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Academics

TEACHING ASSOCIATE PROFESSOR OF FORESTRY, 2018-present

Division of Forestry and Natural Resources, West Virginia University, Morgantown, WV
VISITING ASSOCIATE PROFESSOR OF FORESTRY, 2016-2018

Division of Forestry and Natural Resources, West Virginia University, Morgantown, WV
RESEARCH SCIENTIST, Jan-Oct 2016

Department of Life and Physical Sciences, Lincoln University, Jefferson City, MO
ASSOCIATE PROFESSOR OF BIOLOGY, 2013-2015

Department of Life and Physical Sciences, Lincoln University, Jefferson City, MO
ADJUNCT ASSISTANT PROFESSOR, 2012-2016 & GRADUATE FACULTY, 2014-2016

Department of Forestry, University of Missouri, Columbia, MO
URBAN FORESTER, 2010-2015

Cooperative Research, Lincoln University, Jefferson City, MO
ASSISTANT PROFESSOR OF BIOLOGY, 2007-2013

Department of Life and Physical Sciences, Lincoln University, Jefferson City, MO
PH.D. IN NATURAL RESOURCES, 2007

Department of Forest Resources, University of Idaho, Moscow, ID
Dissertation: Wildfire and Prescribed Burning Effects on Nitrogen Dynamics in Rocky Mountain Watershed Ecosystems

M.S. IN BIOLOGY, 2001

Friedrich-Schiller-University, Jena, Germany
Major: Ecology; Minors: Botany, Zoology, English
Thesis: Succession and C-S-R Functional Types in a Perturbed Grassland Ecosystem
Umeå University, Umeå, Sweden, educational exchange 1997/98

Current and Past Teaching

- West Virginia University, Jan 2016 – present*
 - *Introduction to Plant Identification (FOR393A), 2 cr.: 2 hrs lecture
 - *Fire Ecology (FMAN393B/ FMAN 593B), 3 cr.: 2019 3 hrs lecture and one field trip, 2020-present online
 - Forest Ecosystems (FMAN593C), 2-3 cr.: 2-3 hrs lecture
 - *Forest Ecology (FMAN 212), 3 cr.: 3 hrs lecture and two sections of 3-hr laboratory
 - *Winter Dendrology (FOR206), 1 cr.: 3 hrs field lab
 - *Dendrology (FOR 205), 3 cr., 2 hrs lecture and five sections of 3-hr laboratory
 - *Tree Ecophysiology (FOR 593B), 3 cr.: 3 hrs lecture
 - Forest Botany (FOR 293A), 4 cr.: 3 hrs lecture and 2-hr laboratory
 - Tree Physiology (FOR 493 / FOR 693), 4 cr.: 3 hrs lecture and 3-hr laboratory
 - Graduate Seminar (FMAN796), 1 cr.

- Lincoln University (in order of declining frequency), Aug 2007- Dec 2015
 - General Botany (BIO 106/AGR 107), 4 cr., 3 hrs lecture and 3-hr laboratory
 - Plant Physiology (BIO 311/AGR 329), 4 cr., 3 hrs lecture and 3-hr laboratory
 - Principles of Biology (BIO 103), 3 cr., 3 hrs lecture
 - Taxonomic Botany (BIO 308/AGR323), 4 cr., 2 hrs lecture and 2 2-hr laboratories
 - Principles of Biology Laboratory (BIO 104L), 1 cr., 2-hr laboratory
 - Ecology (BIO 423), 4 cr., 3 hrs lecture and 1-hr discussion session

Graduate Student Advising

- As major advisor
 - Lacey Smith, 2017-2019, MS Forestry
 - Sian Eisenhut, 2018-2021, MS Forestry
 - Joellen Stivala, 2019-2021, MS Forestry
 - Ruben Sabella, 2021-current, MS Forestry candidate
- As committee member
 - Iris Allen, 2017-2019, MS Forestry
 - Zachary Heck, 2020-2021, MS Forestry
 - Jason Horne, 2018-2020, MS Environmental Soil and Water Sciences
 - Logan Ferguson, 2021-2022, MS Forestry

Research Interests

- Vegetation responses (composition, biodiversity, abundance) to disturbance and management
- Sustainable natural resources management

Research Experience

WEST VIRGINIA UNIVERSITY, 2016 – present

- The effects of forest management and deer browsing on herbaceous layer abundance and diversity in Central Appalachian forests, 2021-present
- Response of buffalo clover (*Trifolium stoloniferum* Muhl ex. A. Eaton) to tree harvest and transplanting in Monongahela National Forest, 2021-present
- Impacts of the strip cut forest harvest method for biomass on the ground flora, 2019-present
- Land use effects on macroinvertebrate communities in a mixed-land-use Appalachian watershed, 2019-2021
- The role of forest understory nitrogen metabolism in watershed-level nitrogen retention in an Appalachian hardwood forest, 2017-2021

LINCOLN UNIVERSITY IN MISSOURI, 2007- 2016

- Long-term effects of prescribed burning on soil and plant characteristics in the Missouri Ozark mountains; 2009-2016
- Effects of land management on plant community structure and composition in Prairie Fork Conservation Area, Missouri; 2010-2012

- Vegetation, soil, and microclimate heterogeneity in a 70-year-old abandoned urban limestone quarry in Jefferson City, Missouri; 2010-2012
- Improving quantitative understanding of urban forest carbon sequestration and climate mitigation; 2012-2017

UNIVERSITY OF IDAHO, Department of Forest Resources, Moscow, ID, USA, 2003-2007

Doctoral research (advisor: Dr. Kathleen Kavanagh)

- Study of nitrogen fate in watershed ecosystems after wildfire and prescribed burning in the Rocky Mountains of Idaho, USA
- Study of nitrogen cycling post-fire using natural abundance ^{15}N in terrestrial and aquatic ecosystem components
- Quantifying nitrogen export and retention by intermittent streams in south-central Idaho, USA
- Evaluating the suitability of the diffusion method for soil extracts at natural abundance ^{15}N

FRIEDRICH SCHILLER UNIVERSITY, Institute of Ecology, Jena, Germany, 1999-2001

Master's research (advisor: Dr. Winfried Voigt)

- Study of vegetation regeneration in an anthropogenically disturbed ecosystem using C-S-R plant functional types and multivariate statistics

MAX-PLANCK-INSTITUTE FOR CHEMICAL ECOLOGY, Jena, Germany

Research assistant

- Molecular biological studies of herbivore resistance in *Arabidopsis* species (2002)
- Organization of research herbarium collection (2000)

Competitive Grants, Cooperative Research Agreements & Gifts

STEPHAN K. Saffron Spice - Growing Gold in West Virginia. WV Department of Agriculture Crop Block Grant, \$11,231. *under review*

STEPHAN K., J. SCHULER, C. KELLY, C. LITUMA. Forest Biomass for Energy: A Systems Assessment of Sustainability of the Strip Cut Forest Harvest Method. WVU Research and Scholarship Advancement Grant. \$ 15,000. 2019-2020.

STEPHAN, K. The Role of Tree and Herb Layer Nitrogen Metabolism in Watershed-Level Nitrogen Retention in an Appalachian Hardwood Forest. USDA Forest Service \$ 6,000. 2017-2022

STEPHAN K. Mentoring Students in Natural Resources to Meet Triple Challenges of Biodiversity: Managing Invasive Species and Rare Species under Changing Climatic Conditions. USDA-NIFA Capacity Building Grant. \$149,072 2012-2016.

STEPHAN K. Evaluating Wick Applied Herbicide Treatments to Control Winged Sumac (*Rhus copallinum* L.) While Minimizing Impact on Native Forbs. Cooperative Research Agreement with Missouri Department of Conservation. \$11,986.01. 2012

STEPHAN K. Increasing Student Success in Botany and Related Courses via Web-based Instructional Modules for Course Background Information, Plant Anatomy, and Plant Life Cycles. A Model for Achieving Success in STEM (AMASS), Faculty Development Grant, NSF HBCU-UP. \$5,000. 2011

- RIEDLE J.D., ANDREI A. AND **K. STEPHAN**. Experiential Learning, Recruitment, and Retention in Natural Resources. USDA-NIFA-Capacity Building Grant (P-003406). \$127,382. 2011
- STEPHAN K.** Evaluating Wick Applied Herbicide Treatments to Control Winged Sumac (*Rhus copallinum* L.) While Minimizing Impact on Native Forbs. Cooperative Research Agreement with Missouri Department of Conservation. \$18,983.12. 2011
- STEPHAN K.** Improving Student Skills in Conceptual Understanding and Application. A Model for Achieving Success in STEM (AMASS), Faculty Development Grant, NSF HBCU-UP. \$5,000. 2011
- STEPHAN K.** Evaluating Wick Applied Herbicide Treatments to Control Winged Sumac (*Rhus copallinum* L.) While Minimizing Impact on Native Forbs. Cooperative Research Agreement with Missouri Department of Conservation. \$20,300. 2010
- STEPHAN K.** Vegetation measurements on the Prairie Fork Conservation Area. Prairie Fork Charitable Endowment Trust. Gift \$10,000. 2010
- STEPHAN K.** Title III grant for faculty development: Travel and registration costs for annual meeting of the Ecological Society of America Meeting. \$1,500. 2009
- STEPHAN K.** The Effects of Forest Management on Watershed N dynamics. US Department of Defense, Army Research Office (W911NF-05-2-0003) via LU Cooperative Research Environmental Science Group. \$20,000. 2008
- STEPHAN K.** Title III grant for faculty development: Travel and registration costs for fall meeting of American Geophysical Union. \$1,500. 2007
- KAVANAGH K., W. MINSHALL, AND J. ERICKSON. The effect of spring prescribed fires on nitrogen dynamics within riparian and stream ecosystems. USDA, USDI Joint Fires Sciences Program. \$147,950. 2004-06 (K.S. contributed 40% to the writing)
- KAVANAGH K., W. MINSHALL, AND N. BOSWORTH. The effect of wildfire on nitrogen dynamics within headwater ecosystems. USDA, USDI Joint Fires Sciences Program. \$63,743. 2005-06 (K.S. contributed 40% to the writing)

Non-competitive Formula Funding, McIntire-Stennis (Forestry)

- STEPHAN, K.** The effects of forest management and deer browsing on herbaceous layer abundance and diversity in Central Appalachian forests. \$ 74,800. 2022-2026
- STEPHAN, K.** The role of understory nitrogen metabolism in watershed-level nitrogen retention in an Appalachian hardwood forest. \$ 150,390. 2017-2021
- STEPHAN, K.** Improving Quantitative Understanding of Urban Forest Carbon Sequestration and Climate Mitigation. \$ 70,061/yr. 2012-17
- EIVAZI, F. AND **K. STEPHAN**. Vegetation, Soil, and Microclimate Heterogeneity in a 70-year-old Abandoned Urban Limestone Quarry in Jefferson City, Missouri. \$ 63,000-70,061/yr. 2010-12

Professional Experience

Environmental consultant at Agrarian and Environmental Analytics Plc, Jena, Germany, 2002

- Prepared documents for agricultural and industrial projects requiring an authorization procedure to comply with the German Federal Ambient Pollution Control Act

- Conducted environmental impact assessments of agricultural and industrial projects
- Introduced and implemented the Environmental Management and Audit Scheme (voluntary European Union-wide program to promote environmental protection) in a broad spectrum of companies

Fisheries technician (seasonal), U.S. Forest Service at Lowman Ranger District, Boise National Forest, Idaho, U.S.A., 2000 & 2001

- Stream fish and riparian plant inventories
- Report writing for bull trout monitoring program and westslope cutthroat trout radio telemetry project
- Carried out Burned Area Emergency Rehabilitation survey

Project contract with UNESCO Biosphere Reservation Rhoen, Germany, 2001

- Wrote and edited a sustainable development plan for rural areas of the biosphere reservation

Professional Affiliations

Ecological Society of America (ESA) since 2005

Society of American Foresters (SAF) since 2010

Publications

GOLD Z.J., A.F.A. PELLEGRINI, T.K. REFSLAND, R.J. ANDRIOLI, M.L. BOWLES, D.G. BROCKWAY, N. BURROWS, A.C. FRANCO, S.W. HALLGREN, S.E. HOBBIE, W.A. HOFFMANN, K.P. KIRKMAN, P.B. REICH, P. SAVADOGO, D. SILVÉRIO, **K. STEPHAN**, T. STRYDOM, J.M. VARNER, D.D. WADE, A. WILLS A., AND A.C. STAVER. Submitted 10 Oct 2022. Greater herbaceous vegetation responses to experimental fire in savannas than in forests. *Ecology Letters*.

STEPHAN K. AND J.A. HUBBART. 2023. Plant Community, and Soil and Microclimate attributes after 70 Years of Natural Recovery of an Abandoned Limestone Quarry. *Land* 12(1), 117; <https://doi.org/10.3390/land12010117>

EISENHUT S.E., I. HOLÁSKOVÁ AND **K. STEPHAN**. 2022. Role of Tree Species, the Herb Layer and Watershed Characteristics in Nitrate Assimilation in a Central Appalachian Hardwood Forest. *Nitrogen* 3: 333–352. <https://doi.org/10.3390/nitrogen3020022>

SMITH L. AND **K. STEPHAN**. 2021. Nitrogen Fertilization, Stand Age, and Overstory Tree Species Impact the Herbaceous Layer in a Central Appalachian Hardwood Forest. *Forests* 12(7), 829 <https://doi.org/10.3390/f12070829>

PELLEGRINI, A.F.A., T. REFSLAND, C. AVERILL, C. TERRER, A.C. STAVER, D.G. BROCKWAY, A. CAPRIO, W. CLATTERBUCK, C. COETSEE, J.D. HAYWOOD, S.E. HOBBIE, W.A. HOFFMANN, J. KUSH, T. LEWIS, W.K. MOSER, S.T. OVERBY, B. PATTERSON, K.G. PEAY, P.B. REICH, C. RYAN, M.A.S. SAYER, B.C. SCHARENBRUCH, T. SCHOENNAGEL, G.R. SMITH, **K. STEPHAN**, C. SWANSTON, M.G. TURNER, J.M. VARNER, AND R.B. JACKSON. 2021. Decadal changes in fire frequencies shift tree communities and functional traits. *Nature Ecology and Evolution* 5:504-512 <https://doi.org/10.1038/s41559-021-01401-7>

DANG, C., E. KELLNER, G. MARTIN, Z.B. FREEDMAN, J. HUBBART, **K. STEPHAN**, C.N. KELLY, AND E. M. MORRISSEY. 2021. Land use intensification destabilizes stream microbial

- biodiversity and decreases metabolic efficiency. *Science of the Total Environment* 767: 145440 <https://doi.org/10.1016/j.scitotenv.2021.145440>
- MARTIN, G., C. DANG, E. M. MORRISSEY, J. HUBBART, E. KELLNER, C. KELLY, K. STEPHAN AND Z. B. FREEDMAN. 2020. Stream sediment bacterial communities exhibit temporally-consistent and distinct thresholds to land use change in a mixed-use watershed. *FEMS Microbiology Ecology* 97(2), doi: 10.1093/femsec/fiaa256
- REFSLAND, T., B. KNAPP, **K. STEPHAN** AND J. FRATERRIGO. 2020. Sixty-five years of fire manipulation reveals climate and fire interact to determine growth rates of *Quercus* spp. *Ecosphere* 11(11):e03287. 10.1002/ecs2.3287
- HUBBART J.A., **K STEPHAN**, F. PETERSEN, Z. HECK, J. HORNE, B.J. MEADE. 2020. Challenges for the Island of Barbuda: A Distinct Cultural and Ecological Island Ecosystem at the Precipice of Change. *Challenges* [Perspective], 11(1), 12; <https://doi.org/10.3390/challe11010012>
- KELLNER, E., J. HUBBART, **K. STEPHAN**, E. MORRISSEY, Z. FREEDMAN, E. KUTTA, C. KELLY. 2018. Characterization of sub-watershed-scale stream chemistry regimes in an Appalachian mixed-land-use watershed. *Environmental Monitoring and Assessment* 190:586 <https://doi.org/10.1007/s10661-018-6968-9>
- STEPHAN, K.** (2018). Is it nitrogen that binds us: The arising researcher. *The Bulletin of the Ecological Society of America* [Essay] DOI: 10.1002/bes2.1378
- HUBBART, J.A., E. KELLNER, P. KINDER, AND **K. STEPHAN**. 2017. Challenges in Aquatic Physical Habitat Assessment: Improving Conservation and Restoration Decisions for Contemporary Watersheds. *Challenges* 8(31); doi:10.3390/challe8020031 [Commentary]
- STEPHAN, K.**, K.L. KAVANAGH AND A. KOYAMA. 2015. Comparing the Influence of Wildfire and Prescribed Burns on Watershed Nitrogen Biogeochemistry Using ¹⁵N Natural Abundance in Terrestrial and Aquatic Ecosystem Components. *PlosOne* DOI:10.1371/journal.pone.0119560
- KNAPP, B.O., **K. STEPHAN** AND J.A. HUBBART. 2015. Structure and composition of an oak-hickory forest following over 60 years of repeated prescribed burning in Missouri, U.S.A. *Forest Ecology and Management* 344:95-109 doi:10.1016/j.foreco.2015.02.009
- HUBBART, J.A., E. KELLNER, L. HOOPER, A.R. LUPO, P.S. MARKET, P.E. GUINAN, **K. STEPHAN**, N. I. FOX AND B.M. SVOMA. 2014. Localized Climate and Surface Energy Flux Alterations across an Urban Gradient in the Central U.S. *Energies* 7(3):1770-1791; doi:10.3390/en7031770
- STEPHAN, K.**, K.L. KAVANAGH AND A. KOYAMA. 2012. Effects of spring prescribed burning and wildfires on watershed nitrogen dynamics of central Idaho headwater areas. *Forest Ecology and Management* 263:240-252
- KOYAMA, A., **K. STEPHAN** AND K.L. KAVANAGH. 2011. Fire effects on soil N transformations in central Idaho coniferous forests - Prescribed fires vs. wildfires. *International Journal of Wildland Fire* 21:69-78 <http://dx.doi.org/10.1071/WF10132>
- KOYAMA, A., K.L. KAVANAGH AND **K. STEPHAN**. 2010. Wildfire effects on soil gross nitrogen transformation rates in coniferous forests of central Idaho, USA. *Ecosystems* 13:1112-1126 (<http://www.springerlink.com/content/54u77x228m172772/fulltext.pdf>)

- STEPHAN, K.**, M. MILLER AND M. DICKINSON. 2010. First-order fire effects on herbs and shrubs: present knowledge and process modeling needs. *Fire Ecology* 6:95-114 (<http://www.fireecology.net/Issues/volume-5-issue-3.html>)
- STEPHAN, K.** AND K.L. KAVANAGH, 2009. Suitability of the diffusion method for ammonium and nitrate in KCl extracts for ¹⁵N analysis at natural abundance. *Soil Science Society of America Journal* 73:1-10 (<https://www.soils.org/publications/sssaj> - doi: 10.2136/sssaj2007.0079)
- ZURSTADT C.F. AND **K. STEPHAN**, 2004. Seasonal migration of westslope cutthroat trout in the Middle Fork Salmon River drainage, Idaho. *Northwest Science* 78:278-285

Presentations and Posters – National and International Conferences

(*presenter, §undergraduate presenter, # graduate student presenter)

- Refsland, T.K.*, B.O. Knapp, **K. Stephan** and J.M. Fraterrigo. 2019. Sixty years of fire manipulation in the Missouri Ozarks reveals climate-dependent effects of repeat burns on forest growth. Association for Fire Ecology Conference: Organized Oral Session: Effectiveness of fire and fuel treatments to promote resilience to drought. November 18-22, 2019, Tucson, AZ, USA.
- Stephan, K.***, L. Smith and S. Eisenhut. 2019. Nitrogen deposition, land use history, and tree species impact herb layer characteristics and nitrogen dynamics in an Appalachian hardwood forest. Oral presentation at Annual Meeting of the Ecological Society of America, Aug 11-16, 2019, Louisville, Kentucky, USA.
- Smith, L.# and **K. Stephan**. 2019. Investigating spatial associations between herbaceous plants and tree species in a Central Appalachian hardwood forest. Poster presentation at Annual Meeting of the Ecological Society of America, Aug 11-16, 2019, Louisville, Kentucky, USA.
- Eisenhut, S.# and **K. Stephan**. 2019. Investigating the role of tree species and the herb layer in nitrogen cycling in a Central Appalachian hardwood forest. Poster presentation at Annual Meeting of the Ecological Society of America, Aug 11-16, 2019, Louisville, Kentucky, USA.
- Stephan K.**, J. Hubbart*, K. Beaven and E. Spiegel. 2017. Contrasting carbon in soil and vegetation of forested wildland and urban sites along an urbanization gradient. Poster presentation at 1) Society of American Foresters (SAF), November 15-19, 2017, Albuquerque, New Mexico, USA DOI: 10.13140/RG.2.2.35315.43048
- Hubbart*, J. and **K. Stephan**. 2017. Advancing quantitative understanding of urban forest carbon sequestration and climate mitigation. Poster presentation at International Union of Forest Research Organizations (IUFRO) 125th Anniversary Congress, September 18-22, 2017, Freiburg, Germany
- Asahl§, D., M. Mears§, L. Downing§, E. Skornia, and **K. Stephan**. 2015. Germination rates of *Callirhoe bushii* and *Lespedeza cuneata* under future climate conditions in Missouri. Poster presentation at the Botany Conference (Botanical Society of America), Jul 25-30, 2015, Edmonton, Alberta, Canada
- Skornia§, E. and **K. Stephan**. 2014. Fate of endangered pondberry (*Lindera melissifolia*) in a changing climate. Poster presentation at the Botany Conference (Botanical Society of America), Jul 26-30. 2014, Boise, Idaho, USA
- Steinwand, C., S. Johnson§, and **K. Stephan**. 2014. Fire and climate effects on *Delphinium exaltatum* in the Ozark region of Missouri. Poster presentation at the Botany Conference (Botanical Society of America), Jul 26-30. 2014, Boise, Idaho, USA

- Hill[§], J., **K. Stephan**, M. Underwood, E. Horner. 2014. Spring and summer climate effects on the vigor of endangered Mead's milkweed. Poster presentation at the Botany Conference (Botanical Society of America), Jul 26-30. 2014, Boise, Idaho, USA
- Stephan***, K. and J.A. Hubbart. 2009. Effects of long-term prescribed burning on soil physical and chemical properties in the Missouri Ozarks. Poster presentation at the American Geophysical Union (AGU) meeting, Dec 14-18, 2009, San Francisco, California, USA
- Stephan***, K., A. Koyama, and K.L. Kavanagh. 2007. Influence of fire severity on watershed nitrogen cycling using ¹⁵N natural abundance in terrestrial and aquatic ecosystem components. Poster presentation at American Geophysical Union (AGU) Fall Meeting, Dec 10-14, 2007, San Francisco, California, USA.
- Stephan***, K., A. Koyama, and K.L. Kavanagh. 2006. Comparison of wildfire and prescribed burn effects on N dynamics in headwater ecosystems in central Idaho, USA: N fate, $\delta^{15}\text{N}$ and Processes. Oral presentation at 91st Annual Meeting of the Ecological Society of America, Memphis, Tennessee, USA
- Stephan***, K., A. Koyama, and K.L. Kavanagh. 2006. Comparison of wildfire and spring prescribed burn effects on nitrogen dynamics in Rocky Mountain headwater areas: fate of N and management implications. Poster presentation at 3rd International Fire Ecology and Management Congress. San Diego, California, USA
- Koyama*, A., M. Thompson, **K. Stephan** and K.L. Kavanagh. 2006. Fire effects on carbon dynamics in central Idaho coniferous forests. Poster presentation at the 91st Annual Ecological Society of America Meeting, Memphis, Tennessee, USA
- Koyama*, A., **K. Stephan** and K.L. Kavanagh. 2006. Fire effects on soil N transformations in central Idaho coniferous forests – Prescribed fires vs. wildfires. Poster presentation at 3rd International Fire Ecology and Management Congress, San Diego, California, USA
- Thompson*, M., A. Koyama, **K. Stephan** and K.L. Kavanagh. 2006. The effects of wildfire on hydraulic properties in conifers. Poster presentation at 3rd International Fire Ecology and Management Congress, San Diego, California, USA
- Stephan***, K., A. Koyama, and K.L. Kavanagh. 2005. Fire effects on nitrogen dynamics in headwater systems. Oral presentation at 90th Annual Meeting of the Ecological Society of America, Montreal, Quebec, Canada
- Stephan***, K., A. Koyama, and K.L. Kavanagh. 2004. Fire effects on nitrogen concentration and nitrogen isotopic composition in riparian and upslope plants of headwaters. Poster presentation at 89th Annual Meeting of the Ecological Society of America Portland, Oregon, USA
- Koyama*, A., **K. Stephan** and K.L. Kavanagh. 2004. Ash effects on nitrogen dynamics in soils and plants after a wildfire. Poster presentation at the 88th Annual Ecological Society of America Meeting, Portland, Oregon, USA

Presentations and Posters – Regional and Local Conferences

(*presenter, [§]undergraduate presenter, # graduate student presenter)

- Sabella, R. # and **K. Stephan**. Response of running buffalo clover (*Trifolium stoloniferum* Muhl ex. A. Eaton) to tree harvest and transplanting in Monongahela National Forest. Poster presentation at WVU Davis College Graduate Student Research and Creative Scholarship Day, April 26, 2022, Morgantown, WV, USA
- Eisenhut, S.E. and **K. Stephan***. Nitrate assimilation by maples and the herbaceous layer in a Central Appalachian hardwood forest. Oral presentation at Central Hardwood Conference, April 5-8, 2022, Morgantown, WV, USA.

- Razvillas, K. [§] and **K. Stephan**. Repeatedly harvesting narrow strips of forest for energy biomass benefits the herbaceous layer. Poster presentations at 1) Central Hardwood Conference, April 5-8, 2022, Morgantown, WV, USA and 2) Women in Natural Resources Research Symposium, April 14, 2022, West Virginia University, Morgantown, WV, USA.
- Razvillas, K. [§] and **K. Stephan**. Repeatedly harvesting narrow strips of forest for energy biomass benefits the herbaceous layer. Online presentation at WVU Summer Undergraduate Research Symposium (SURE), July 29, 2021, Morgantown, WV, USA.
- Clasgens, A. [§], J. Stivala, and **K. Stephan**. Urban development impacts on aquatic benthic macroinvertebrate community in a mixed-land-use watershed. Online presentation at WVU Summer Undergraduate Research Symposium (SURE), July 23, 2020, Morgantown, WV, USA.
- Smith, L. [#] and **K. Stephan**. 2019. Investigating spatial associations between herbaceous plants and tree species in a Central Appalachian hardwood forest. Poster presentations at 1) WVU Davis College Graduate Student Research and Creative Scholarship Day, March 26, 2019, Morgantown, WV, USA, and 2) Women in Natural Resources Research Symposium, March 27, 2019, West Virginia University, Morgantown, WV, USA.
- Eisenhut, S. [#] and **K. Stephan**. 2019. Investigating the role of tree species and the herb layer in nitrogen cycling in a Central Appalachian hardwood forest. Poster presentations at 1) WVU Davis College Graduate Student Research and Creative Scholarship Day, March 26, 2019, Morgantown, WV, USA, and 2) Women in Natural Resources Research Symposium, March 27, 2019, West Virginia University, Morgantown, WV, USA.
- Kellner*, R.E., J.A. Hubbart, **K. Stephan**, E.M. Morrissey, Z.B. Freedman, E. Kutta, and C.N. Kelly. 2018. Characterization of sub-watershed-scale stream chemistry regimes in an Appalachian mixed-land-use watershed. Oral presentation at Sixth Interagency Conference on Research in the Watersheds, July 23, 2018, Shepherdstown, WV.
- Dang, C. [#], G. Martin, J.A. Hubbart, E. Kellner, C. Kelly, **K. Stephan**, R. Miller, Z. Freedman and E. Morrissey. 2018. Stream sediment microbial community function is sensitive to alterations in water chemistry associated with watershed land use. Poster presentations at 1) Institute of Water Security and Science (IWSS) Spring Conference, February 21-22, 2018 and 2) Oral Presentation at Universities Council on Water Resources/ National Institutes for Water Resources (UCOWR/NIWR) 2018 Annual Water Resources Conference, June 6, 2018, Pittsburgh, PA.
- Smith, L. [#] and **K. Stephan**. 2018. Investigating spatial associations between herbaceous plants and tree species in a Central Appalachian hardwood forest. Poster presentations at 1) Institute of Water Security and Science (IWSS) Spring Conference, February 21-22, 2018, Morgantown, WV, USA and 2) WVU Davis College Graduate Student Research and Creative Scholarship Day, April 11, 2018, Morgantown, WV, USA.
- Stephan K.** ^{*} 2017. The role of understory nitrogen metabolism in watershed-level nitrogen retention in an Appalachian hardwood forest. Poster Presentation at Institute of Water Security and Science (IWSS) Symposium, February 28, 2017, Morgantown, West Virginia, USA
- Stephan K.**, J. Hubbart*, K. Beaven and E. Spiegel. 2017. Contrasting carbon in soil and vegetation of forested wildland and urban sites along an urbanization gradient. Poster presentation at Institute of Water Security and Science (IWSS) Spring Conference, February 21-22, 2018, Morgantown, WV, USA
- Asahl[§], D., M. Mears[§], L. Downing[§], E. Skornia, and **K. Stephan**. 2015. Germination rates of *Callirhoe bushii* and *Lespedeza cuneata* under future climate conditions in Missouri. Poster presentations at 1) Missouri Natural Research Conference (MNRC), Feb 4-6, 2015, Osage Beach, Missouri, USA; 2) Lincoln University research symposium, Apr 14, 2015, Jefferson City,

- Missouri, USA; 3) Missouri Academy of Science Meeting (MAS), Apr 18, 2015, Warrensburg, Missouri, USA
- Beaven[#], K.R., J.A. Hubbart, and **K. Stephan**. 2015. Investigating soil carbon, nitrogen and respiration across an urban to forested gradient in mid-Missouri. Poster presentation at Missouri Natural Research Conference (MNRC), Feb 4-6, 2015, Osage Beach, Missouri, USA
- Skornia[§], E. and **K. Stephan**. 2014. Fate of endangered pondberry (*Lindera melissifolia*) in a changing climate. 1) Poster presentation at Missouri Natural Research Conference (MNRC), Feb 5-7, 2014, Osage Beach, Missouri, USA; Oral presentations at 2) Lincoln University Research symposium, Apr 22, 2014, Jefferson City, Missouri, USA and 3) Missouri Academy of Science Meeting (MAS), Apr 26, 2014, Warrensburg, Missouri, USA
- Steinwand, C., S. Johnson[§], and **K. Stephan**. 2014. Fire and climate effects on *Delphinium exaltatum* in the Ozark region of Missouri. 1) Poster presentation at Missouri Natural Research Conference (MNRC), Feb 5-7, 2014, Osage Beach, Missouri, USA; Oral presentations at 2) Lincoln University Research symposium, Apr 22, 2014, Jefferson City, Missouri, USA and 3) Missouri Academy of Science Meeting (MAS), Apr 26, 2014, Warrensburg, Missouri, USA
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