

## Biographical Sketch

**Chris Zou, Ph.D.**

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Department of Natural Resource Ecology and Management  
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### (a) Professional Preparation

Southwest University	Chongqing, China	Biology	B.S., 1985
Southwest University	Chongqing, China	Plant Ecology	M.S., 1988
University of Canterbury	Christchurch, NZ	Forest Science	Ph.D., 2000
Texas A&M University	College Station, TX	Ecohydrology	Postdoc., 2004

### (b) Appointments

Professor	Oklahoma State University, Stillwater, OK	2019 – present
Associate Professor	Oklahoma State University, Stillwater, OK	2014 – 2019
Assistant Professor	Oklahoma State University, Stillwater, OK	2008 – 2014
Senior Research Specialist	University of Arizona, Tucson, AZ	2005 – 2008
Research Associate	Sichuan Forest Research Institute, Chengdu	1988 – 1995

### (c) Products

#### *Most closely related products*

- [1] Zou, C., Twidwell, D., Bielski, C., Fogarty, D., Mittelstet, A., Starks, P., Will, R., Zhong, Y. and Acharya, B., 2018. Impact of eastern redcedar proliferation on water resources in the Great Plains USA—current state of knowledge. *Water*, 10(12), p.1768.
- [2] Wilcox, B.P., Birt, A., Archer, S.R., Fuhlendorf, S.D., Kreuter, U.P., Sorice, M.G., van Leeuwen, W.J. and Zou, C.B., 2018. Viewing woody-plant encroachment through a social–ecological lens. *BioScience*, 68(9), pp.691-705.
- [3] Zou, C.B., Turton, D.J., Will, R.E., Engle, D.M. and Fuhlendorf, S.D., 2014. Alteration of hydrological processes and streamflow with juniper (*Juniperus virginiana*) encroachment in a mesic grassland catchment. *Hydrological Processes*, 28(26), pp.6173-6182.
- [4] Nunes Biral, V.C., Will, R.E. and Zou, C.B., 2019. Establishment of *Quercus marilandica* Muenchh. and *Juniperus virginiana* L. in the tallgrass prairie of Oklahoma, USA increases litter inputs and soil organic carbon. *Forests*, 10(4), p.329.
- [5] Qiao, L., Zou, C.B., Stebler, E. and Will, R.E., 2017. Woody plant encroachment reduces annual runoff and shifts runoff mechanisms in the tallgrass prairie, USA. *Water Resources Research*, 53(6), pp.4838-4849.

#### *Other significant products*

- [1] Adams, H.D., Guardiola-Claramonte, M., Barron-Gafford, G.A., Villegas, J.C., Breshears, D.D., Zou, C.B., Troch, P.A. and Huxman, T.E., 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*, 106(17), pp.7063-7066.
- [2] Zou, C.B., Barnes, P.W., Archer, S. and McMurtry, C.R., 2005. Soil moisture redistribution as a mechanism of facilitation in savanna tree–shrub clusters. *Oecologia*, 145(1), pp.32-40.

- [3] Breshears, D.D., Myers, O.B., Meyer, C.W., Barnes, F.J., Zou, C.B., Allen, C.D., McDowell, N.G. and Pockman, W.T., 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(4), pp.185-189.
- [4] Sun, X., Zou, C.B., Wilcox, B. and Stebler, E., 2019. Effect of vegetation on the energy balance and evapotranspiration in tallgrass prairie: A paired study using the eddy-covariance method. *Boundary-Layer Meteorology*, 170(1), pp.127-160.
- [5] Breshears, D.D., Huxman, T.E., Adams, H.D., Zou, C.B. and Davison, J.E., 2008. Vegetation synchronously leans upslope as climate warms. *Proceedings of the National Academy of Sciences*, 105(33), pp.11591-11592.

**(d) Synergistic Activities**

- [1] Broadening the participation of groups underrepresented in science by participating the summer research experience for high school teacher through NSF EPSCoR Project - Adapting socio-ecological systems to increased climate variability.
- [2] Participated and contributed to the Rangelands Partnership by 19 western land-grant universities to build Global Rangelands portals and database to provide public and private land managers, researchers, educators, and the public in the U.S. and worldwide with the information and tools they need for sustainable management of rangelands, informed decision-making, professional enhancement, and educational activities.
- [3] Built and maintained an extension and outreach program around core research to demonstrate land use and invasive species impact on water resources to a broad audience from high school students to land management professionals.
- [4] Organizer for ESA special session “*Bridging Ecohydrological Research from Arid Lands to Humid Environments*” for the 93rd ESA Annual Meeting 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.