



Barbara Sowińska-Świerkosz, associate professor

Affiliation

University of Life Sciences in Lublin, Faculty of Environmental Biology, Department of Hydrobiology and Ecosystem Protection, Subdepartment of Landscape Ecology and Nature Conservation

Dobrzańskiego street 37, 20-262 Lublin

Contact details: phone: 81-461-00-61 ext. 320

e-mail address: barbara.sowinska@wp.pl; barbara.swierkosz@up.lublin.pl

V-Director of Doctoral School of the University of Life Sciences in Lublin

Education

2006 – Master's degree in Civil Engineering at the Lublin University of Technology, Faculty of Civil and Sanitary Engineering, major: Civil Engineering, specialty: Protection of Monuments of Architecture and Urban Planning; Title of dissertation: The application of landscape quality objectives for the projected "Roztocze–Solska Forest Biosphere Reserve" as an instrument for shaping the visual context of historic buildings

2011 – PhD in Agricultural Sciences in the discipline of Environmental Protection and Engineering, specialty of Landscape Ecology, University of Life Sciences in Lublin,

Faculty of Agrobioengineering; Title of doctoral dissertation: Landscape quality objectives of the projected "Roztocze–Solska Forest Biosphere Reserve" as an instrument of rural areas environment design

2019 – Habitation in Environmental engineering, mining and energy; Wrocław University of Environmental and Life Science, The Faculty of Environmental Engineering and

Geodesy, Field: Engineering and technology; Title of achievement: Landscape quality indicators for areas with varying degrees of anthropogenic transformation

Research interest

Assessment of the effectiveness of Nature-based solutions projects

Nature-based solutions impacts on landscape quality and social perception

Acceptance baseline for Nature-based solutions projects

Co-design and co-development of Nature-based solutions implementation

Evaluation of ecosystem services provided by urban ecosystems

Use of remote sensing data in landscape analysis

Landscape quality assessment: spatial, ecological, cultural and visual dimensions

The most important publications:

1. Sowińska- Świerkosz B., Garcia J., Wendling L. 2024. Linkages between the concept of nature-based solutions and the notion of landscape. *Ambio* 2024 Vol. 53 s. 227–241, DOI: 10.1007/s13280-023-01935-z
2. Sowińska- Świerkosz B., Garcia J. 2022. What are nature-based solutions (NBS)? Setting core ideas for concept clarification. *Nature-Based Solutions* Vol.2 Article number 100009, DOI: 10.1016/j.nbsj.2022.100009
3. Sowińska- Świerkosz B., Soszyński D., 2022. Spatial indicators as a tool to support the decision-making process in relation to different goals of rural planning. *Land Use Policy* Vol. 119 Article number 106180, DOI: 10.1016/j.landusepol.2022.106180
4. Wojcik-Madej J., Sowińska- Świerkosz B., 2022. Pre-existing interventions as NBS candidates to address societal challenges. *Sustainability* 2022 Vol. 14 Iss. 15 Article number 9609, DOI: 10.3390/su14159609
5. Sowińska-Świerkosz B., Chmielewski T.J. Comparative Assessment of Public Opinion on the Landscape Quality of Two Biosphere Reserves in Europe. *Environmental Management*. 2014. 54: 531-556. DOI: 10.1007/s00267-014-0316-9
6. Sowińska-Świerkosz B., Soszyński D. Landscape structure versus the effectiveness of nature conservation: Roztocze region case study (Poland). *Ecological Indicators*. 2014. 43:143-153. DOI: 10.1016/j.ecolind.2014.02.018
7. Sowińska-Świerkosz B., Chmielewski T.J. A new approach of the identification of Landscape Quality Objectives (LQOs) as a set of indicators. *Journal of Environmental Management*. 2016. 184: 596–608. DOI: 10.1016/j.jenvman.2016.10.016
8. Sowińska-Świerkosz B. Index of Landscape Disharmony (ILDH) as a new tool combining the aesthetic and ecological approach to landscape assessment. *Ecological Indicators*.2016. 70: 166–180.DOI: 10.1016/j.ecolind.2016.05.038
9. Sowińska-Świerkosz B. The application of surrogate measures of ecological quality assessment: the introduction of the Indicator of Ecological Landscape Quality (IELQ). 2017. *Ecological Indicators* 73: 224–234. DOI: 10.1016/j.ecolind.2016.09.019
10. Sowińska-Świerkosz B. Review of indicators of cultural heritage: concepts, methods of assessment and categorization schemes. *Ecological Indicators*, 2017. 81: 526-54. DOI: 10.1016/j.ecolind.2017.06.029
11. Sowińska-Świerkosz B., Soszyński D. The index of the Prognosis Rural Landscape Preferences (IPRLP) as a tool of generalizing peoples' preferences on rural landscape.

Journal of Environmental Management. 2019. 248: 109272. DOI: 10.1016/j.jenvman.2019.109272

12. Sowińska-Świerkosza B., Michalik-Śnieżek M. 2020. The Methodology of Landscape Quality (LQ) Indicators Analysis Based on Remote Sensing Data: Polish National Parks Case Study. *Sustainability* 12(7):2810. DOI: 10.3390/su12072810

13. Sowińska-Świerkosza B. 2020. Critical review of landscape-based surrogate measures of plant diversity. *Landscape Research* 45(7): 819-840 DOI: 10.1080/01426397.2020.1795095

14. Sowińska- Świerkosz, B., Michalik-Śnieżek, M., Bieske-Matejak, A. **2021**. Can Allotment Gardens (AGs) Be Considered an Example of Nature-Based Solutions (NBS) Based on the Use of Historical Green Infrastructure? *Sustainability*, 13, 835. <https://doi.org/10.3390/>

Principal investigator and co-investigator in international and national research projects

Project Improvement of the ecological status and optimization of the tourism use of the catchment basin of the Miejskie–Kleszczów lake complex as a pilot project for implementation in the post-lake areas of the River Bug Euroregion Task entitled: Architectural traditions of Polesie Lubelskie. PHARE Cross-border Cooperation Program, Small Projects Fund, 2006 – co-investigator.

Participation in the program “Alter-Net - A Long Term Biodiversity, Ecosystem and Awareness Research Network”. 6th European Union Framework Program, 2007–2008

Technical Report on the Protection of Cultural Values implemented as part of the Plan for the Protection of Polesie National Park and Natura 2000 areas within the Park, 2013, principal investigator

Technical Report on the Protection of Cultural Values implemented as part of the Plan for the Protection of Szczebrzeszynski Landscape Park , 2021, principal investigator

Placements in domestic and foreign scientific or academic centres

Monthly internship at the Lviv Technical University's Institute of Geodesy, Department of Photogrammetry and Geoinformatics, December 2018 – February 2019, Lviv

Weekly Staff Mobility for training, Erasmus + Programme, AERES University of Applied Sciences, Netherlands, 2019

Weekly Staff Mobility for teaching, Erasmus + Programme, Insitutu Politecnico de Beja, Portugal, 2020

Weekly Staff Mobility for training, Erasmus + Programme, Department of Civil and Environmental Engineering, Universitat Politècnica de Catalunya-BarcelonaTech, 2023