

BIOGRAPHICAL SKETCH

GAIL W. T. WILSON

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A. Professional Preparation

Kansas State University, Manhattan, KS, Agronomy, Ph.D. 2003.
Slippery Rock State University, Slippery Rock, PA, Biology, M.S. 1983.
Mercyhurst University, Erie, PA, Biology / Geology minor, B.S. 1979.

B. Appointments

2020 – Present	Regents Professor, Oklahoma State University,
2018 – Present	Adjunct Professor, China Agricultural University
2014 – Present	Sarkeys Distinguished Professor, Oklahoma State University
2014 – Present	Riata Faculty Fellow, Oklahoma State University
2012 – Present	Professor and Graduate Program Coordinator, Oklahoma State University
2007 – 2012	Associate Professor, Oklahoma State University
2003 – 2007	Research Assistant Professor, Kansas State University
2001 – 2007	Director, NSF Research Experience for Undergraduates Program: Konza Prairie
1998 – 2001	Research Coordinator, Konza Prairie Biological Station
1994 – 2003	Research Associate, Division of Biology, Kansas State University

C. Products

Five Related Publications (of 104 total peer-reviewed publications): (*Indicates graduate student; #indicates postdoctoral fellow)

1. Li J.*, T. Shiming, S. Xie, G.W.T. Wilson, A.B. Cobb#, L. Guo, B. Deng, and K. Wang. 2020. Plant-soil feedbacks facilitate grassland species coexistence at the community level. *Oikos*. 129: 533-543.
2. Revillini, D.*, G.W.T. Wilson, R.M. Miller, R. Lancione, and N.C. Johnson. 2019. Plant diversity and fertilizer management shape the belowground microbiome of native grass bioenergy feedstocks. *Frontiers Plant Science*. 10:1-18.
3. Duell, E.B.*, K. Zaiger*, J.D. Bever, and G.W.T. Wilson. 2019. Climate affects plant-soil feedbacks of native and invasive grasses: Negative feedbacks in stable but not variable environments. *Frontiers in Ecology and Evolution*. 7. doi:10.3389/fevo.2019.00419.
4. Zhou, J.*, G.W.T. Wilson, A.B. Cobb#, G. Yang, and Y. Zhang. 2019. Alfalfa seeding, phosphorus amendments, and mowing facilitate restoration of diverse and highly productive grasslands. *Landscape Degradation and Development*. 30: 647-657.
5. Wilson, G.W.T., C.W. Rice, M.C. Rillig, A. Springer**, and D.C. Hartnett. 2009. Soil aggregation and carbon sequestration are tightly correlated with the abundance of arbuscular mycorrhizal fungi: results from long-term field experiments. *Ecology Letters* 12: 452-461.

Five Additional Publications

1. Hoeksema, J.D., J.D. Bever, S. Chakraborty, V.B. Chaudhary, M. Gardes, C.A. Gehring, M. M. Hart, E. A. Housworth, W. Kaonongbua, J.N. Klironomos, M.J. Lajeunesse, J. Meadow, B.G. Milligan, B. Piculell, A. Pringle, M.A. Rúa, J. Umbanhowar, W. Viechtbauer, Y-W. Wang, G.W.T. Wilson, P.C. Zee. 2018. Evolutionary history, not environmental context, best predicts strength of mycorrhizal mutualism. *Nature: Communications Biology* (2018) 1:116 | DOI: 10.1038/s42003-018-0120-9.
2. Cobb, A.B.*, G.W.T. Wilson, C.L. Goad, S.R. Bean, R.C. Kaufman**, T.J. Herald, and J.D. Wilson. 2016. The role of arbuscular mycorrhizal fungi in grain production and nutrition of sorghum genotypes: Enhancing sustainability through plant-microbial partnership. *Agriculture, Ecosystems, and Environment*. 233: 432-440.
3. Stevens, B.M.*, J. Propster, G.W.T. Wilson, A. Abraham, C. Ridenour, C. Doughty, and N.C. Johnson. 2018. Mycorrhizal symbiosis influence the trophic structure of the Serengeti. *Journal of Ecology*. 106: 536-546.
4. Hartnett, D.C. and G.W.T. Wilson. 1999. Mycorrhizal mediation of plant species composition and diversity in tallgrass prairie. *Ecology*. 80: 122-130.
5. Wilson, G.W.T. and D.C. Hartnett. 1998. Interspecific variation in plant responses to mycorrhizal colonization in prairie grasses and forbs. *American Journal of Botany*. 85:1732-1738.

D. Synergistic Activities

- Student research mentoring includes: Actively involved in OSU OK-LSAMP and Undergraduate Research Scholar Programs, targeting research opportunities for Native American undergraduate students; OSU-Sao Paulo International Exchange Program sponsoring undergraduate research; Instructor and Teacher Mentor and Session Coordinator for NSF Girls Researching Our World (GROW). Throughout the past ten years, my research program has employed and trained 38 female and 23 minority undergraduate students conducting independent research. All of these students are currently employed as scientists in academia, or private, tribal, or government positions, are self-employed, or are pursuing graduate or undergraduate degrees.
- Lead-PI and program director for the NSF-REU grassland ecology program conducted at Konza Prairie Biological Station (2000-2008). Primary mentor for 24 REU students. All of these students are currently employed as scientists in academia, or private, tribal, or government positions, or are pursuing graduate or undergraduate degrees.
- Teaching includes: Undergraduate courses in Restoration Ecology; Grassland Ecology, Graduate courses in Biogeochemistry; Ecology and Evolution of Symbioses; Entangled Genomics; Restoration Ecology, Nutrient Dynamics; Ecological Analysis and Synthesis; Graduate Seminar
- Panelist: NSF IOS: Physiological and Structural Systems (2011) and pre-proposal panel (2013); NSF DEB: Evolutionary and Population Ecology (2008); Doctoral Dissertation Improvement (2006, 2007); USDA NIFA Fellowship Program panel (2015); Australian Research Council Ecology panel (2012); Romanian Joint Research Programme (2014); Research Experience for Undergraduates PI advisory panel; NSF NEON Science and Education Coordinating Committee
- Editorial Board: Journal of Vegetation Science (2013-2018); Journal of Ecology (2016-Present)