Dr. James Wanket

Education:

2002: Ph.D. (Geography), University of California at Berkeley 1998: M.A. (Geography), University of California at Berkeley 1995: B.A. (Geography), Humboldt State University

TEACHING

Academic Positions:

California State University, Sacramento, Department of Geography Professor, August 2014 to present Chair, August 2020 to August 2022 Associate Professor, August 2009 to August 2014 Assistant Professor, August 2003 to August 2009

University of California, Berkeley, Department of Geography Visiting Summer Faculty, May 2003 to July 2014 Lecturer, January 2003 to May 2003 Graduate Student Instructor, August 1996 to December 2002

Sonoma State University, Department of Geography Lecturer, January 2001 to May 2001

Courses Taught:

At California State University, Sacramento

Geography 1 (Physical Geography)

Geography 11 (Physical Geography Laboratory)

Geography 116 (Global Climate Change)

Geography 117 (Landforms)

Geography 190 (Senior Research Seminar)

Geography 193C (Field Geography, Physical)

Geography 199 (Special Problems in Geography)

At University of California, Berkeley

Geography 1 (Global Environmental Change)

Geography 40 (Introduction to Earth System Science)

Geography 171 (The Physical Geography of California)

Geography 180 (Field Methods for Physical Geography

At Sonoma State University

Geography 365 (Biogeography and Landscape Ecology) Geography 396 (Introduction to Global Positioning System)

SCHOLARLY ACTIVITY

Current Research Interests:

- the influence of management practices on California forests in the late Holocene
- the effects of recent climate change and fire activity on forest species composition
- high-resolution late Holocene climatic records from lakes in northern California and Nevada
- the role of megafauna in shaping forest structure and composition during the Last Glacial Maximum
- the history of disjunct tree species distributions in northern California and Nevada
- the timing and character of Holocene changes in California's maritime/continental climatic boundary

Recent Research Collaborators:

- Battles Lab (Forest Ecology and Ecosystem Dynamics), University of California, Berkeley
- Quaternary Paleoecology Laboratory, University of California, Berkeley
- Museum of Paleontology, University of California, Berkeley
- Climate Change Team, US Geological Survey, Menlo Park
- Volcano Hazards Team, US Geological Survey, Menlo Park

Research Contributions (asterisk indicates undergraduate student mentee):

Knight, Clarke A., John J. Battles, M. Jane Bunting, Marie Champagne, **James A. Wanket**, and David B. Wahl. (2022). Methods for robust estimates of tree biomass from pollen accumulation rates: Quantifying paleoecological reconstruction uncertainty. *Frontiers in Ecology and Evolution* 10:956143 http://dx.doi.org/10.3389/fevo.2022.956143

Knight, Clarke A., Lysanna Anderson, M. Jane Bunting, Marie Champagne, Rosie M. Clayburn, Jeffrey N. Crawford, Anna Klimaszewski-Patterson, Eric E. Knapp, Frank K. Lake, Scott A. Mensing, David Wahl, **James Wanket**, Alex Watts-Tobin, Matthew D. Potts, and John J. Battles. (2022). Land management explains major trends in forest structure and composition over the last millennium in California's Klamath Mountains. *Proceedings of the National Academy of Sciences* 119(12) https://doi.org/10.1073/pnas.2116264119

Knight, Clarke A., Mark Baskaran, M. Jane Bunting, Marie Champagne, Matthew D. Potts, David Wahl, **James Wanket**, and John J. Battles. (2021). Linking modern pollen accumulation rates to biomass: Quantitative vegetation reconstruction in the western Klamath Mountains, NW California, USA. *The Holocene* 31(5) https://doi.org/10.1177%2F0959683620988038

Knight, Clarke A., Charles V. Cogbill, Matthew D. Potts, **James A. Wanket**, and John J. Battles. (2020). Settlement-era forest structure and composition in the Klamath Mountains: Reconstructing a historical baseline. *Ecosphere* 11(9) https://doi.org/10.1002/ecs2.3250

Variable Impact of Late-Quaternary Megafaunal Extinction in Causing Ecological State Shifts in North and South America. (2016). Barnosky, A. D., E. L. Lindsey, N. A. Villavicencio, E. Bostelmann, E. A. Hadley, **J. A. Wanket**, and C. R. Marshall). *Proceedings of the National Academy of Sciences* 113(4), pp. 856-861 https://doi.org/10.1073/pnas.1505295112

*Webb, Emily and **James Wanket**. (2016). Paleoecological evidence from the northern Sierra Nevada of severe ecosystem disruption during the Medieval Climate Anomaly. *Abstracts of the 70th Annual Conference of the California Geographical Society*

Wanket, James, David B. Wahl, and Jennifer Kusler. (2015). Preliminary pollen record from Echo Lake, Ruby Mountains, Nevada (abstract). *Quaternary International* 387:149 http://dx.doi.org/10.1016/j.quaint.2015.01.185

*Slavensky, Jane and **James Wanket**. (2015). Reconstructing Siskiyou Enriched Coniferous Forest Dynamics in the Klamath Mountains from 1000 AD to Present. *Abstracts of the 69th Annual Conference of the California Geographical Society*

*MacLean, Jillian and **James Wanket**. (2013). Reconstructing Mixed Evergreen Forest Dynamics in the Western Klamath Mountains from 1000 AD to Present. *Abstracts of the 76th Meeting of the Association of Pacific Coast Geographers*

Wanket, James, David Wahl, Lysanna Anderson, and Jennifer Kusler. (2013). A Pollen and Charcoal Record of Alpine Ecosystem Change from Echo Lake, Ruby Mountains, Nevada. *Abstracts of the Association of American Geographers* 109th Annual Meeting

*Russo, Kaydee and **James Wanket.** (2010). Reconstructing Climate and Fire Activity in the Klamath Mountains. *Abstracts of the 64th Annual Conference of the California Geographical Society*

Starratt, Scott W., David B. Wahl, Elmira. Wan, **James A. Wanket**, Thomas Lloyd-Davies, Holly Olson, and *Jennifer Kusler. (2009). Holocene Paleoenvironment of the North-central Great Basin: Preliminary Results from Favre Lake, Northern Ruby Mountains, Nevada *Geological Society of America Abstracts with Programs* 41:7 p. 510

*Kusler, Jennifer and **James Wanket**. (2009). A Paleoecological Analysis of Meadow Sediments from the Klamath Mountains of California (with Jennifer Kusler). *Abstracts of the Pacific Climate Workshop, April 19-22, 2009*

Wahl, D., S. Starratt, E. Wan, **J. Wanket**, H. Olson, T. Lloyd-Davies, and *J. Kusler. (2009). Holocene Climate Variability in the Ruby Mountains, Nevada: a Perspective from the North-Central Great Basin. *Abstracts of the Pacific Climate Workshop, April 19-22, 2009*

Starratt, S., D. Wahl, E. Wan, **J. Wanket**, H. Olson, T. Lloyd-Davies, and *J. Kusler. (2009). Holocene Climate in the Great Basin: Preliminary Results from Alpine Lakes in the Ruby

Mountains, Nevada. Abstracts of the Association of American Geographers 105th Annual Meeting

*Reynolds-Kusler, Jennifer and **James Wanket**. (2008) A Reconstruction of Late Holocene Vegetation Productivity and Composition from Meadow Sediments at Diamond Lake in the Klamath Mountains. *Abstracts of the 62nd Annual California Geographical Society Conference*

Wanket, James. (2008). *Pollen Analysis of Big Meadows Section A1*. Report submitted to El Dorado National Forest.

West, G. James, Wallace Woolfenden, Scott Anderson, and **James Wanket**. (2007) Late Pleistocene and Holocene Environments. In *California Prehistory: Colonization, Culture, and Complexity*, eds. T. A. Jones and K. A. Klar, 11-34. Lanham, MD: AltaMira.

Wanket, James. (2007). A Holocene pollen record from Medicine Lake, Southern Cascades, California. *Abstracts of the Association of American Geographers 103rd Annual Meeting*

Wanket, James. (2006) Last glacial maximum to recent forest dynamics in the western Klamath Mountains. Abstracts of the Association of American Geographers 102nd Annual Meeting

Wanket, James and *Heather Bills. (2005) Late Holocene vegetation and fire history of a mixed evergreen forest in the Klamath Mountains. *Abstracts of the 68th Meeting of the Association of Pacific Coast Geographers*

Wanket, James and *Heather Bills. (2005) Preliminary analysis of Holocene changes in mixed evergreen forest composition from Frog Pond, Siskiyou County. *Abstracts of the 59th Annual California Geographical Society Conference*

Wanket, James. (2004). Holocene Vegetation Change across a Maritime-Continental Climatic Gradient in Northern California. *Abstracts of the 67th Meeting of the Association of Pacific Coast Geographers*

Wanket, James. (2004): Stability Vs. Change in the Klamath Mountains: The Paleoecology of a "Refuge". Abstracts of the Association of American Geographers 100th Annual Meeting

Starratt, Scott W., John A. Barron, Tara Kneeshaw, R. Larry Phillips, James L. Bischoff, Jacob B. Lowenstern, and **James A. Wanket** (2003). A Holocene record from Medicine Lake, Siskiyou County, California: Preliminary diatom, geochemical, and sedimentological data. With *Interagency Ecological Program for the San Francisco Estuary Technical Report* 71: 131-148

Wanket, James. (2003). Vegetation response to millennial-scale climate variability during the Pleistocene/Holocene transition in the western Klamath Mountains, Northern California. *Abstracts of the Association of American Geographers 99th Annual Meeting*

Wanket, James Achiel. (2002). *Late Quaternary Vegetation and Climate of the Klamath Mountains*. Ph.D. Dissertation, University of California at Berkeley. 238 pp.

Wanket, James. (2002). Late Quaternary Vegetation Dynamics in the Western Klamath Mountains, California. *Abstracts of the Association of American Geographers 98th Annual Meeting*. p. 645.

Wanket, James (2001). Full glacial to recent vegetation in the Klamath Mountains: preliminary pollen record from Twin Lake, Humboldt County, California. *Abstracts of the 2001 Pacific Climate Conference*.

Wanket, James. (2000) *Traveling the Trinity Highway*. (Contributing author, multiple chapters). L. Bennion and J. Rohde, eds. Arcata: Mountain Home Press

Lienkaemper, J. J., D. P Schwartz, K. I. Kelson, W. R. Lettis, G. D. Simpson, J. R. Southon, **J. A. Wanket**, and P. L. Williams. (1999) Timing of paleoearthquakes on the northern Hayward Fault--preliminary evidence in El Cerrito, California. *United States Geological Survey Open-File Report 99-318*. 34 pp.

Wanket, James. (1999). Late Holocene vegetation change in the Berkeley Hills, California. *Abstracts of the Association of American Geographers 95th Annual Meeting*. p. 625.

Wanket, James A. (1999). Late Holocene Pollen Stratigraphy Along the Hayward Fault, El Cerrito, California. (Abstract). *Palynology 23* p. 267.

Wanket, James. (1998). Vegetation changes in the Berkeley Hills, California over the last 4,000 years. *Yearbook of the Association of Pacific Coast Geographers 61* p. 252.

Invited Research Talks:

2024: Climate change, mammoths, and fire management: Investigating the paleoecology of the Klamath Mountains. Paper presented for the Sacramento State Geology, Environmental Studies, Ecology Colloquium.

2023: Adventures in wetlands paleoecology. Paper presented for Sacramento State Environmental Studies 158 (Wetlands Ecology).

2020: Climate change and California forests: Lessons from the past. Paper presented for the Sacramento State Geology, Environmental Studies, Ecology Colloquium.

2014: Prehistoric Geography. Paper presented for the Sacramento City College Geography Awareness Week Speakers Series.

2014: Forest Migration in a Warming World. Paper presented for the 2013-2014 STEM

Lecture Series, California State University, Sacramento Center for STEM Excellence.

- 2013: Investigating California's climate during the "Medieval Warm Period" and "Little Ice Age". Paper presented for the California State University, Stanislaus Geography Symposium.
- 2013: The joys and challenges of fieldwork in Geography. Panel discussion at the 67th Annual Meeting of the California Geographical Society.
- 2012: Reconstructing prehistoric vegetation and climate in Northern California and Nevada. Paper presented for the University of California, Davis Geography in Practice Seminar Series.
- 2012: Secrets from the mud: Investigating long-term vegetation and climate change in Northern California and Nevada. Paper presented for the California State University, Stanislaus Geography Symposium.
- 2010: Chasing the secrets of Bigfoot Country: Reconstructing long-term vegetation and climate in the Klamath Mountains. Paper presented for the US Geological Survey Western Earth Surface Processes Seminar Series.
- 2009: Northern California paleoecology: Reconstructing prehistoric vegetation, fire, and climate using late Quaternary sediment records. Paper presented for the Sacramento State University Geology Colloquium.
- 2005: Unstable refuge: The history of forest diversity in the Klamath Mountains. Paper presented for the Sonoma State University Biology Colloquium.
- 2004: Relicts and Refugia: Late Quaternary Forests of the Klamath Mountains. Paper presented for the California Botanical Society Seminar Series.
- 1998: Using Non-Native Pollen to Date Recent Sediments. Paper presented at the Bay Area Paleoseismology Workshop.

Awards and Grants:

- 2024: College of Natural Sciences and Mathematics SURE Award Faculty Mentor
- 2021: College of Natural Sciences and Mathematics SURE Award Faculty Mentor
- 2020: College of Natural Sciences and Mathematics SURE Award Faculty Mentor (project canceled due to COVID-19)
- 2019: Distinguished Service Award, California Geographical Society

- 2018: Sabbatical Leave, Most Meritorious Designation
- 2017-2018: Outstanding Teaching Award, College of Natural Sciences and Mathematics
- 2015: College of Natural Sciences and Mathematics SURE Award Faculty Mentor
- 2013: College of Natural Sciences and Mathematics SURE Award Faculty Mentor (two students)
- 2012: Faculty Professional Development Award, University Enterprises, Inc.
- 2011: Sabbatical Leave, Most Meritorious Designation
- 2011: Faculty Professional Development Award, University Enterprises, Inc.
- 2009: Sacramento State University Pedagogy Enhancement Award
- 2009: College of Natural Sciences and Mathematics SURE Award Faculty Mentor
- 2009: Faculty Professional Development Award, University Enterprises, Inc.
- 2008: Summer Research Grant, CSUS College of Natural Sciences and Mathematics
- 2008: Faculty Professional Development Award, University Enterprises, Inc.
- 2002: Geography and Regional Science Doctoral Dissertation Improvement Grant, National Science Foundation
- 2001: Carl Sauer Fellowship, Department of Geography, University of California at Berkeley
- 2000: Outstanding Graduate Student Instructor Award, University of California at Berkeley
- 1997: Social Sciences Research Grant, University of California at Berkeley

UNIVERSITY SERVICE

2009-present: Department of Geography Primary Committee on Retention, Tenure, and Promotion

Chair, 2015 to 2019; 2023-present

Member, 2009-2015; 2019-2020; 2022

Ex-officio member as Department Chair, 2020-2022

2023-present: Member, College of Natural Sciences and Mathematics Awards Committee.

2023-present: Member, Department of Geography Outreach and Advancement Committee

2015-present: Member, Geography Department Research Review Committee

2023: Chair, Department of Geology Primary Committee on Retention, Tenure, and Promotion.

2023: Chair, Department of Environmental Studies Post-Tenure Review Committee

2023: Member, Department of Geography Curriculum and Assessment Committee

2022-2023: Chair, College of Natural Sciences and Mathematics Diversity, Equity, and Inclusion Committee

2022-2023: Geography Department representative, College of Natural Sciences and Mathematics Academic Council

2022-2023: Member, Geography Department Faculty Search Committee

2020-2022: Geography Department Chair

2006-2012; 2017; 2019-2022: Geography Department Representative, Faculty Senate

2021-2022: *Ex-officio* member as Department Chair, Geography Department Faculty Search Committee

2020-2021: Ex-officio member as Department Chair, Geography Department Faculty Search Committee

2020-2021: Member, University Research Misconduct Investigation Committee

2020: Member, College of Natural Sciences and Mathematics Dean Search Committee

2019-2020: Chair, Geography Department Faculty Search Committee

2017-2020: Member, University Appointment, Retention, Tenure, and Promotion Policy Committee

2016-2019: Member, Faculty Endowment for Student Scholarships Committee

2017: Member, Department of Environmental Studies Primary Committee on Retention, Tenure, and Promotion

2017: Member, College of Natural Sciences and Mathematics Associate Dean Search Committee

2016-2017: Member, Geography Department Faculty Search Committee

2012-2015: Member, Faculty Senate Subcommittee on Reading and Writing

2012-2015: Panel Chair, University Grade Appeals

2014: Member, Sacramento State Graduation Initiative Learning that Counts Team

2013-2014: Member, President's Committee to Revise the University Grade Appeal Policy

2012: Member, Faculty Learning Community on Program Assessment, General Education Category B

2011: Member, College of Arts and Letters Dean Search Advisory Committee

2010-2011: Chair, Faculty Senate Select Committee on Standing Committee Organization

2009-2010: Chair, Faculty Senate Select Committee on the Senate Budget

2009-2010: At-Large Member, Faculty Senate Executive Committee

2009: Chair, Department of Environmental Studies Primary Committee on Retention, Tenure, and Promotion

2007-2008: Member, Geography Department Faculty Search Committee

2007-2008: Member, College of Natural Sciences and Mathematics Committee on Undergraduate Research

2006-2007: Member, College of Natural Sciences and Mathematics Science and Space Center Planning Committee

2006: Member, Geography Department Faculty Search Committee

COMMUNITY SERVICE

Professional Service

- Community Collaborative Rain, Hail, and Snow Network
 - o 2008-present: Observer, Station CA-SA-12
- Academic Reviews

o 2008-2018: *The California Geographer* (Editorial Board Member)

o 2018: Urban Planning

o 2016: Palynology

- o 2016: From Saline to Fresh Water: The Diversity of Western Lakes in Space and Time (Geological Society of America Books)
- o 2013-2015: *Writing the University* (California State University, Sacramento student journal)
- o 2013: The Holocene
- o 2011: African Ethnobotany in the Americas
- o 2010: *Applied Geography*
- Outside Reviews for Other Universities
 - o 2018: Promotion Review, University of California at Berkeley
 - o 2017: Program Review, Humboldt State University
- California Geographical Society
 - o 2015-2017: Past President
 - o 2013-2015: President
 - o 2011-2013: Vice President
 - o 2008-2011: Member, Board of Directors
- Pacific Climate Workshop
 - o 2017: Session Moderator
 - o 2000-present: Workshop Participant
- Education Outreach
 - 2011: Sierra Nevada Teacher Institutes and Workshops, "Climate Change and Field Investigation" curriculum consultant
 - o 2010: Compass Invitational Summer Institute participant
 - o 2010: Grass Valley Charter School, sixth grade science research and career presenter

Professional Organization Memberships:

- California Geographical Society
- American Association of Geographers
- Association of Pacific Coast Geographers
- California Botanical Society
- Geological Society of America

Community Service-Directed Publications:

• 2014: President's Column. CGS Bulletin 68:3

- 2014: A Northern Californian's Secret Love Affair with Los Angeles. CGS Bulletin 68:1
- 2013: President's Column. CGS Bulletin 67:2