$111,332
Pinyon Juniper woodland fire history studies in southern New Mexico	Department of Defense and the University of New Mexico	C Baisan, E Muldavin	10/99- 12/03	\$25,200
Tree-Ring assessment of tent caterpillar outbreaks in aspen stands on northern New Mexico	USDA Forest Service, Rocky Mountain Research Station	C Baisan, A Lynch, I Garcia	9/00- 4/1/03	\$5,970

Climatic and Human Impacts on Fire Regimes in Forests and Grasslands of the U S Southwest: Assessing the Consequences of Interactions between Human Activities and a Changing Climate	FY 2000 Science-Achieve Results STAR Program, National Center for Environmental Research, Environmental Protection Agency	B Morehouse* J Overpeck, S Yool, B Orr, G Christopherson	11/00-10/03	\$1,260,993
The Monument Canyon Restoration Program: Reducing extreme fire risk & conducting research in an old-growth New Mexico Ponderosa pine forest	USDA Forest Service, Collaborative Forest Restoration Program	D Falk#	10/01-9/05	\$344,824
Landscape Fire History Patterns in the Sky Islands of Southeastern Arizona	Rocky Mountain Research Station, USDA Forest Service	J Iniguez#, C Baisan	3/13/02-12/31/04	\$79,421
Dissertation Research: Ecological effects of temporal and spatial variability in the disturbance regime of an old-growth Ponderosa Pine Forest	Ecological Studies Program, NSF	D Falk#	6/02-5/03	\$5,108
ESA Program Chair Assistant and Expenses	Ecological Society of America		12/02-11/03	\$59,000
Paleofire History Workshop, Flagstaff Arizona	NOAA Offices of Global Programs , US Forest Service, Pac NW Research Station , PAGES, Inter-American Institute , and Joint Fire Sciences Program	C Whitlock, S Anderson	03/23-28/02	\$55,000
A Fire-Climate Synthesis in the Western United States	Western Mountain Initiative, USGS Global Change Program	C Baisan	8/04-12/06	\$48,979
Comparing Fire scar analysis, fire atlas records and fire simulations in the Saguaro-Rincon Mountains Wilderness	Aldo Leopold Wilderness Research Institute, USDA Forest Service	C Farris#, C Baisan	09/01-12/05	\$91,961
FSML: Promoting Biological Research on the Colorado Plateau with the Merriam-Powell Research Station	National Science Foundation DBI-0224851	M Wagner*, J Collins, S Smith (all funds to NAU)	9/02-8/05	\$249,010

Extension to the International Multiproxy Paleofire Database	USDA Forest Service	C Woodhouse, P Brown	9/04-9/06	\$3,000
Variability, Social Vulnerability and Public Policy in the Southwestern US -- Phase 2, also known as the Climate Assessment for the Southwest	NOAA Office of Global Programs Grant NA16GP2578	J Overpeck*, and nine co-PIs	6/02-05/07	\$4,452,000
Response of western mountain ecosystems to climate variability and change	USDA, US Geological Survey	C Baisan	9/06-03/08	\$29,218
Multi-century reconstruction of chaparral fire history using fire-scarred bigcone Douglas-fir in three southern California National Forests	USDA/USDI Service, Interagency Joint Fire Science Program	K Lombardo#, C Baisan, M Borchert	10/06-09/09	\$130,000
Fire regimes of montane grasslands of the Valles Caldera National Preserve, New Mexico	USDA/USDI, Interagency Joint Fire Science Program	D Falk*, C Allen, B Parmenter	10/06-04/11	\$224,890
Growth and Demography of Pinaleno High Elevation Forests	USDA Forest Service, Rocky Mountain Research Station	D Falk*, A Lynch	9/07-9/12	\$128,192
Fire history and stream flow reconstruction in the Santa Fe Watershed	City of Santa Fe, NM	E Margolis#, C Allen	11/07-12/08	\$102,337
Decision Support for Defining Historical Fire Regimes: The International Multiproxy Paleofire Database	Science Foundation Arizona	C Woodhouse * P Brown	01/07-01/9	\$71,195
Catalina-Rincon-FireScape	USDA Forest Service, Coronado NF	D Falk*	08/09-01/14	\$560,000
Exploring integrated natural-cultural-interpretive questions through tree-ring analyses	USDI National Park Service, Sonoran Desert Inventory & Monitoring Network	J Balmat, C Baisan	6/08-3/11	\$10,000
Fire and Climate Change: A New Synthesis	USDA/USDI Joint Fire Sciences Program	D Falk E Sutherland P Brown T Brown	8/09-04/12	\$306,324

Integrating Historic Patterns of Wildfire, Emissions, and Climate for Siberia as a Basis for Estimating the Impacts of Fire on Carbon Cycling	National Aeronautics and Space Administration, and USDA Forest Service	S Conard* and others	06/10-6/14	\$370,000
Fingerprinting causes of increasing tree mortality in the Southwestern US	USDI, National Park Service	A Macalady#	8/09-11/10	\$24,363
An assessment of current fire condition in selected plant communities in Zion National Park	USDI, National Park Service	D Falk, P Brown	07/10-12/13	\$49,921
Assessing forest age structure and tree spatial patterns in repeatedly burned forests: Gila National Forest, NM	USDA. Forest Service	Ellis Margolis#*	09/09-09/11	\$61,000
Elucidating the response of pinyon pine in the southwestern United States to climate variability through dendroecological and carbon isotope analyses	DOE, Los Alamos National Laboratories	A Macalady#	10/10-09/12	\$95,496
Saving the World's Largest and Most Significant Dendrochronology Collection	USDI, National Park Service, National Endowment for the Humanities	P Creasman*	06/11-05/13	\$425,000
Processes and Patterns in the North American Monsoon Macrosystem	National Science Foundation, Macrosystems Biology	R Monson*, S Leavitt, C Woodhouse and others	04/11-04/16	\$3,800,000
Long-term vulnerability and resilience of coupled human-natural ecosystems to fire regime and climate changes at an ancient Wildland Urban Interface	National Science Foundation, Dynamics of Coupled Human-Natural Systems	C Roos, TJ Ferguson, S Chavarria, R Keane, M Liebmann	09/11-12/14	\$1,498,027
Establishing the Center for Mediterranean Archaeology and The Environment (CMATE) at Univ.AZ	Malcolm Hewitt Wiener Foundation and the Institute for Aegean Prehistory	P. Kuniholm, T. Wazny	01/12-01/17	\$769,143