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EDUCATION

B.S.	1975	University of California, Davis	Environmental Science, Highest Honors
M.S.	1978	University of California, Davis	Ecology
Ph.D.	1986	University of California, Davis	Ecology

AREAS OF INTEREST

Conservation Practice and Climate Change – Planning for climate change in conservation
Ecological Dynamics – Biotic responses to climate variability and climate change
Vegetation Geography – Distribution of vegetation at regional and global scales
Climate Dynamics – Climate system processes controlling regional climate variability

PROFESSIONAL EXPERIENCE

Current Positions

2002-present *Research Affiliate*, Inst of Arctic and Alpine Research (INSTAAR), Univ of Colorado at Boulder.
2007-present *Affiliate Scientist*, Natural Resource Ecology Laboratory (NREL), Colorado State Univ, Ft. Collins.
2000-present *Instructor and Adjunct Faculty*, Center for Environmental Research and Conservation, Columbia University, New York.

Prior Experience

1976 *Lecturer*, Sierra Nevada College, Incline Village, NV.
1984 *Lecturer*, Dept of Land, Air, and Water Resources, University of California, Davis.
1985-1986/ *Postdoctoral Fellow / Research Associate*, Cooperative Inst for Research in the Atmosphere (CIRA),
1987-1990 Colorado State University, Ft. Collins.
1987-1997/ *Research Associate / Research Scientist I*, Natural Resource Ecology Laboratory, Colorado State
1997-2002 University
1991-1996 *Deputy Project Scientist*, Climate System Modeling Program, University Corporation for
Atmospheric Research (UCAR), Boulder, CO.
1997-2002 *Scientist II / Deputy Section Head / Acting Section Head*, Ecosystem Dynamics and the Atmosphere
Section, Climate and Global Dynamics Div., National Center for Atmospheric Research, Boulder
2002-2007 *Research Scientist III*, Natural Resource Ecology Laboratory, Colorado State Univ.
2005-2009 *Lecturer*, Dept of Ecology & Evolutionary Biology / Dept of Geography, Univ of Colorado, Boulder.
2006 *Lecturer*, Semester at Sea, Institute for Shipboard Education, Pittsburgh, PA. Fall 2006.
2004-2005, *Research Associate*, Inst of Arctic and Alpine Research (INSTAAR), University of Colorado at
2007-2008 Boulder

SPONSORED RESEARCH (18) —

Including – NASA EOS, NOAA, USGS Global Change Research Program, USFS, EPRI, DOE, National Park Service Inventory & Monitoring Program

INTERNATIONAL AND NATIONAL PROFESSIONAL SERVICE —

Agency Program Review and Proposal Review Panels (n=8) –

Including – NASA-EOS, DOE-NIGEC, DOI-National Park Service, British Columbia Ministries of Environment and of Forests and Range, Canada.

Committees and Science Teams (21) –

Current –

Rocky Mountain Climate Working Group, Greater Yellowstone Network and Rocky Mountain Network, US National Park Service Inventory and Monitoring Program. 2009-present.

British Columbia Central Interior Ecoregional Assessment, Nature Conservancy of Canada, Victoria, BC. Team Lead, Climate Change Working Group; Member, Core Team. 2007-present.

Professional Workshops and Meetings Organized/Chaired (17) –

Recent –

Greater Yellowstone & Rocky Mountain Networks Climate Data Analysis Workshop, Bozeman, MT. April 2009. National Park Service Inventory and Monitoring Program. (Organizer, with Stacey Ostermann-Kelm)

Invited Professional Talks and Seminars (58)

Recent –

British Columbia Conservation Data Center (BCCDC), BC Ministry of the Environment. “The Climate Threat and Conservation Planning.” Victoria, BC, Canada. Oct 2007. Invited seminar.

College of Environmental Conservation and Sustainability (ESCAS), Instituto de Pesquisas Ecológicas, Nazaré Paulista, São Paulo, Brazil. “The Climate Threat and Conservation.” Aug 2009. Guest lecture.

PUBLICATIONS (refereed articles 46 and chapters 26; total = 159)

Selected –

- Baker, B.B., T.G.F. Kittel, J.V. Higgins, and J.C. Haney. 2009. Climate vulnerability of ecosystems and landscapes on Alaska’s North Slope. Chapter in: *Climate Hotspots: Key Vulnerable Regions, Climate Change and Limits to Warming*. W.L. Hare, A. Battaglini, W. Cramer, M. Schaeffer, and C. Jaeger (eds.). Springer. Accepted.
- Fuentes, M., T.G.F. Kittel, and D. Nychka. 2006. Sensitivity of ecological models to spatial-temporal estimation of their climate drivers: Statistical ensembles for forcing. *Ecological Applications* 16:99–116.
- Kittel, T.G.F., et al. 2004. The VEMAP Phase 2 bioclimatic database. I: A gridded historical (20th century) climate dataset for modeling ecosystem dynamics across the conterminous United States. *Climate Research* 27:151-170.
- Kittel, T.G.F., P.E. Thornton, J.A. Royle, and T.N. Chase. 2002. Climates of the Rocky Mountains: Historical and Future Patterns. Chapter in: J. Baron (ed.). *Rocky Mountain Futures: An Ecological Perspective*. Island Press.
- Greenland, D., and T.G.F. Kittel. 2002. Temporal variability of climate at the US Long-Term Ecological Research (LTER) sites. *Climate Research* 19:213–231.
- Kittel, T.G.F., W.L. Steffen, and F.S. Chapin, III. 2000. Global and regional modeling of arctic-boreal vegetation distribution and its sensitivity to altered forcing. *Global Change Biology* 6 (Suppl. 1):1-18.
- Melillo, J., A. Janetos, D. Schimel, and T. Kittel. 2000. Vegetation and biogeochemical scenarios. Chapter 2 (pp. 73-91), in: *Climate Change Impacts for the United States: The Potential Consequences of Climate Variability and Change. Foundation Document*. National Assessment Synthesis Team (eds.). US Global Change Research Program, Washington, DC. Cambridge University Press, Cambridge, UK.
- Schimel, D., J. Melillo, H. Tian, A.D. McGuire, D. Kicklighter, T. Kittel, N. Rosenbloom, S. Running, P. Thornton, D. Ojima, W. Parton, R. Kelly, M. Sykes, R. Neilson, and B. Rizzo. 2000. Contribution of increasing CO₂ and climate to carbon storage by ecosystems of the United States. *Science* 287:2004-2006.
- Yates, D.N., T.G.F. Kittel, and R.F. Cannon. 2000. Comparing the correlative Holdridge model to mechanistic biogeographical models for assessing vegetation distribution response to climatic change. *Clim. Change* 44:59-87.
- Kittel, T.G.F. 1998. Effects of climatic variability on herbaceous phenology and observed species richness in temperate montane habitats, Lake Tahoe Basin, Nevada. *Madroño* 45:75-84.
- Kittel, T.G.F., F. Giorgi, and G.A. Meehl. 1998. Intercomparison of regional biases and doubled CO₂-sensitivity of coupled atmosphere-ocean general circulation model experiments. *Climate Dynamics* 14:1-15.
- Kittel, T., G. Meehl, and D.S. Schimel (eds.). 1995. Results from the Model Evaluation Consortium for Climate Assessment (MECCA). *Global and Planetary Change* (Special Issue), vol. 10 (nos. 1-4).
- Campbell, G.G., T.G.F. Kittel, G.A. Meehl, and W.M. Washington. 1995. Low-frequency variability and CO₂ transient climate change. Part 2: EOF analysis of CO₂ and model-configuration sensitivity. *Global and Planetary Change* 10:201-216.
- VEMAP Members. 1995. Vegetation/Ecosystem Modeling and Analysis Project (VEMAP): Comparing biogeography and biogeochemistry models in a continental-scale study of terrestrial ecosystem responses to climate change and CO₂ doubling. *Global Biogeochemical Cycles* 9:407-437.