

Promotion Committee Report on the Appointment of Professor doc. RNDr. Tomáš Václavík, Ph.D., in the Field of Ecology

Doc. Tomáš Václavík submitted his application for the initiation of the procedure for appointment as professor on March 31, 2025, in accordance with Act No. 52/2025 Coll., amending Act No. 111/1998 Coll., on Higher Education Institutions. This application was reviewed on May 7, 2025, by the Scientific Council of the Faculty of Science, Palacký University in Olomouc, which approved the committee that subsequently corresponded via emails and online in the following composition:

PROMOTION COMMITTEE FOR THE APPOINTMENT OF PROFESSOR

Chairperson: prof. Ing. Dr. Bořivoj Šarapatka, CSc.

Palacký University in Olomouc, Faculty of Science, Department of Ecology and

Environmental Sciences

Members: prof. MVDr. Emil Tkadlec, CSc.

Palacký University in Olomouc, Faculty of Science, Department of Ecology and

Environmental Sciences

prof. Ing. Petr Sklenička, CSc.

Czech University of Life Sciences in Prague, Faculty of Environmental Sciences,

Department of Landscape and Urban Planning

prof. James M. Bullock, Ph.D.

The UK Centre for Ecology & Hydrology (UKCEH)

prof. Ing. Zdeněk Žalud, Ph.D.

Mendel University in Brno, Institute of Agrosystems and Bioclimatology

OPINION OF THE EVALUATION COMMITTEE

Based on the materials submitted by the candidate for the appointment procedure, the committee evaluated the teaching and scientific activities of doc. Tomáš Václavík and provides the following report:

Candidate Introduction

Doc. RNDr. Tomáš Václavík, Ph.D., completed his master's and RNDr. studies at the Faculty of Science, Palacký University in Olomouc, specializing in Ecology and Environmental Sciences. He then pursued further studies at the University of North Carolina at Charlotte, USA, under the mentorship of Prof. Meentemeyer. In 2011, he earned a Ph.D. in Geography – Applied Geoinformation Sciences by successfully defending his dissertation titled *Frontiers in Invasive Species Distribution Modeling (iSDM):* Assessing effects of absence data, dispersal constraints, stage of invasion and spatial dependence. During his doctoral studies, he received several awards, including the John Fraser Hart Award, Best

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Ph.D. Student Paper (2009 and 2010), NASA-MSU Professional Enhancement Award (2009), and the US-International Association for Landscape Ecology Award (2011).

Following the completion of his Ph.D., he gained valuable experience starting in 2011 through a postdoctoral fellowship at the Helmholtz Centre for Environmental Research – UFZ in Germany, where he worked as a researcher in the Department of Computational Landscape Ecology under the guidance of Prof. Seppelt. Simultaneously, beginning in 2011, he started teaching part-time and working at the Department of Ecology and Environmental Sciences at Palacký University in Olomouc. Since 2018, he has been employed there full-time, initially as an assistant professor and, since 2021, as an associate professor in the field of Ecology, following his habilitation with the thesis *titled Landscape Ecology in the Anthropocene: Spatial Aspects of Human–Environment Interactions Across Scales*.

Since 2018, he has also been involved in research projects at the Department of Climate Change Impacts on Agroecosystems at the Global Change Research Institute (CzechGlobe) of the Czech Academy of Sciences in Brno. Since 2023, he has closely collaborated with Korea University in Seoul as an Adjunct Faculty member within the framework of the K-CLUB International Collaboration Hub.

His main area of expertise is landscape ecology and applied geoinformation sciences, including spatial and predictive modeling in GIS. He focuses on understanding natural and human-induced processes that lead to changes in landscape structure, land use patterns, and their impacts on biodiversity and ecosystem services.

Teaching Activities

Doc. Václavík is an experienced and dedicated educator. His involvement in teaching began during his undergraduate and master's studies, when he worked as an instructor for educational programs at the Sluňákov Environmental Education Center. He commenced his professional teaching career during his doctoral studies in the United States, where he led lab exercises and seminars for courses such as *Environmental Modelling in GIS* and *Quantitative Analysis*. He continues to teach *Environmental Modelling in GIS* in English at the Faculty of Science, Palacký University in Olomouc. Since 2011, he has also been lecturing on *Landscape Ecology* and contributes to teaching of three additional courses.

During his tenure at the Helmholtz Centre for Environmental Research – UFZ in Leipzig, he conducted numerous seminars and colloquia on topics such as species distribution modeling, spatial analyses, cluster analyses, and the evaluation of ecosystem services. Both abroad and in the Czech Republic, Doc. Václavík has organized or participated as an instructor in many professional workshops and summer schools. Notable activities include the summer school *Modelling Policy Impacts on Ecosystem Services and Biodiversity* as part of the BESTMAP project (Horizon 2020), a summer school on *Archetype Analysis in Sustainability Research* at Humboldt University in Berlin, and a series of workshops titled *FAWKES* (Facilitated Workshops on Ecosystem Services), co-organized by UFZ in Leipzig and the University of Leeds in the United Kingdom.

Doc. Václavík is also actively engaged in supervising students. Under his guidance, more than 20 students have successfully defended their master's theses, and approximately 10 students have completed their bachelor's theses. He has supervised three doctoral students, one of whom has already successfully defended his dissertation. Additionally, he co-supervised two doctoral students who completed their Ph.D. studies at UFZ in Leipzig, with official supervision provided by the University of Halle. Beyond this, he has mentored several interns, including three postdoctoral researchers, two of whom were international. These postdoctoral researchers were employed at the Department of Ecology and Environmental Sciences thanks to his European research grant.

His teaching and mentoring expertise extend to memberships in doctoral program boards for *Physical Geography and Geoecology* at Charles University and *Environmental Modelling* and *Environmental Earth Sciences* at the Czech University of Life Sciences. Doc. Václavík also regularly serves as an

external reviewer for theses at various academic levels and is a member of state examination committees, including nine doctoral committees and one habilitation committee.

This promotion committee, having reviewed the above-mentioned facts, concludes that doc. Václavík's teaching activities are extensive, impactful, and of significant importance to the bachelor's, master's, and doctoral study programs in the field of Ecology at the Faculty of Science, Palacký University Olomouc.

Scientific Research and Publication Activities

Doc. Václavík is a renowned expert in the fields of landscape ecology, landscape epidemiology, land systems science, biodiversity and ecosystem service assessment, species distributions, and agroecosystems. His work is interdisciplinary, combining ecological theory with spatial analysis and GIS computation. He employs modern statistical approaches and machine learning tools, focusing on predictive modeling of human—environment interactions.

Doc. Václavík has contributed to various international research projects focused on sustainable land management in agroecosystems. He is a co-author of the concept of land system archetypes, which has been applied at the European level to evaluate agricultural landscapes in various EU case studies. In recent years, he led a working group within an H2020 project aimed at modeling the impacts of agrienvironmental policies on biodiversity and ecosystem services in agricultural landscapes. Another key area of his research is landscape epidemiology, where he has participated in projects assessing the influence of landscape parameters on the distribution of ticks and the occurrence of tick-borne diseases, including the spatiotemporal dynamics and risk prediction of various pathogens.

The results of his research have been published in over 80 scholarly works, 59 of which are indexed in the Web of Science (WoS) database. His total citation count on WoS stands at 3,606 (h-index = 28), and on Google Scholar, it reaches 5,648 (h-index = 32). Among his WoS-indexed publications, 19 articles have appeared in journals with an impact factor exceeding 6, including Science, Trends in Ecology and Evolution, Annual Review of Phytopathology, Nature Communications, Global Environmental Change, One Earth, and Environmental Research Letters. He is listed as the first or corresponding author on 20 publications and he supervised 14 studies where he is credited as the last author. His most cited work, published in Nature Communications, which he led as a guarantor of a project's working group, has received 467 citations on WoS and 694 citations on Google Scholar. Three of his publications, focusing on the impacts of agricultural activities on biodiversity, systematic analysis of ecosystem services, and land system archetypes, are listed on WoS as "Highly Cited Papers". Additionally, he has authored or co-authored three book chapters and several policy briefs aimed at informing decision-makers. For his scientific achievements, doc. Václavík has received the Dean's Award at the Faculty of Science, Palacký University, on three occasions. He has presented his findings at more than 80 conferences, predominantly international, including seven invited lectures or keynote presentations.

Doc. Václavík has also served as the principal investigator of projects funded by both Czech and international research agencies. During his Ph.D. studies, he was part of research teams supported by the National Science Foundation (NSF) and the USDA Forest Service. From 2011 to 2018, while in Germany, he led working groups in several projects funded by the German Federal Ministry for Education and Research (BMBF) and the European Biodiversity Partnership (Biodiversa+). At Palacký University, he was the principal investigator and leader of a working group in a project under the European Horizon 2020 framework program. Additionally, he contributed to projects funded by the Technology Agency of the Czech Republic (TAČR) and the Czech Agency for Medical Research (AZV).

Tomáš Václavík is also active in editorial boards of scientific journals and professional societies. From 2013 to 2015, he served as an associate editor for the international journal Biological Invasions (IF =

2.9), from 2015 to 2020 for Diversity and Distributions (IF = 5.1). He currently served as an associate editor for Land (IF = 3.2) and the Journal of Landscape Ecology. He is also a sought-after reviewer for international journals, as evidenced by review requests from more than 35 periodicals. He is currently a member of six scientific and professional societies. Since 2024, he has served on the executive committee of the Czech Association for Landscape Ecology (IALE-CZ).

The international recognition of doc. Václavík and the impact of his work are further evidenced by three letters from prominent international experts, all of whom unanimously recommend his appointment as professor to the Dean of the Faculty of Science:

- **Prof. Ross K. Meentemeyer**, Goodnight Distinguished Professor of Geospatial Analytics, Director of the Center for Geospatial Analytics at North Carolina State University, USA
- Prof. Dr. Ralf Seppelt, Head of Research Unit Ecosystems of the Future, Co-Head of the Department for Computational Landscape Ecology, Helmholtz Centre for Environmental Research – UFZ, Germany
- **Prof. Dr. Anna Cord**, Agro-ecological Modeling Group, Institute of Crop Science and Resource Conservation (INRES), University of Bonn, Germany

Based on the above-mentioned facts and a thorough review of the professional and teaching activities of doc. RNDr. Tomáš Václavík, Ph.D., the committee concludes that he is an internationally recognized and accomplished scientist in the field of landscape ecology and applied geoinformation sciences. Doc. Václavík has made substantial contributions to interdisciplinary research, particularly in modeling human-nature interactions and evaluating biodiversity and ecosystem services, with his scientific achievements earning widespread international acclaim. His publication record, featuring highly impactful works and numerous citations, highlights his ability to produce original and innovative insights. Additionally, doc. Václavík is an experienced educator who actively engages in teaching and mentoring students across all academic levels. The committee is confident in his exceptional scientific, pedagogical, and organizational expertise and strongly recommends that the Scientific Council of the Faculty of Science, Palacký University in Olomouc, approve the appointment of doc. Václavík as a professor in the field of ecology.

COMMITTEE VOTING

A secret vote was conducted using the online application anketa.upol.cz. The committee members approved the above-mentioned opinion and resolution, which is being submitted to the Scientific Council of the Faculty of Science, Palacký University Olomouc, in the following wording: The committee recommends the appointment of doc. RNDr. Tomáš Václavík, Ph.D., as a professor in the field of Ecology.

Voting Results:

Total number of committee members: 5
Number of votes cast: 5
Number of affirmative votes: 5
Number of negative votes: 0
Abstentions: 0

In Olomouc, November 8, 2025

Prof. Dr. Ing. Bořivoj Šarapatka, CSc. Chairman of the Promotion Committee