

Curriculum Vitae

THOMAS WILLIAM SWETNAM

March 2017

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)

- Member, Board of Trustees, The Nature Conservancy, New Mexico, 2016-present
- 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
- 6th 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
- 3rd 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

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 7th 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
- 4th 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, scheduled for November 15, 2016

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)
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.
- 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
Dana Perkins	MS, Renewable Natural Resources, 1995	A dendroecological assessment of whitebark pine in the Sawtooth Salmon River region, Idaho	Ecologist, Challis Field Office, Bureau of Land Management, ID
Henri D. Grissino-Mayer	Phd, Watershed Management, 1995	Tree-ring reconstructions of climate and fire history at El Malpais National	Professor, Department of Geography, University of Tennessee

Name	Degree and Year	Thesis/Dissertation Title	Current Position
		Monument, New Mexico	
Kiyomi Morino	MS, Watershed Management, 1996	Reconstruction and interpretation of historical patterns of fire occurrence in the Organ Mountains, New Mexico	Post Doctoral 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	Assistant Professor, School of Forest Resources, 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
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 Selway-Bitterroot Wilderness area, Idaho/Montana	Wildland Fire Science Coordinator, USGS National Center, US Geological Survey, Reston, VA
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>)	Attorney, NY

Name	Degree and Year	Thesis/Dissertation Title	Current Position
		stand in the Santa Catalina Mountains, Arizona	
Kurt F. Kipfmüller	PhD, Geography, 2003	Fire-climate-vegetation interactions in subalpine forests of the Selway-Bitterroot Wilderness Area, Idaho and Montana, USA	Associate 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	Associate 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	Post Doctoral Scientist, University of Arizona
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
Erica Bigio	MS, Geosciences, 2006; PhD, Geosciences, 2013	Tree ring and alluvial records of fire history in the southern Rocky Mountains	Post Doctoral Scientist, University of Arizona
Troy Knight	PhD, Geography, 2011	Dendroclimatology and woodland demography dynamics in northeastern Utah	Assistant 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	Science policy advisor, National Academy of Sciences, Washington, DC
Joshua Farella	MS, Geography, 2011-2015	Fire and human history in the Jemez Mountains, NM	Research Assistant, UA
Christopher Guiterman	PhD, SNRE, 2010-2016	Climate and human drivers of forest vulnerability in the U.S. Southwest	Research Associate, UA

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
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	Associate Professor, School of Natural Res. & Environment, UA
Ellis Margolis	2009-15	Southwestern fire and climate studies	Post Doc, LTRR
Erica Bigio	2013-pres.	Siberian fire & climate studies	Post Doc, LTRR

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 Hessl, 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, Farmingham
- Thomas Kitzberger, PhD 1994, University of Colorado, Professor at Universidad Nacional del Comahue, Bariloche, Argentina.
- Yves Jardon, PhD 1994, Universit e Laval, Quebec, Research Scientist, Universit e Laval
- Craig Allen, PhD 1995, University of California, Berkeley, Research Scientist, U.S. Geological Survey, Jemez Mountains Field Station
- Pete Ful e, 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 Diaz Castro, PhD 1998, Universidad Nacional Aut onoma de M xico, Research Scientist, Centro de Investigaciones Biologicas del Noroeste, La Paz
- Matts Niklasson, PhD 1998, Agriculture Sciences, Ume , 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, Ume , Sweden, 1998
- Kenneth Olaf Storaunet -- Norwegian University of Life Sciences, 2006
- Elizabeth M. Campbell -- Universit e du Quebec a Montreal, 2007

PUBLICATIONS (by type and chronological order)

[Google Scholar profile](#) as of March 23, 2017:

Citations 18,569; 7,827 since 2012

h-index 57; 35 since 2012

i10-index 119; 86 since 2012

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 (FIRESCAN). 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.
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1. **Swetnam, T.W.** 1988. Forest fire primeval. *The World and I* 3:236-241.
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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.
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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 *)

Project Title	Funding Source	Co-PIs, PIs*, Students & Postdoc#	Duration	Funding Amount
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	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	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	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	US 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	US 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	US Forest Service, Aldo Leopold Research Institute	P Morgan, M Rollins	8/94-5/98	\$76,609
Regional dendroecology research	US 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	US 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	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	US 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	National Park Service, Southern Arizona Group Office	C Baisan, S Danzer#	8/96-12/98	\$29,000
Fire regime assessment for Coronado National Memorial	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	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, US Forest Service	M Kaib#	8/98-8/03	\$40,000
Crown fire histories, bog fire scar histories and drought-induced ecotone shifts	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	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	US 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, US 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, US 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	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 Forest 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 Forest Service, 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-FireScope	US Forest Service, Coronado NF	D Falk*	08/09- 01/14	\$560,000
Exploring integrated natural-cultural-interpretive questions through tree-ring analyses	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	Joint Fire Sciences Program (USDI/USDA) and U.S. Forest Service	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 U.S. Forest Service	S Conard* and others	06/10- 6/14	\$370,000
Fingerprinting causes of increasing tree mortality in the Southwestern US	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	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	U.S. 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	Los Alamos National Laboratories	A Macalady#	10/10- 09/12	\$95,496

Saving the World's Largest and Most Significant Dendrochronology Collection	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