

BRADFORD P. WILCOX

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EMPLOYMENT HISTORY

- 2020–present *Sid Kyle Endowed Professor of Semiarid Ecohydrology*, Department of Ecology and Conservation Biology, Texas A&M University, College Station, TX.
- 2000–2020 *Associate Professor, Professor, Sid Kyle Professor of Semiarid Ecohydrology*, Department of Ecosystem Science and Management, Texas A&M University, College Station, TX.
- 1996–2000 *Chief Scientific Officer*, Inter-American Institute for Global Change Research, Sao Jose dos Campos, Brazil.
- 1991–1996 *Research Hydrologist*, Los Alamos National Laboratory, Los Alamos, NM.
- 1988–1991 *Research Hydrologist*, USDA-ARS Northwest Watershed Research Center, Boise, ID.
- 1985–1988 *Visiting Assistant Professor*, Watershed Science, Department of Earth Resources, Colorado State University, Fort Collins, CO.

EDUCATION

- 1986 — Ph.D. (Rangeland Hydrology), Department of Animal and Range Science, New Mexico State University, Las Cruces, NM.
- 1982 — M. S. (Rangeland Ecology), Department of Range and Wildlife, Texas Tech University, Lubbock, TX.
- 1978 — B. S. (Rangeland Management), Department of Range and Wildlife, Texas Tech University, Lubbock, TX.

HONORS

2021: Vice Chancellor's Award in Excellence, Texas A&M University; **2021:** Fellow, Ecological Society of America; **2020:** Distinguished Lecture at the Global Institute for Water Security, University of Saskatchewan; **2018:** Outstanding Achievement in Research, Society for Range Management; **2017:** Sid Kyle Endowed Professorship of Semiarid Ecohydrology, Texas A&M University; **2015:** College of Agriculture and Life Sciences Dean's Outstanding Achievement Award; **2013:** Fulbright Scholar, Ecuador; **2012–2015:** Science without Borders Scholar, Brazil; **2011:** Outstanding Contribution to Range Management, Texas Section of the Society for Range Management; **2011:** Ming-ko Woo Lecturer for the Canadian Geophysical Union; **2004:** Outstanding Undergraduate Teaching Award, Department of Rangeland Ecology and Management, Texas A&M University; **2018, 2010, 2008, 2005, 2004, 2002:** Outstanding Technical Publication, Texas Section of the Society for Range Management.

RESEARCH SUMMARY

Dr. Wilcox's research career, spanning more than 40 years, has been *at the interface of ecology and hydrology of drylands* with a particular focus on woodlands and savannas. His sustained and innovative body of work has made lasting and important contributions to the emerging discipline of ecohydrology. His research in New Mexico, Idaho, and Texas has led to groundbreaking insights into how vegetation affects the pathways, dynamics, and timing of runoff and recharge at multiple scales. In particular, his work has radically revised our understanding of how woody plant encroachment alters the water cycle on rangelands. In recent years, his work has included investigations into ecohydrological processes in Caatinga shrublands in northeastern Brazil, tropical grasslands in the Andes, and subtropical woodlands in south Texas and Mexico. He has also led a number of interdisciplinary teams examining complex environmental problems from a coupled human and

natural systems perspective. He has authored more than 140 publications, with 116 appearing in peer-reviewed scientific journals. Dr. Wilcox has 5186 citations (Web of Science, 2/23/2022) and an h-index of 36.

AGU CORE VALUES

Dr. Wilcox has demonstrated leadership in AGU core values throughout his career.

- *Thought leader in ecohydrology*: As the lead convener of three highly influential AGU Chapman Conferences and co-author of many peer-reviewed synthesis papers, he has strongly shaped the emerging field of ecohydrology.
- *Public engagement leader*: Dr. Wilcox has presented scores of invited presentations in layperson venues, including the Texas Legislature, related to water and woody plant encroachment. These efforts have led to major changes in public policy with respect to State-funded brush control—representing a potential savings of millions of dollars otherwise spent on ineffective programs designed to augment municipal water supplies.
- *Mentor for the next generation*: Dr. Wilcox has mentored dozens of graduate students, post-doctoral scientists, and visiting early-career professionals. Under his leadership, the AGU Chapman Conferences have positively influenced hundreds of early-career scientists (including providing over \$50,000 in travel support).
- *Leader in transdisciplinary science*. In the past decade, Dr. Wilcox has led a number of interdisciplinary teams addressing complex environmental problems with a total grant support of over \$25 M. He is currently leading a \$10 M USDA-funded project aimed at mitigating environmental challenges faced by farmers and ranchers across the Great Plains (<https://www.theprairieproject.org>).

MEMBERSHIPS

American Association for the Advancement of Science, American Geophysical Union, Ecological Society of America, Society for Range Management.

SERVICE

American Geophysical Union

- **Lead Organizer** for Chapman Conferences on Ecohydrology: **2016** – *Emerging Issues in Tropical Ecohydrology*. Cuenca, Ecuador; **2009** – *Examining Ecohydrological Feedbacks of Landscape Change Along Elevation Gradients in Semiarid Regions*. Boise, ID; **2002** – *Ecohydrology of Semiarid Landscapes*. Taos, NM.
- **Convener/Co-convener** of sessions at AGU annual meetings – 1999, 2000, 2001, 2003, 2006, 2008, 2012, 2014, and 2017; **Associate Editor**, *Water Resources Research* 2011–present; **Special Issue Guest Editor**, *Geophysical Research Letters*, 2007; **Member**, AGU Ecohydrology Committee (2009–2015), AGU Surface Water Committee (1998–2009), and AGU Water and Policy Committee (1998–2009); **Chair** (2018, 2019) and member (2017) of Nominating Committee for Outstanding Early Career Hydrologist.

Other Service

- **Associate Editor**: *Ecological Applications* (2010–present), *Ecohydrology* (2011–present), *Rangeland Ecology and Management* (2015–2019); **Special Issue Editor**: *Ecohydrology* (2012, 2018), *Water* (2018), *Hydrological Processes* (2006), and *Ecology* (2005); **Editorial Board**: *Water* (2018–present), *Catena* (2008–2014).
- **Panel Service and Advisory Boards**: NSF (2021, 2018), University of Nevada, Reno (2018), Army Corps of Engineers (2014, 2013, 2012, 2011, 2010, 2009), EPA (2012), USDA (2011, 2006), Edwards Aquifer Authority (2006–2016), European Union (2004), Paramo Project (2007).
- **University Service**: Chair and member of numerous committees at College and Department levels