

CURRICULUM VITAE



Name **Edina Csákvári**
E-mail address csakvari.edina@ecolres.hu
Webpage <https://ecolres.hu/en/Edina.CSAKVARI>

EDUCATION

2015–2018 PhD student, Szent István University, Doctoral School of Environmental Sciences, Gödöllő
2013–2015 MSc in Agricultural Environmental Management Engineering, Szent István University, Faculty of Agricultural and Environmental Sciences, Gödöllő
2009–2013 BSc in Nature Conservation Engineering, West Hungarian University, Faculty of Forestry, Sopron

LANGUAGE

English, intermediate (B2)
Slovak, intermediate (B2)

RESEARCH ACTIVITY

2019 – present: research assistant, Centre for Ecological Research, Institute of Ecology and Botany, Vácrátót

- Studying regeneration potential and restoration possibilities of Pannonian sandy grasslands
- Assessment and mapping of ecosystem services at the state level. Cultural Ecosystem Services Working Group leader
- Prioritization of future research questions for sustainable land use in Central and Eastern European Countries

2021: expert associate, Széchenyi István University, Győr

- Development of a training laboratory for drone and image processing

2018 – 2019: research assistant, National Agricultural Research and Innovation Centre, Gödöllő

- Metabolite analysis of potato and tomato genotypes with GC-MS analyser
- Studying resistance of GMO-free potato

ORIGINAL RESEARCH ARTICLES

Csákvári E., Bede-Fazekas Á., Horváth F., Molnár Zs., Halassy M. (2021) Do environmental predictors affect the regeneration capacity of sandy habitats? A country-wide survey from Hungary. *Global Ecology and Conservation*, 27(4):e01547, <https://doi.org/10.1016/j.gecco.2021.e01547>

Csákvári E., Fabók V., Bartha S., Barta Z., Batáry P., Borics G., Botta-Dukát Z., Erős T., Gáspár J., Hideg É., Kovács-Hostyánszki A., Sramkó G., Standovár T., Lengyel Sz., Liker A., Magura T., Márton A., Molnár V. A., Molnár Zs., Oborny B., Ódor P., Tóthmérész B., Török K., Török P., Valkó O., Szép T., Vörös J., Báldi A. (2021) Conservation biology research priorities for 2050: A Central-Eastern European perspective. *Biological Conservation*, 264(2021): 109396, <https://doi.org/10.1016/j.biocon.2021.109396>

Csákvári E., Halassy M., Enyedi A., Gyulai F., Berke J. (2021) Is einkorn wheat (*Triticum monococcum* L.) a better choice than winter wheat (*Triticum aestivum* L.)? Wheat quality estimation for sustainable agriculture using vision-based digital image analysis. *Sustainability*, 13(21): 12005, <https://doi.org/10.3390/su132112005>

Elhani S., Haddadi M., Csákvári E., Zantar S., Hamim A., Villányi V., Douaik A., Bánfalvi Zs. (2019) Effects of partial root-zone drying and deficit irrigation on yield, irrigation water-use efficiency and some potato (*Solanum tuberosum* L.) quality traits under glasshouse conditions. *Agricultural Water Management*, 224(C), 1-1, <https://doi.org/10.1016/j.agwat.2019.105745>

SCIENTIFIC CONFERENCES

Csákvári E., Bede-Fazekas Á., Horváth F., Molnár Zs., Halassy M. (2021) The regeneration capacity of Pannonian sandy habitats and their possible environmental predictors. *21. Kolozsvári Biológus Napok*, Kolozsvár, 16-17. April 2021

Csákvári E., Dósa H., Mártonné Máthé K., Michalkó G., Zölei A. (2021) Mapping and assessment of recreation as a cultural ecosystem service. *6th Forum Carpaticum – Linking the Environmental, Political and Societal Aspects for Carpathian Sustainability*, Brno, 21-25. June 2021

Csákvári E., Bede-Fazekas Á., Horváth F., Molnár Zs., Halassy M. (2020) The connection between environmental predictors and regeneration capacity of sandy habitats in Hungary. *6th Student Conference on Conservation Science*, Centre for Ecological Research, Tihany, pp. 12., 25-29. August 2020

Csákvári E., Horváth F., Molnár Zs., Halassy M. (2019) Homoki élőhelyek regenerációs képességének országos szintű vizsgálata (in Hungarian). In: Fazekas I., Lázár I. (ed.) *Tájak működése és arculata. VIII. Magyar Tájökológiai Konferencia*, MTA DTB Földtudományi Szakbizottság, Debrecen, Kisvárd, 29-31. August 2019, ISBN 978-963-7064-39-5, pp. 231–236.

SCHOLARSHIPS AND AWARDS

- 2022 Stephen W. Kuffler Publication Award
- 2022 Hungarian Eötvös Scholarship

- 2021 National Talent Program, Scholarship for Young Talents (NTP-NFTÖ-21-B-0034 grant)
- 2020 National Talent Program, Scholarship for Young Talents (NTP-NFTÖ-20-B-0048 grant)
- 2020 'Best Talk Award' 6th Student Conference on Conservation Science, Centre for Ecological Research, Tihany, Hungary
- 2017 – 2018 New National Excellence Program, Hungarian Ministry of Human Capacities (ÚNKP-17-3)
- 2015 Award for outstanding MSc final exam, Szent István University, Gödöllő
- 2014 Award for presentation in Scientific Student Conference, Szent István University, Gödöllő
- 2016 – 2017 Campus Mundi scholarship for PhD students, Mendel University in Brno, Faculty of AgriSciences
- 2010 – 2011 Erasmus+ scholarship, Czech University of Life Sciences, Faculty of Forestry and Wood Sciences, Prague, Forest, Water and Landscape Management MSc

RESEARCH OBJECTIVES

Natural, semi-natural and appropriately managed ecosystems contribute to the health and well-being of people, secure a sustainable provision of ecosystem services for future generations and support climate change mitigation and adaptation. At the same time, most human activities seriously undermine the integrity, functioning and services of ecosystems and threaten their health and stability by transforming them into species-poor, simplified or novel ecosystems.

The maintenance of ecosystems' contributions to human well-being thus requires protection, management and restoration efforts. One of the main goals of the EU Biodiversity Strategy for 2030 is to avoid further loss of biodiversity and to restore ecosystems.

In the Restoration Ecology Group, Centre for Ecological Research I am studying regeneration capacity and restoration possibilities of Pannonian sandy grasslands and abandoned agricultural fields, and I am investigating how biotic and abiotic landscape indicators determine the success of spontaneous regeneration. We found that the local regeneration of open and closed steppes is primarily determined by habitat naturalness. For juniper-poplar stands the seasonality of the precipitation is the most important predictor. In the case of abandoned fields, the regeneration is primarily affected by the sand content of the soil and the total local extent of habitats. Furthermore, grasslands and agricultural areas represent a potential for regeneration after abandonment. Our results show that in addition to habitat adequacy, proxies for landscape naturalness are the most important predictors of regeneration capacity.

Currently, we are prioritizing different ecological restoration interventions on a national scale for sandy habitat types. We hope restoration prioritization helps determine optimal restoration methods in national and regional spatial planning to create sustainable landscapes and maintain biodiversity.