

Adam M. Berland

Department of Geography and Meteorology
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Current Position

Associate Professor, Dept of Geography and Meteorology, Ball State University 2020-present

Previous Positions

Assistant Professor, Department of Geography, Ball State University 2015-2020
Postdoctoral Research Associate, US Environmental Protection Agency,
National Risk Management Research Laboratory 2013-2015
Visiting Assistant Professor, joint appointment: Institute for the Environment
& Sustainability and Department of Geography, Miami University 2011-2013

Education

Ph.D. Geography, University of Minnesota, Minneapolis, MN 2012
Graduate minor: Natural Resources Science & Management
M.A. Geography, University of Minnesota, Minneapolis, MN 2007
B.A. *Summa cum laude*, Majors: Geography & Environmental Studies,
University of St. Thomas, St. Paul, MN 2005

RESEARCH

Peer-reviewed Publications (* denotes student author)

Browning MHEM, Locke DH, Konijnendijk C, Labib SM, Rigolon A, Yeager R, Bardhan M, Berland, A, Dadvand P, Helbich M, Li F, Li H, James P, Klompmaker J, Reuben A, Roman LA, Tsai W-L, Patwary M, O'Neil-Dunne J, Ossola A, Wang R; Yang B, Yi L, Zhang J, Nieuwenhuijsen M. 2024. Measuring the 3-30-300 Rule to Help Cities Meet Nature Access Thresholds. *Science of the Total Environment* 907: 167739, <https://doi.org/10.1016/j.scitotenv.2023.167739>.

Elnajdi A*, Berland A, Haeft J, Dowling C. 2023. Influence of Soil pH, Organic Matter, and Clay Content on Environmentally Available Lead in Soils: A Case Study in Muncie, Indiana, USA. *Open Journal of Soil Science* 13: 414-430, <https://doi.org/10.4236/ojss.2023.1310019>.

- Elnajdi A*, Berland A, Haeft J, Dowling C. 2023. Relationships among environmental lead in playground soils and dust and blood lead of children in Muncie, Indiana, USA. *Journal of Geoscience and Environment Protection* 11: 21-31, <https://doi.org/10.4236/gep.2023.1110003>.
- Berland A, Locke DH, Herrmann DL, Schwarz K. 2023. Residential land owner type mediates the connections among vacancy, overgrown vegetation, and equity. *Urban Forestry & Urban Greening* 80: 127826, <https://doi.org/10.1016/j.ufug.2022.127826>.
- Weir J*, Vacura K*, Bagga J, Berland A, Hyder K, Skov C, Attyby J, Venturelli P. 2022. Big data from a popular app reveals that fishing creates superhighways for aquatic invaders. *PNAS Nexus* 1: pgac075, <https://doi.org/10.1093/pnasnexus/pgac075>.
- Berland A. 2022. Are housing vacancy rates a good proxy for physical blight? *Cityscape* 24: 53-68, <https://www.huduser.gov/portal/periodicals/cityscpe/vol24num2/article3.html>.
- Goddard MA, Davies ZG, Guenat S, Ferguson MJ, Fisher JC, [...] Berland A, [...] Dallimer M. 2021. A global horizon scan of the future impacts of robotics and autonomous systems on urban ecosystems. *Nature Ecology & Evolution* 5: 219-230, <https://doi.org/10.1038/s41559-020-01358-z>.
- Berland A. 2020. Urban tree growth models for two nearby cities show notable differences. *Urban Ecosystems* 23: 1253-1261, <https://doi.org/10.1007/s11252-020-01015-0>.
- Berland A, Locke DH, Herrmann DL, Schwarz K. 2020. Beauty or Blight? Abundant Vegetation in the Presence of Disinvestment across Residential Parcels and Neighborhoods in Toledo, OH. *Frontiers in Ecology and Evolution* 8: 566759, <https://doi.org/10.3389/fevo.2020.566759>.
- LeBlanc DC, Maxwell JT, Pederson N, Berland A, Mandra T. 2020. Radial growth responses of tulip poplar (*Liriodendron tulipifera*) to climate in the eastern United States. *Ecosphere* 11: e03203, <https://doi.org/10.1002/ecs2.3203>.
- Berland A, Roman LA. 2020. New possibilities for virtual street tree inventories. *Arborist News* 29: 22-26, https://www.fs.fed.us/nrs/pubs/jrnl/2020/nrs_2020_berland_001.pdf.
- Berland A, Roman LA, Vogt J. 2019. Can field crews telecommute? Varied data quality from citizen science tree inventories conducted using street-level imagery. *Forests* 10: 349, <https://doi.org/10.3390/f10040349>.
- LeBlanc DC, Berland A. 2019. Spatial patterns in oak (*Quercus* spp.) radial growth response to drought along climate gradients in Eastern North America. *Canadian Journal of Forest Research* 49: 986-993, <https://doi.org/10.1139/cjfr-2018-0360>.
- Lockwood B, Berland A. 2019. Socioeconomic factors associated with increasing street tree density and diversity in central Indianapolis. *Cities and the Environment (CATE)* 12(1): Article 6. URL: <https://digitalcommons.lmu.edu/cate/vol12/iss1/6/>.
- Schwarz K, Berland A, Herrmann DL. 2018. Green, but not just? Rethinking environmental justice indicators in shrinking cities. *Sustainable Cities and Society* 41: 816-821, <https://doi.org/10.1016/j.scs.2018.06.026>.

- Roman LA, Pearsall H, Eisenman TS, Conway TM, Fahey RT, Landry S, Vogt JM, van Doorn NS, Grove JM, Locke DH, Bardekjian AC, Battles JJ, Cadenasso ML, Konijnendijk CC, Avolio M, Berland A, Jenerette GD, Mincey SK, Pataki D, Staudhammer C. 2018. Human and biophysical legacies shape contemporary urban forests: a literature synthesis. *Urban Forestry & Urban Greening* 31: 157-168, <https://doi.org/10.1016/j.ufug.2018.03.004>.
- Berland A, Shiflett SA, Shuster WD, Garmestani AS, Herrmann DL, Goddard HC, Hopton ME. 2017. The role of trees in urban stormwater management. *Landscape and Urban Planning* 162: 167-177, <https://doi.org/10.1016/j.landurbplan.2017.02.017>.
- Berland A, Lange DA*. 2017. Google Street View shows promise for virtual street tree surveys. *Urban Forestry & Urban Greening* 21: 11-15, <https://doi.org/10.1016/j.ufug.2016.11.006>.
- Herrmann DL, Schwarz K, Shuster WD, Berland A, Chaffin BC, Garmestani AS, Hopton ME. 2016. Ecology for the shrinking city. *BioScience* 66: 965-973, <https://doi.org/10.1093/biosci/biw062>.
- Berland A, Hopton ME. 2016. Asian longhorned beetle complicates the relationship between taxonomic diversity and pest vulnerability in street tree assemblages. *Arboricultural Journal: The International Journal of Urban Forestry* 38: 28-40, <https://doi.org/10.1080/03071375.2016.1157305>.
- Green OO, Garmestani AS, Albro S, Ban NC, Berland A, Burkman CE, Gardiner MM, Gunderson L, Hopton ME, Schoon ML, Shuster WD. 2016. Adaptive governance to promote ecosystem services in urban green spaces. *Urban Ecosystems* 19: 77-93, <https://doi.org/10.1007/s11252-015-0476-2>.
- Berland A, Herrmann DL, Hopton ME. 2016. National assessment of Tree City USA participation according to geography and socioeconomic characteristics. *Arboriculture & Urban Forestry* 42: 120-130. URL: <https://auf.isa-arbor.com/request.asp?JournalID=1&ArticleID=3387&Type=2>.
- Hopton ME, Berland A. 2015. Calculating Puerto Rico's ecological footprint (1970-2010) using freely available data. *Sustainability* 7: 9326-9343, <https://doi.org/10.3390/su7079326>.
- Berland A, Schwarz K, Herrmann DL, Hopton ME. 2015. How environmental justice patterns are shaped by place: terrain and tree canopy in Cincinnati, Ohio, USA. *Cities and the Environment (CATE)* 8(1): Article 1. URL: <https://digitalcommons.lmu.edu/cate/vol8/iss1/1/>.
- Berland A, Hopton ME. 2014. Comparing street tree assemblages and associated stormwater benefits among communities in metropolitan Cincinnati, Ohio, USA. *Urban Forestry & Urban Greening* 13: 734-741, <https://doi.org/10.1016/j.ufug.2014.06.004>.
- Milanovich JR, Berland A, Hopton ME. 2014. Influence of catchment land cover on stoichiometry and stable isotope compositions of basal resources and macroinvertebrate consumers in headwater streams. *Journal of Freshwater Ecology* 29: 565-578, <https://doi.org/10.1080/02705060.2014.933450>.
- Berland A, Elliott GP. 2014. Unexpected connections between residential urban forest diversity and vulnerability to two invasive beetles. *Landscape Ecology* 29: 141-152, <https://doi.org/10.1007/s10980-013-9953-2>.

Berland A, Manson SM. 2013. Patterns in residential urban forest structure along a synthetic urbanization gradient. *Annals of the Association of American Geographers* 103: 749-763, <https://doi.org/10.1080/00045608.2013.782598>.

Berland A. 2012. Long-term urbanization effects on tree canopy cover along an urban-rural gradient. *Urban Ecosystems* 15: 721-738, <https://doi.org/10.1007/s11252-012-0224-9>.

Berland A, Shuman B, Manson SM. 2011. Simulated importance of dispersal, disturbance, and landscape history in long-term ecosystem change in the Big Woods of Minnesota. *Ecosystems* 14: 398-414, <https://doi.org/10.1007/s10021-011-9418-x>.

Publications in peer review

Ayeni E*, Berland A. *In review*. Implementing the 3-30-300 Rule for Urban Greenspace Using Publicly Available Geospatial Data.

McDonald Z*, Weir J*, Berland A, Skov C, Hyder K, Venturelli P. *In review*. Can climate-induced changes in the relative abundance of freshwater game fish be inferred from digital catch log data?

Other Publications

Hopton ME, Berland A. 2014. *Municipal street tree structure and ecosystem services*. EPA Science in Action: Innovative Research for a Sustainable Future. National Risk Management Research Laboratory. EPA Number: EPA/600/F-13/355. URL: https://cfpub.epa.gov/si/si_public_record_report.cfm?Lab=NRMRL&dirEntryId=270183.

Conference Presentations (* denotes student author)

Berland A. 2024. Best practices in crowdsourcing geospatial information. *Indiana GIS Conference*. Michigan City, IN.

Ayeni E*, Berland A. 2024. Implementing the 3-30-300 Rule for Urban Greenspace in Evansville. *Indiana GIS Conference*. Michigan City, IN.

Berland A, Roman LA. 2024. Factors explaining mortality in recently planted trees in Philadelphia. *American Association of Geographers Annual Meeting*. Honolulu, HI.

McFarland D*, Berland A, Gruver J, Haeft J. 2023. The Effectiveness of Biochar in Agricultural Amelioration of Martian Soil Simulant. *American Geophysical Union Annual Meeting*. San Francisco, CA.

Elnajdi A*, Berland A, Dowling C. 2023. Assessing lead levels in playground environments and their relation to children's blood lead levels: A study in Muncie, Indiana. *Geological Society of America Connects Meeting*. Pittsburgh, PA.

Berland A. 2023. Optimizing ArcGIS workflows with ModelBuilder. *Indiana GIS Conference*. Evansville, IN.

- Berland A, Kuban AJ. 2023. Facilitating student learning and public engagement through an immersive GIScience course. *American Association of Geographers Annual Meeting*. Denver, CO.
- Elnajdi A*, Berland A, Dowling C, Haeft J. 2023. Assessment of Lead Levels in Soil and Dust on Playground Equipment in Muncie, Indiana. *Indiana Academy of Science Annual Meeting*. Indianapolis, IN.
- Berland A, Kuban A. 2023. Green Hoosiers: Engaging students and community stakeholders by crowdsourcing sustainability stories. *Indiana Sustainability and Resilience Conference*. Indianapolis, IN.
- Venturelli PA, McDonald Z*, Weir JL*, Berland A, Skov C, Hyder K. 2023. Can climate-induced changes in the relative abundance of freshwater game fish be inferred from digital catch log data? *10th World Recreational Fishing Conference*. Melbourne, Australia.
- Venturelli PA, Thornton-Weir JL*, Vacura K*, Bagga J, Berland A, Hyder K, Skov C, Atty J, Gundelund C, Kinsley A, Phelps N, Daniel W. 2023. Evidence that data from a fishing app can explain, predict, and prevent the spread of aquatic invasive species among inland lakes. *10th World Recreational Fishing Conference*. Melbourne, Australia.
- Berland A, Weir J*, Vacura K*, Bagga J, Hyder K, Skov C, Venturelli P. 2022. Invasion superhighways: How lake tourism paves the way for the spread of exotic species. *Innovations in Invasive Species Management Conference*. Nashville, TN.
- Elnajdi A*, Dowling C, Haeft J, Berland A. 2022. Assay of pH values, organic matter, clay content, and their correlation with environmental availability of lead (Pb) in the soils of Muncie, Indiana. *Geological Society of America Connects Meeting*. Denver, CO.
- Berland A. 2022. Telling sustainability stories using a web mapping application. *Indiana GIS Conference*. Muncie, IN.
- Elnajdi A*, Dowling C, Haeft J, Berland A. 2022. Evaluating the factors controlling the environmental availability of lead (Pb) in the soils of Muncie, Indiana. *Indiana Academy of Science Annual Meeting*. Indianapolis, IN.
- Berland A, Herrmann DL, Locke DH, Schwarz K. 2022. Overgrown lawns relate to property owner traits in Toledo and Trenton. *American Association of Geographers Annual Meeting*. Virtual meeting.
- Berland A, Locke DH, Schwarz K, Herrmann D. 2021. Property parcel characteristics help understand urban vegetation patterns. *American Association of Geographers Annual Meeting*. Virtual meeting.
- Berland A. 2021. A simple technique for online street tree inventories. *Indiana Arborist Association Virtual Annual Conference*. Virtual meeting.
- Berland A, McCreary R*. 2020. Tree canopy mapping using LiDAR and color-infrared air photos. *Indiana Geographic Information Council Virtual Conference*.
- Herrmann DL, Berland A, Jenerette GD. 2020. Landforms as basis of urban social-ecological investigations. *Ecological Society of America Virtual Annual Meeting*.

- Weir J*, Vacura K*, Berland A, Bagga J, Hyder K, Skov C, Venturelli P. 2020. Invasion superhighways: Recreational smartphone data reveals patterns in the human-mediated spread of exotic and invasive species. *American Fisheries Society Virtual Annual Meeting*.
- Berland A. 2020. The Future of GIS in Indiana (invited panel session). *Indiana GIS Conference*. Muncie, IN (canceled due to COVID-19 pandemic).
- Berland A. 2020. Urban tree growth models for two Lower Midwest cities show notable differences. *American Association of Geographers Annual Meeting*, Denver, CO (canceled due to COVID-19 pandemic).
- Vacura K*, Weir J*, Berland A, Venturelli P. 2019. Going digital: What Recreational Smartphone Data Can Reveal about the Human-Mediated Spread of Exotic and Invasive Species. *American Fishers Society & The Wildlife Society Joint Annual Conference*. Reno, NV.
- Berland A, Roman LA, Vogt J. 2019. Generating street tree data using Google Street View: Data quality varies according to analyst expertise. *American Association of Geographers Annual Meeting*. Washington, DC.
- Herrmann DL, Berland A, Shuster WD. 2019. Aligning scales in social and environmental elements of urban green infrastructure. *American Association of Geographers Annual Meeting*. Washington, DC.
- Weir JL*, Vacura K*, Berland A, Venturelli P. 2019. Using geographic data from angler apps to map the aquatic connectivity from user movement as a vector of invasive species. *Midwest Fish & Wildlife Conference*. Cleveland, OH.
- Herrmann DL, Berland A, Prues A, Garmestani A, Shuster WD. 2018. Landforms of urban watersheds. *American Geophysical Union Fall Meeting*. Washington, DC.
- Berland A, Roman L, Vogt J. 2018. Street tree inventories: balancing data needs and data quality. *Partners in Community Forestry National Conference*. Irvine, CA.
- Fain J*, Berland A. 2018. Integrating digital technologies in a citizen science project about street trees. *East Lakes Division of the American Association of Geographers Annual Meeting*. Ada, OH.
- Schwarz K, Berland A, Herrmann DL. 2018. Does volunteer vegetation in shrinking cities create a false narrative of environmental justice? Results from Toledo, OH. *American Association of Geographers Annual Meeting*. New Orleans, LA.
- Berland A, Vogt J, Roman L. 2018. Can field crews telecommute? Conducting street tree inventories using Google Street View. *American Association of Geographers Annual Meeting*. New Orleans, LA.
- Herrmann DL, Schwarz K, Berland A. 2018. Towards a Rust Belt ecology. *American Association of Geographers Annual Meeting*. New Orleans, LA.
- Berland A. 2018. City trees and the citizen scientist: opportunities and barriers (invited panel session). *American Association of Geographers Annual Meeting*. New Orleans, LA.

- Schwarz K, Berland A, Herrmann DL. 2017. Green but not just? Rethinking environmental justice outcomes for shrinking cities. *Ecological Society of America Annual Meeting*. Portland, OR.
- Imboden A*, Gruver J, Berland A, Gregg A. 2017. Driving away food insecurity: Mapping Muncie, Indiana mobile market locations through GIS and community engagement. *OxyFood AFHVS/ASFS Annual Meeting*. Los Angeles, CA.
- Berland A. 2017. Monitoring approaches to understand the socio-ecological dynamics of the urban forest (invited panel session). *American Association of Geographers Annual Meeting*. Boston, MA.
- Berland A, Lockwood B. 2017. Increased street tree density and diversity over 13 years in central Indianapolis. *American Association of Geographers Annual Meeting*. Boston, MA.
- Berland A. 2017. Urban forest as green infrastructure – the role of street trees. *Indiana Local Technical Assistance Program (LTAP) Stormwater Drainage Conference*. West Lafayette, IN.
- Berland A. 2016. How well does a virtual street tree survey work? *Partners in Community Forestry National Conference*. Indianapolis, IN.
- Berland A, Lange D*. 2016. The promise and limitations of virtual street tree surveys. *American Association of Geographers Annual Meeting*. San Francisco, CA.
- Herrmann DL, Shuster WD, Garmestani AS, Berland A, Schwarz K, Chaffin BC, Hopton ME. 2015. Ecology for the shrinking city. *Ecological Society of America Annual Meeting*. Baltimore, MD.
- Schwarz K, Berland A, Herrmann DL, Hopton ME. 2015. The role of geographical context in the distribution of urban tree canopy cover: implications for environmental justice and urban sustainability planning. *9th IALE World Congress*. Portland, OR.
- Berland A, Goddard HC, Hopton ME. 2015. Integrating evapotranspiration into cost-effective stormwater management. *Ohio Stormwater Conference*. Sandusky, OH.
- Schwarz K, Berland A, Herrmann DL, Hopton ME. 2015. How does place shape environmental justice patterns? Terrain and tree canopy in Cincinnati, Ohio. *Association of American Geographers Annual Meeting*. Chicago, IL.
- Berland A, Goddard HC, Hopton ME. 2015. Integrating nature into stormwater management: evapotranspiration is central to cost-effective methods. *Association of American Geographers Annual Meeting*. Chicago, IL.
- Thurston HW, Garmestani A, Berland A, Hopton ME, Shuster WD. 2014. Economic impacts of green infrastructure. *The International Society of Exposure Science 24th Annual Meeting*. Cincinnati, OH.
- Berland A, Hopton ME. 2014. Comparing street tree structure to neighborhood characteristics: an issue of scale? *Association of American Geographers Annual Meeting*. Tampa, FL.
- Berland A, Elliott GP. 2013. Urban forest diversity and pest vulnerability in a residential landscape. *Association of American Geographers Annual Meeting*, Los Angeles, CA.

- Berland A. 2012. How does urban forest structure vary along an urbanization gradient? *Association of American Geographers Annual Meeting*, New York, NY.
- Berland A. 2011. Urbanization and tree canopy cover in the Twin Cities, MN, 1937-2009. *Doctoral Dissertation Showcase Poster Session*. University of Minnesota, Minneapolis, MN.
- Berland A. 2011. Urban forest changes associated with urbanization in the Twin Cities, MN. *Association of American Geographers Annual Meeting*. Seattle, WA.
- Manson SM, Nelson K, Jordan N, Vondracek B, Clower K, Brummel R, Berland A, Bonsal D, Brand G. 2010. Developing a model of ecosocial feedback for multifunctional agriculture as a pathway to land-change sustainability. *Global Land Project Open Science Meeting*, Tempe, AZ.
- Berland A, Manson SM. 2010. Urban forest ecosystem services along an urbanization gradient in the Twin Cities, MN. *Association of American Geographers Annual Meeting*. Washington, DC.
- Bauer M, Berland A, Whitmore J, Erickson T. 2008. Land cover and impervious surface classifications of the Twin Cities Metropolitan Area and St. Croix River Basin. *Minnesota GIS/LIS Consortium Annual Conference*. Rochester, MN.
- Bauer M, Berland A, Erickson T. 2008. Land cover and impervious classifications of the Minneapolis-St. Paul Metropolitan Statistical Area. *Minnesota Water Resources Conference*. St. Paul, MN.
- Berland A. 2008. Modeling past forest expansion in the Big Woods region of Minnesota. *Ecological Society of America Annual Meeting*. Milwaukee, WI.
- Berland A. 2008. Past vegetation change in the Big Woods region of Minnesota: Interactions among climate, vegetation, disturbance, and landscape. *Association of American Geographers Annual Meeting*. Boston, MA.
- Berland A. 2007. Modeling vegetation change in the Big Woods of Minnesota. *Association of American Geographers Annual Meeting*. San Francisco, CA.
- Berland A. 2005. A simple model for explaining fish community structure in western Minnesota's prairie potholes using lake size and hydrologic connectivity. *Undergraduate Midwestern Geography Symposium*. Macalester College, St. Paul, MN.
- Berland A. 2004. National wetlands inventory data compared with current wetland coverage in Eden Prairie, MN. *Minnesota GIS/LIS Consortium Annual Conference*. St. Cloud, MN.
- Berland A, Kelley DW. 2004. GIS analysis of lake characteristics and fish community structure. *Bush Foundation Program Grant Collaborative Inquiry Poster Session*. University of St. Thomas, St. Paul, MN.
- Berland A, Kelley DW. 2004. Recent change in wetland coverage in Eden Prairie, MN. *Bush Foundation Program Grant Collaborative Inquiry Poster Session*. University of St. Thomas, St. Paul, MN.
- Berland A, Kelley DW, Zimmer KD, Herwig B, Hanson M, Wright R, Younk J. 2004. Using GIS to analyze fish populations in shallow lakes in western Minnesota. *West Lakes Division of the Association of American Geographers Annual Meeting*. Oshkosh, WI.

Invited Presentations

- Berland A. 2023. Department of Geography and the Environment Colloquium, University of Denver.
- Berland A, Kuban AJ. 2022. Sustainability Stories: Media and Mapping to Promote Awareness of Sustainable Activities. Ball State University Immersive Learning Showcase.
- Berland A. 2021. Iowa State University Shade Tree Short Course.
- Berland A. 2020. TREE Fund Webinar Series.
- Berland A. 2019. Department of Geography and Planning Colloquium, University of Toledo.
- Berland A. 2019. Urban Forest Management and Planning Workshop, The Morton Arboretum.
- Berland A. 2017. Department of Biology Seminar, Ball State University.
- Berland A, Hopton ME. 2015. Combined Sewer Overflow Webinar Series. US EPA, Office of Water.
- Berland A, Hopton ME. 2015. Safe and Sustainable Water Resources Webinar Series. US EPA, Office of Research and Development.
- Berland A. 2015. Department of Geography Seminar, Ball State University.
- Berland A. 2014. Department of Geography and Geosciences Seminar, University of Louisville.
- Hopton ME, Berland A. 2014. Green Days, Environment and Natural Resources Program, Iceland University.
- Berland A, Hopton ME, Elliott GP. 2014. Department of Biological Sciences Seminar, Northern Kentucky University.
- Berland A. 2013. US EPA National Risk Management Research Laboratory.
- Berland A. 2012. Department of Geography & Urban Planning Seminar, University of Wisconsin Oshkosh.
- Berland A. 2011. EcoLunch Seminar, Miami University.
- Berland A. 2011. Geography Department Seminar, Macalester College.
- Berland A. 2011. Department of Geography Coffee Hour, University of Minnesota.
- Jordan N, Manson S, Nelson K, Vondracek B, Arnold T, Brummel R, Clower R, Berland A, Bonsal D, Brand G, Graves S. 2010. Crop and Soil Science Seminar Series, Department of Crop and Soil Sciences, Pennsylvania State University.
- Jordan N, Manson SM, Nelson K, Vondracek B, Arnold T, Brummel R, Clower K, Berland A, Bonsal D, Brand G, Graves S. 2010. Conservation Biology Seminar, University of Minnesota.
- Jordan N, Manson SM, Nelson K, Vondracek B, Arnold T, Brummel R, Clower K, Berland A, Bonsal D, Brand G, Graves S. 2010. Agroecology Graduate Program, University of Wisconsin-Madison.

- Bauer M, Berland A, Whitmore J. 2008. Presentation for the Minnesota Pollution Control Agency and US Environmental Protection Agency, St. Paul, MN.
- Bauer M, Berland A, Whitmore J, Erickson T. 2008. Presentation for the Minnesota Pollution Control Agency and Wisconsin Dept of Natural Resources, Taylors Falls, MN.
- Lorah PA, Berland A. 2005. Research presentation for the Board of Trustees, University of St. Thomas, St. Paul, MN.

GRANTS AND FELLOWSHIPS

External Grants and Fellowships

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| TreePeople Research Contract, Los Angeles' Urban Soil Future. Berland A (PI). (\$45,000). | 2023 |
| Florida Fish and Wildlife Conservation Commission Research Grants, Effects of invasive hydrilla on largemouth bass fishing inferred from state data and digital catch logs. Venturelli P (PI), Berland A (Co-PI). 2023. (\$68,309). | 2023 |
| IndianaView Grant Program, Implementing the 3-30-300 Rule for Urban Greenspace in Indiana Communities. Berland A (PI). (\$1,500). | 2023 |
| IndianaView Student Scholarship Program, Unmanned aircraft systems and remote sensing for natural resource management. Berland A (PI), Leever J (Co-PI). (\$750). | 2022 |
| IndianaView Grant Program, Tree canopy mapping using LiDAR data and color-infrared air photos. Berland A (PI). (\$1,500). | 2020 |
| US Department of Agriculture, Small Business Innovation Research Phase 2 grant, Azavea Inc. (PI), Berland A (subaward). Developing a web interface to use Google Street View imagery for street tree inventories. (\$5,970 subaward). | 2020 |
| US Department of Agriculture, Small Business Innovation Research Phase 1 grant, Azavea Inc. (PI), Berland A (subaward). Developing a web interface to use Google Street View imagery for street tree inventories. (\$2,982 subaward). | 2018 |
| TREE Fund, John Z. Duling Grant Program, Evaluating virtual street tree surveys as a tool for municipal forest management. Berland A (PI), Vogt J (Co-PI), Roman LA (Co-PI). (\$23,030). | 2016 |
| IndianaView Student Scholarship Program, Examining remote sensing applications to calculate ecological benefits provided by urban trees. Berland A (PI), Lange D (Co-PI). (\$750). | 2016 |
| National Research Council, Research Associateship Program; host: US Environmental Protection Agency. (Salary, research, & travel funds). | 2013-2015 |
| National Science Foundation, Doctoral Dissertation Research Improvement Grant, Modeling the impact of urbanization on ecosystem services in the Twin Cities of Minnesota (Award #1003138). Manson SM (PI), Berland A (Co-PI). (\$6,725). | 2010 |

Internal Grants and Fellowships

Provost Immersive Learning Pilot Grant, “Sustainability Stories: Media and Mapping to Promote Awareness of Sustainable Activities,” with Kuban A. (\$8,714).	2021
Immersive Learning Micro-Grant to facilitate GIS coursework with community partner organizations, College of Sciences and Humanities, Ball State University. (\$205).	2016
Doctoral Dissertation Fellowship, University of Minnesota, Graduate School. (\$22,500).	2010
Thesis Research Grant, University of Minnesota, Graduate School. (\$1,500).	2009
Graduate Research Partnership Program, University of Minnesota, College of Liberal Arts. (\$4,000).	2009
Summer Fellowship, University of Minnesota, Department of Geography. (\$3,500).	2007
Young Scholars Research Program Grant, University of St. Thomas. (\$3,000).	2004

HONORS AND AWARDS

Nominee, Mentor of the Year Award, Southern Regional Education Board	2023
Immersive Learning Faculty Award, Ball State University	2023
Finalist, Graduate Faculty Mentor Award, Ball State University	2023
Scientific and Technological Achievement Award, Honorable Mention, US Environmental Protection Agency	2021
Faculty of the Year Award, Department of Geography, Ball State University, Presented by the local chapter of Gamma Theta Upsilon student group	2018, 2022
Finalist, Outstanding Junior Faculty Award, Ball State University	2018
Indiana Emergency Response Commission Award for special projects work with the Hendricks County Local Emergency Planning Committee	2017
SPA Fellow, Sponsored Projects Administration, Ball State University	2015-2016
Scholar-Athlete Recognition, Intercollegiate Tennis Association	2005
GIS Intern, Minnesota Department of Natural Resources	2004-2005
Bob Garhart Award for Undergraduate Research, University of St. Thomas	2004

TEACHING AND ADVISING

Instructor of Record (*excludes independent studies and internship supervision*)

Student Evaluations: Median score of 4.88 out of 5 across all Ball State courses (2015-2024)

Ball State University, 2015-present

GEOG 265	Introduction to Geographic Information Systems
GEOG 321	Urban Geography
GEOG 438	Advanced Geographic Information Systems Analysis
GEOG 448/548	Geographic Information System Design
GEOG 625	GIS for Environmental Science
DSCI 607	Data Analytics for Environmental Sciences (developed online course)

Miami University, 2011-2013

GEO 121	Earth's Physical Environments
GEO 441/541	Geographic Information Systems
IES 175	Environmental Science Seminar
IES 275	Principles of Environmental Science
IES 431/531	Principles and Applications of Environmental Science
IES 511	Environmental Measurements

University of Minnesota, 2010

GEOG 1403	Biogeography of the Global Garden
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Graduate Advising – Primary Advisor

<i>In progress</i>	Esther Ayeni	Ph.D. Environmental Sciences
2023	Abdul Elnajdi	Ph.D. Environmental Sciences
2022	Jackeline Fain	M.S. Geography
2022	Laurynn Thieme	M.S. Geography
2021	Heather Richards	M.S. Geography
2017	Dan Lange	M.S. Geography
2013	Travis Drury	M.En. Environmental Sciences

Graduate Advising – Committee Member

<i>In progress</i>	Raymond Asamoah	M.S. Geology & Natural Resources
<i>In progress</i>	Esther Atutey	Ph.D. Environmental Sciences
<i>In progress</i>	Gbemisola Bamiduro	Ph.D. Environmental Sciences
<i>In progress</i>	Rocco Boyd	M.S. Biology
<i>In progress</i>	Emily Hayes	Ph.D. Environmental Sciences
<i>In progress</i>	Josef Hrabowski	Ph.D. Environmental Sciences
<i>In progress</i>	Brooke Karasch	Ph.D. Environmental Sciences
<i>In progress</i>	David McFarland	Ph.D. Environmental Sciences
<i>In progress</i>	Aaron Muehler	Ph.D. Environmental Sciences
<i>In progress</i>	Wade Schaeffer	M.S. Biology
<i>In progress</i>	David Shearer	Ph.D. Environmental Sciences
<i>In progress</i>	Luisa Velásquez	Ph.D. University of Lleida (Spain)
<i>In progress</i>	Paton Willbanks	M.S. Biology
<i>In progress</i>	Carson Wright	Ph.D. Environmental Sciences
2024	Ahmed Benkhayal	Ph.D. Environmental Sciences

2023	Blaik Duran	M.S. Biology
2023	Corwyn Hall	M.S. Biology
2023	Tyler McGeorge	M.S. Geology & Natural Resources
2023	Kathryn McGowan	M.S. Biology
2023	Jessica Weir	Ph.D. Environmental Sciences
2022	Bethany Darby	M.S. Biology
2022	Cole Baird	M.S. Biology
2022	Lara Jones	M.S. Biology
2022	Zachary McDonald	M.S. Biology
2021	Alex Flynt	M.S. Geography
2020	Mitchell LaRue	M.S. Geography
2019	Mario Minder	Ph.D. Environmental Sciences
2019	Jeffrey Robbins	M.S. Biology
2019	Kirsten Vacura	M.S. Biology
2018	Robert Shields	Ph.D. Environmental Sciences
2017	Caleb Saylor	M.S. Geography
2014	Matthew Hallett	M.En. Environmental Sciences
2013	Chad Toussant	M.En. Environmental Sciences

Undergraduate Research Assistants Mentored

2022	Jo Leever	Geography
2020	Riley McCreary	Geography
2018-2019	Daniel Kern	Geography
2017	Rebecca Stroud	Geography
2017	Maurizio Lovinello	Geography
2016-2017	Garrett Fuelling	Geography
2016	Mitchell Grime	Geography

Pedagogical Development

Teaching and Technology Summit, Ball State University	2024
High Impact Practices (HIPs) Mini-Course, Ball State University	2023
How to be an Ally/Advocate for People from Systemically Underrepresented Groups, Ball State University	2023
Beautiful Canvas Pages Made Easy, Ball State University	2023
Provost Faculty Summit: Equitable, Inclusive, and Innovative Practices, Ball State Univ.	2023
Student Success Summit, Ball State University	2022
Make Your Canvas Course Accessible, Ball State University	2022
Bootcamp for Multimodal Teaching and Learning, Ball State University	2020
Instructional Technology Workshop, Ball State University	2018
Faculty Learning Community for New Tenure Track Faculty, Ball State University	2016
New Faculty Academy, Ball State University	2015
Instructional Technology Workshops, Ball State University	2015
Preparing Future Faculty Retreat, University of Minnesota	2010
Preparing Future Faculty Course (Teaching in Higher Ed), University of Minnesota	2008

PROFESSIONAL SERVICE

Committee Memberships

University-wide, Ball State University

Member, University Core Curriculum Director Search Committee	2024
Member, University Core Curriculum Task Force	2023-2024
Member, Faculty Council	2023-Present
Member, Public Safety Traffic Appeals Committee	2023-Present
Member, Provost Immersive Learning Grant Review Committee	2023
Member, Advisory Council on Scholarship	2021-2023

College of Sciences and Humanities, Ball State University

Member, College of Sciences and Humanities Restructuring Task Force	2022-2023
Member, Environmental Sciences Student Award Selection Committee	2021, 2023
Member, Promotion and Tenure Committee	2020-2021
Co-Chair, Data Analytics Initiative	2019-2021

Department of Geography and Meteorology, Ball State University

Member, Promotion and Tenure Committee	2021-2024
Chair, Promotion and Tenure Committee	2020-2021
Member, Merit Salary Evaluation Committee	2020-2021
Chair, Faculty Search Committee	2017-2018
Member, Assessment Committee	2015-2022
Member, Merit Salary Evaluation Committee	2015-2017

Indiana Geographic Information Council

Member, Conference Planning Committee	2019-2022
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US Environmental Protection Agency

Steering Committee, Network for Cincinnati EPA Trainees (NCET)	2015
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Organization of Conferences and Meetings

Session moderator, <i>Indiana GIS Conference</i> , Muncie, IN	2022
Session moderator, <i>Indiana Geographic Information Council Virtual Conference</i>	2020
Field trip co-organizer, Mile High Trees: Riverfront Revitalization, Urban Development and a Tour of Denver's Urban Green Space. <i>American Association of Geographers Annual Meeting</i> , Denver, CO (canceled due to COVID-19 pandemic)	2020
Paper session organizer, Arboriculture and Urban Forestry, <i>American Association of Geographers Annual Meeting</i> , San Francisco, CA	2016
Paper session co-organizer for four sessions, Trees in the city, <i>Association of American Geographers Annual Meeting</i> , New York, NY	2012
Paper session co-organizer, Urban forests: patterns and drivers, <i>Association of American Geographers Annual Meeting</i> , Seattle, WA	2011

Facilitator, New TA Orientation Break-Out Session, The Graduate School
University of Minnesota 2008

Public Outreach

Delaware County Invasive Plant Project, Steering Committee	2020-Present
Red-tail Land Conservancy, ecological restoration volunteer and member	2017-Present
Urban Forestry Committee, City of Muncie, IN, Secretary	2018-Present
Urban Forestry Committee, City of Muncie, IN, Member at-large	2016-Present
Muncie Sanitary District, Bureau of Water Quality	2024
Created maps of fish distributions in the White River, Delaware County, IN	
White River Cleanup, Crew Leader	2018-2021
Buffalo Sewer Authority Stormwater Tree Analysis Technical Advisory Committee, City of Buffalo, NY	2018
Western Wildlife Corridor, ecological restoration volunteer and member	2013-2015
Talawanda Science Week faculty host for 3 rd and 4 th grade visitors, Miami University	2012

Journal Reviewing (number of unique manuscripts)

<i>Arboriculture & Urban Forestry</i> (2)	<i>Intl Soil and Water Conservation J</i> (1)
<i>Building and Environment</i> (1)	<i>ISPRS Intl J Geo-Information</i> (2)
<i>Canadian Journal of Forest Research</i> (1)	<i>Journal of Environmental Management</i> (1)
<i>Cities and the Environment (CATE)</i> (3)	<i>Journal of Urban Ecology</i> (1)
<i>Citizen Science: Theory and Practice</i> (1)	<i>Land</i> (1)
<i>City and Environment Interactions</i> (2)	<i>Land Use Policy</i> (1)
<i>Data</i> (2)	<i>Landscape and Urban Planning</i> (11)
<i>Ecological Applications</i> (2)	<i>The Northeastern Geographer</i> (1)
<i>Ecological Engineering</i> (1)	<i>PLOS ONE</i> (6)
<i>Ecology and Society</i> (2)	<i>Remote Sensing</i> (5)
<i>Environment and Planning B</i> (1)	<i>Remote Sensing Letters</i> (2)
<i>Environment, Development, and Sustainability</i> (1)	<i>Science of the Total Environment</i> (2)
<i>Environmental Research</i> (1)	<i>Sustainability</i> (3)
<i>Forests</i> (4)	<i>Sustainable Cities and Society</i> (2)
<i>Health and Place</i> (1)	<i>Trees</i> (1)
<i>Infrastructures</i> (1)	<i>Urban Ecosystems</i> (3)
<i>Intl J Biodiversity and Conservation</i> (1)	<i>Urban Forestry & Urban Greening</i> (14)
<i>Intl J Env'tal Research and Public Health</i> (1)	<i>Water</i> (2)
<i>Intl J Remote Sensing</i> (2)	

Proposal Review for External Funding Agencies

Maryland Sea Grant, research proposal review	2023
National Science Foundation, Human-Environment and Geographical Sciences Program, research proposal review	2022
Indiana Department of Natural Resources. Community and Urban Forestry Assistance Grant proposal review panelist	2021

Natural Sciences and Engineering Research Council (NERSC) of Canada: Collaborative Research and Training Experience proposal review	2019
National Science Foundation. Hydrologic Sciences Program, research proposal review	2019
National Environment Research Council (UK), Constructing a Digital Environment Open Call, research proposal review	2019
National Science Foundation. Decision, Risk, and Management Sciences Program, research proposal review	2017
BiodivERsA 2015 joint call for proposals on <i>Understanding and managing biodiversity dynamics to improve ecosystem functioning and delivery of ecosystem services in a global change context</i> , research proposal review	2016

Professional Memberships

American Association of Geographers (lifetime member)	2004-Present
Ecological Society of America	2008-2016
Indiana Geographic Information Council	2016-Present
Minnesota GIS/LIS Consortium	2004-Present