

Short CV – Ishi Buffam



Current position

Senior Lecturer, Department of Landscape Architecture, Planning and Management, Swedish University of Agricultural Sciences (SLU). Deputy Head of Department for Research.

Previous positions

2019 – 2021 Researcher, Department of Landscape Architecture, Planning and Management, Swedish University of Agricultural Sciences (SLU)

2016-2019 Associate Professor with Tenure, Department of Biological Sciences, University of Cincinnati, USA

2010-2016 Assistant Professor, Department of Biological Sciences, University of Cincinnati, USA

2007-2010 Post-doctoral scholar, Department of Zoology, University of Wisconsin-Madison, USA

Education

2007 PhD in Forest Ecology and Management, SLU, with dissertation topic: Linking landscape characteristics, streamwater chemistry, and brown trout (*Salmo trutta*) distributions in a boreal stream network. Head Advisor: Hjalmar Laudon

1999 Master of Environment Sciences, University of Virginia, USA

1994 Bachelors of Science in Chemistry, Haverford College, USA

Funded Research Projects – Selection

2020-2022. In it for the long-term: How does the provision of ecosystem services from green roofs change as the ecosystems age? FORMAS. Lead PI (3 000 000 SEK)

2021- 2022. Nature-Based Solutions in Support of the Sustainable Development Goals: Expanding Opportunities in Ethiopian Cities. FORMAS. Lead PI. (195 216 SEK).

2018-2019. Urban Green Infrastructure for Optimizing Long-Term Provision of Ecosystem Services: Developing a Universal Framework Under Different Cultures and Climates. FORMAS. Co-PI (1 900 000 SEK)

2017 – 2018. Characterizing the Link Between Algal Bloom Biomass and Methane Production in Ohio Reservoirs. U.S. Geological Survey. Lead PI (300 000 SEK)

Publications – 6 recent (of 71 total)

Buffam, I., F.A. Hagemann, T. Emilsson, D. Gamstetter, A.M. Palsdottir, T.B. Randrup, K. Yeshitela, and Å. Ode Sang. 2022. Priorities and barriers for urban ecosystem service provision: A comparison of stakeholder perspectives from three cities. *Frontiers in Sustainable Cities*. [doi:10.3389/frsc.2022.838971](https://doi.org/10.3389/frsc.2022.838971)

Hintz C.L., Booth M.T., Newcomer-Johnson T.A., Fritz K.M., and I. Buffam. 2022. Urban buried streams: Abrupt transitions in habitat and biodiversity. *Science of the Total Environment* [doi:10.1016/j.scitotenv.2022.153050](https://doi.org/10.1016/j.scitotenv.2022.153050)

Mitchell, M.E., T. Emilsson, and I. Buffam. 2021. Carbon, nitrogen, and phosphorus variation along a green roof chronosequence: implications for green roof ecosystem development. *Ecological Engineering* 164: 106211. [doi: 10.1016/j.ecoleng.2021.106211](https://doi.org/10.1016/j.ecoleng.2021.106211)

Buffam, I., K. Bishop and H. Laudon. 2021. Influence of the landscape template on chemical and physical habitat for brown trout within a boreal stream network. *Frontiers in Water*. [doi: 10.3389/frwa.2021.683070](https://doi.org/10.3389/frwa.2021.683070)

Buffam, I. and O. Starry. 2020. Overview: The role of spatial heterogeneity in shaping green roof ecosystems. *Journal of Living Architecture*, 7(2): 1-4. [doi: 10.46534/jliv.2020.07.02.001](https://doi.org/10.46534/jliv.2020.07.02.001)

Berberich, M., J.J. Beaulieu, T.L. Hamilton, S. Waldo and I. Buffam. 2019. Spatial variability of sediment methane production and methanogen communities within a eutrophic reservoir: importance of organic matter source and quantity. *Limnology and Oceanography*. [doi: 10.1002/lno.11392](https://doi.org/10.1002/lno.11392)

Other scientific merits (selected)

Author/co-author of >70 peer-reviewed scientific articles in the fields of catchment biogeochemistry, landscape and ecosystem ecology, and urban sustainability. (H-index: 28; Avg. Citations per article: 54; Citations: 3320)

Lead supervisor for 4 PhD students, all completed; lead or co-supervisor for 12 masters students and 27 bachelors students who completed their research theses; and currently co-supervisor for 1 post-doctoral scholar.

Associate Editor for two journals: *Biogeochemistry* and *Journal of Living Architecture*

Current Teaching Responsibilities at SLU

COURSE	LEVEL	ROLE	YEARS
Climate Change – Effects on the Landscape and Potential Solutions (LK0401)	BS	Lead teacher	2021 – pres.
Climate Change – Landscape in Transition (LK0412)	MS	Lead teacher	2019 – pres.
Stadens Utmaningar (Challenges of the City) (LK0194)	MS	Co-teacher	2019 – pres.
Blue-Green Infrastructure	MS	Guest lecturer	2020 – pres.
Watershed Ecology and Biogeochemistry	PhD	Guest lecturer	2020 – pres.

Collaboration and communication with external stakeholders (selected examples)

2022	Panelist, Human-Land Live Podcast on “Research on Landscapes for a Sustainable Society”
2022	Convener and Panelist, Public Workshop: “Ecosystem Services from Aging Green Roofs”
2022	Moderator, Webinar on “Visualizing the future – adapting to a changing climate”
2019	Led Stakeholder Workshops, “Urban Green Infrastructure in Support of the Sustainable Development Goals” in three cities: Malmö (SE), Cincinnati (US), Addis Ababa (ET)
2015	Live radio interview, “The Many Benefits of Green Roofs”, Cincinnati Edition Radio Show, WVXU-Cincinnati, USA

Selected Awards and Honors

2022	Annual prize in pedagogy, SLU Alnarp Student Union
2020	AGU Outstanding Reviewer, American Geophysical Union
2019	SLU Futures Lab, Participating Researcher
2016	National Academies Education Fellow in the Life Sciences
2016	Annual Environmental Teacher Award, Greater Cincinnati Earth Coalition
2012	University of Cincinnati Geospatial Information and Environmental Sensor Networks Excellence in Faculty Research Award