

Kevin G. Willson

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University of New Mexico
Albuquerque, NM 87106

Research Interests

Forest, fire, disturbance, restoration, ecosystem, plant, and soil ecology; conservation biology; silviculture; statistics; GIS and remote sensing; field, modeling, and applied research.

Education

University of New Mexico Albuquerque, NM	Biology Advisor: Dr. Matthew Hurteau	Ph.D., May 2023 (Expected)
	Statistics	Graduate Minor, May 2021
University of Alabama Tuscaloosa, AL	Geography Concentration: Geospatial Science Advisor: Dr. Justin Hart	M.S., May 2018
	Thesis: Temporal dynamics affecting ground flora recovery after fire in thinned <i>Pinus-Quercus</i> stands	
University of Maryland College Park, MD	Environmental Science Concentration: Ecological and Technological Design	B.S., May 2015
	Ecology & Evolutionary Sciences	B.S., May 2015

Professional Experience

High Desert Ecological Research Great Basin Institute/Nevada Department of Wildlife, Reno, Nevada Maria Jesus AmeriCorps VISTA Field Technician	May 2016–Sept 2016
Aquatic Entomology Research University of Maryland, College Park, Maryland Dr. William Lamp Lab Manager/Field Technician	Sept 2015–Apr 2016
Wetlands Restoration Research University of Maryland, College Park, Maryland Dr. Brian Needelman Lab and Field Technician	May 2012–Aug 2013, Sept 2015–Apr 2016
NSF Research Experience for Undergraduates Internship Samford University, Birmingham, Alabama Dr. Scot Duncan Lab and Field Researcher	June 2014–July 2014

Publications

Blomdahl E.M., J.H. Speer, M. Kaye, ..., **K.G. Willson**, B.D. Woodward, R.J. DeRose. Drivers of forest change in the Greater Yellowstone Ecosystem. *Journal of Vegetative Sciences*. Submitted.

Kressuk J.M., J.D. Goode, A.A.R. Bhuta, J.L. Hart, J.S. Kleinman, D.L. Phillips, **K.G. Willson**. 2020. Composition and structure of a montane longleaf pine stand on the Alabama Piedmont. *Southeastern Naturalist*, 19, 436-446.

Willson K.G., L.E. Cox, J.L. Hart, D.C. Dey. 2020. Three-dimensional light structure of an upland *Quercus* stand post-tornado disturbance. *Journal of Forestry Research*, 31, 141-153.

Willson K.G., J.L. Hart., Zengel, B. 2019. A longing for the natural past: Unexplored benefits and impacts of a nostalgic approach towards restoration in ecology. *Restoration Ecology*, 27, 949-954.

Barefoot C.R., **K.G. Willson**, J.L. Hart, C.J. Schweitzer, D.C. Dey, 2019. Effects of thinning and prescribed fire frequency on ground flora in mixed *Pinus*-hardwood stands. *Forest Ecology and Management*, 432, 729-740.

Willson K.G., C.R. Barefoot, J.L. Hart, C.J. Schweitzer, D.C. Dey, 2018. Temporal patterns of ground flora response to fire in thinned *Pinus-Quercus* stands. *Canadian Journal of Forest Research*, 48(10), 1171-1183.

Willson K.G., Perantoni, A.N., Berry, Z.C., *et al.*, 2017. Influences of reduced iron and magnesium on growth and photosynthetic performance of *Phragmites australis* subsp. *americanus* (North American common reed). *Aquatic Botany*, 137, 30-38.

Presentations

Willson, K.G., C.R. Barefoot, J.L. Hart, C.J. Schweitzer, D.C. Dey. 2018. The effects of thinning and prescribed fire on the herb stratum over time in *Pinus-Quercus* stands. Oral presentation at: American Association of Geographers Meeting, New Orleans, LA.

Barefoot C.R., **K.G. Willson**, J.L. Hart, C.J. Schweitzer, D.C. Dey. 2018. Effects of thinning and burning on ground flora in mixed *Pinus*-hardwood stands. Poster presentation at: American Association of Geographers Meeting, New Orleans, LA.

Willson K.G., J.L. Hart, C.J. Schweitzer, D.C. Dey. 2017. Temporal effects of thinning and prescribed fire on ground flora in mixed pine-oak stands. Oral presentation at: Association for Fire Ecology Fire Ecology and Management Congress, Orlando, FL.

Willson K.G., L.E. Cox, J.L. Hart, D.C. Dey. 2017. The effects of a wind disturbance on the three dimensional light structure of an upland oak stand. Poster presentation at: Society of American Foresters National Convention, Albuquerque, NM.

WILLSON – CURRICULUM VITAE

Willson K.G., R.S. Duncan, R.M. Fincher, *et al.* 2015. Effects of Environmental Variables on Montane Longleaf Pine Ecosystems. Poster presentation at: Ecological Society of America Meetings, Baltimore, MD.

Berry Z.C., A.N. Perantoni, **K.G. Willson**, *et al.* 2015. Assessing Effects of Reduced Mg(II) and Fe(II) on growth of *Phragmites australis* ssp. *americanus*. Poster presentation at: Maryland Day, College Park, MD.

Willson K.G., R.S. Duncan, R.M. Fincher, *et al.* 2015. Effects of Environmental Variables on Montane Longleaf Pine Ecosystems. Poster presentation at: Emerging Researchers National Conference, Washington, DC.

Willson K.G., R.S. Duncan, R.M. Fincher, *et al.* 2015. Effects of Environmental Variables on Montane Longleaf Pine Ecosystems. Poster presentation at: University of Maryland Undergraduate Research Day, College Park, MD.

Willson K.G., R.S. Duncan, R.M. Fincher, *et al.* 2014. Effects of Environmental Variables on Montane Longleaf Pine Ecosystems. Poster presentation at: Wildlife Habitat Council Symposium, Baltimore, MD.

Willson K.G., R.S. Duncan, R.M. Fincher, *et al.* 2014. Effects of Environmental Variables on Montane Longleaf Pine Ecosystems. Poster presentation at: University of Maryland Agricultural and Natural Resources College Open House Clarksville, MD.

Funding	Awarded
2022-2025 USDA NIFA AFRI EWD Predoctoral Fellowship	\$153,059.00
2021 Alvin R. and Caroline G. Grove Summer Research Scholarship	\$3,000.00
2021 JFSP Graduate Research Innovation Grant	\$24,845.00
2020 Alvin R. and Caroline G. Grove Summer Research Scholarship	\$2,000.00
2019 Harry Wayne Springfield Fellowship	\$18,000.00
2017 Association for Fire Ecology Travel Award	\$275.00
2017 University of Alabama Graduate School Travel Award	\$1,000.00
2016 Segal AmeriCorps Education Award	\$2,200.00
2015 Research Experience for Undergraduates Conference Travel Award	\$1,000.00
Total Awarded:	\$205,379.00

Honors and Awards

University of Alabama Outstanding Master's Thesis Award 2018
University of Alabama Department of Geography Outstanding Graduate Award 2018
University of Maryland Senior Marshal 2015
University of Maryland Honors College Citation
University of Maryland Dean's List every semester
Eagle Scout

Teaching and Mentoring Experience

Teaching Assistant, Global Change Biology (BIOL 480), University of New Mexico

WILLSON – CURRICULUM VITAE

Fall 2020

Fall 2021

Teaching Assistant, Plant & Animal Form & Function (BIOL 304L) Lab, University of New Mexico

Fall 2018

Teaching Assistant, Earth Surface Processes (GY 102) Lab, University of Alabama

Spring 2018

Teaching Assistant, Atmospheric Patterns and Processes (GY 101) Lab, University of Alabama

Spring 2017

Fall 2017

Spring 2018

Teaching Assistant, Eastern Forest Communities and Silvics (GY 492), University of Alabama

Summer 2017

Mentor, Macrofungal response to compound disturbance in a longleaf pine woodland, Forest Dynamics Lab

Summer 2017

Fall 2017

Spring 2018

Mentor, Effects of thinning and prescribed fire on fuel loading and composition in mixed pine-oak stands, Forest Dynamics Lab

Fall 2017

Spring 2018

Professional Memberships

2017 – present	Ecological Society of America
2017 – present	Forest Stewards Guild
2017 – present	Society of American Foresters
2019 – present	Tree Ring Society