

Chris B. Zou

Assistant Professor and Ecohydrologist

Oklahoma State University, 008C AGH, Stillwater, OK 74078-6013

Phone: 405-744-9637; E-mail: chris.zou@okstate.edu

A. PPROFESSIONAL PREPARATION

Southwest University, Chongqing	Biology	B.S., 1985
Southwest University, Chongqing	Plant Ecology	M.S., 1988
University of Canterbury, Christchurch	Forestry	Ph.D., 2000

B. APPOINTMENTS

2008 – Present	Assistant Professor, Oklahoma State University, Stillwater, OK
2005 – 2008	Senior Research Specialist, University of Arizona, Tucson, AZ
2000 – 2004	Post-doctoral Research Associate, Texas A&M University, College Station, TX
1988 – 1995	Research Associate, Sichuan Forest Research Institute, Chengdu

C. PUBLICATIONS (34 peer-reviewed articles)

i. Five Most Relevant Publications

- [1] Wine ML*, Zou CB, Bradford JA, Gunter SA. 2012. Runoff and sediment responses to grazing native and introduced species on highly erodible Southern Great Plains soil. *Journal of Hydrology* 450-451: 336 – 341.
- [2] Wang LX, **Zou CB**, O'Donnell F, Goods FT, Franz TE, Milller GR, Caylor KK, Cable JM, Bond B. 2012. Characterizing ecohydrological and biogeochemical connectivity across multiple scales: a new conceptual framework. *Ecohydrology* 5:221-233.
- [3] **Zou CB**, Ffolliott PF, Wine M. 2010. Streamflow responses to vegetation manipulations along a gradient of precipitation in the Colorado River Basin. *Forest Ecology and Management* 259:1268-1276.
- [4] **Zou CB**, Breshears DD, Newman BD, Wilcox BP, Gard MO. 2008. Water dynamics under low- versus high- ponderosa pine tree density: ecohydrological functioning and restoration implications. *Ecohydrology* 1:309-315.
- [5] **Zou CB**, Barnes PW, Archer S, McMurtry C. 2005. Soil moisture redistribution as a mechanism of facilitation in savanna tree-shrub clusters. *Oecologia* 145:32-40.

ii. Five Other Significant Publications

- [1] Field JP, Breshears DD, Whicker JJ, **Zou CB**. 2011. Interactive effects of grazing and burning on wind- and water-driven sediment fluxes: rangeland management implications. *Ecological Applications* 21:189-199.
- [2] Adams HD, Guardiola-Claramonte M, Barron-Gafford GA, Villegas JC, Breshears DD, **Zou CB**, Troch PA, and Huxman TE. 2009. Temperature sensitivity of drought-induced tree mortality portends increased regional die-off under global-change-type drought. *Proceedings of the National Academy of Sciences of the USA* 106:7063-7066.

- [3] Breshears DD, Myers OB, Meyer CW, Barnes FJ, **Zou CB**, Allen CD, McDowell NG, Pockman WT. 2009. Tree die-off in response to global-change-type drought: mortality insights from a decade of plant water potential measurements. *Frontiers in Ecology and the Environment* 7:185-189.
- [4] Miao SL, **Zou CB**, Breshears DD. 2009. Vegetation responses to extreme hydrological events: sequence matters. *American Naturalist* 173:113-118.
- [5] Breshears DD, Huxman TE, Adams HD, **Zou CB**, Davison JE. 2008. Vegetation synchronously leans upslope as climate warms. Commentary. *Proceedings of the National Academy of Sciences of the USA* 105:11591-11592.

D. SYNERGISTIC ACTIVITIES

- Organizer for ESA special session “Bridging Ecohydrological Research from Arid Lands to Humid Environments” for the 93rd ESA Annual Meeting (Milwaukee, WI) in 2008 and co-organizer for ESA special session “Addressing Global Warming Challenges in Drylands: Integrating Ecophysiological Mechanisms with Ecohydrological Feedbacks” for the 95th ESA Annual Meeting (Pittsburgh, PA) in 2010.
- Coordinators for two USDA National Need Fellowship programs which supported 9 graduate GRAs (5 MS and 4 PhD students) in multiple disciplinary academic units (Hydrology, Natural Resource and EEB) to study the land cover and land use change and climate variability on hydrological processes during 2005-2008.
- Ad Hoc proposal reviewer for National Science Foundation, U.S. Department of Defense SERDP program (2009), USGS/NIWR and manuscript reviewer for over 15 international journals

E. COLLABORATORS AND OTHER AFFILIATIONS

i. Collaborator and Co-Editors.

Bradford Wilcox (Texas A&M)	Kim Winton (USGS)
Brent Newman (DOE, Los Alamos)	Maite Guardiola-Claramonte (Uni. of Arizona)
Clifton Meyer (DOE, Los Alamos)	Margaret Torn (DOE, Lawrence Berkeley)
Craig Allen (USGS)	Nathan McDowell (DOE, Los Alamos)
Darin Law (Uni. of Arizona)	Orrin Myers (Uni. of New Mexico)
Dave Engle (Oklahoma State)	Patrick Royer (Uni. of Arizona)
David Breshears (Uni. of Arizona)	Peter Ffolliott (Uni. of Arizona)
Don Turton (Oklahoma State)	Peter Troch (Uni. of Arizona)
Greg Barron-Gafford (Uni. of Arizona)	Rod Will (Oklahoma State),
Jason Field (Uni. of Arizona)	Sam Fuhlendorf (Oklahoma State)
Jeff Whicker (DOE, Los Alamos)	Shili Miao (South Florida Water Management District)
Jennifer Davison (Uni. of Arizona)	Travis Huxman (Uni. of Arizona)
Jim Bradford (USDA, SPPRS)	William Pockman (Uni. of New Mexico)
Juan Villegas (Universidad de Antioquia Medellin, Colombia)	

ii. Advisors and Postdoctoral Sponsors

Steve Archer (Uni. Arizona, Postdoctoral sponsor), Roger Sands (Uni. Canterbury, PhD advisor, retired), Zhangcheng Zhong (Southwest University, MS advisor, retired)

iii. Thesis advisor and Postgraduate-Scholar Sponsor

Michael Wine (MS), Amanda West (MS), Jenny Hung (MS), Joseph Dale (MS), Bharat Acharya (PhD), Shujun Chen (Visiting scholar), Peili Shi (Visiting Scholar)