

**6<sup>TH</sup> EUROPEAN CONGRESS OF CONSERVATION BIOLOGY - ECCB 2022****“Biodiversity crisis in a changing world”**

The Europe Section of the Society for Conservation Biology (SCB) organize a series of professional meetings for promoting conservation of biological diversity in Europe since 2006 when the first 1st ECCB took place in Eger, Hungary with the topic "Diversity for Europe". This year the host country was Czech Republic, the 6th European Congress of Conservation Biology took place in the campus of Czech University of Life Sciences Prague (CZU) on August 22-26, 2022. During the five days conference over 700 participants came together to address the topic “Biodiversity crisis in a changing world” and preservation of biodiversity in Europe.

Professionals, conservationist, experts, lawmakers, scientists, students, gathered to present, to discuss and to design new strategies to meet the modern challenges in times of biodiversity emergency, post covid challenges and war uncertainty. More than 20 topic areas were addressed, between them “citizen science for conservation” had special attention during some of the symposia talks, posters, workshops, and speed presentations.

The symposia “*Monitoring biodiversity trends and threats using novel digital tools*” was organized by Ivan Jarić from the Biology Centre of the Czech Academy of Sciences. Was highlighted the rapidly increase of internet and new technologies use in favors of conservation. Phone applications, webpages, social media, other platform have become a source of unprecedented amounts of highly diverse and readily accessible data.

Accordingly, there is an emerging field “*conservation culturomics*” that aims to promote conservation by exploring human-nature interactions as these are manifested in online and other digital archives. In the other hand, they presented iEcology which is the study of ecological patterns and processes using data generated for other purposes and stored digitally. These two terms and fields are strongly related with citizen science because the data is collected by citizens and is contributing to scientific research to better understand the natural world and people’s interactions with it.

During these symposia expositors showed how iEcology approaches can be used to explore spatio-temporal trends in biodiversity, monitor rare or endangered species, and threats to its persistence. Meanwhile in the case of conservation culturomic they showed examples how some approaches have been used to explore interest in nature, conservation and the environment; highlight cultural ecosystem services and their value for people; look at people’s interest in species or regions of conservation concern; and quantify attitudes towards conservation interventions and policies.

Some of the presentation's topics were

- Trends and dynamics in conservation culturomics and iEcology research- Uri Roll (Ben-gurion University of the Negev, Israel)
- Digital data sources and methods for conservation culturomics- Ricardo Correia (University of Helsinki, Finland)
- Social media in conservation science: opportunities, challenges and going forward- Enrico Di Minin (University of Helsinki, Finland)
- Nature apps – Gaining Ecological and Conservation Insights from Dedicated Smartphone Applications- Anna Cihlová (Ben-gurion University, Israel)
- Digital and traditional marketing approaches for effective fundraising in conservation - Takahiro Kubo (NIES - National Institute for Environmental Studies, Japan)
- Comparing interest in nature across culturomic and other digital sources - Reut Vardi (Tel-Aviv University, Israel)
- How supportive can deep learning be in biodiversity research? Three tales of cultural services, biological invasions, and wildlife trade- Ana Sofia Vaz (CIBIO-InBIO-BIOPOLIS, Portugal)
- How well does online information-seeking behavior indicate public conservation orientation? Taxonomy and personal characteristics matter- Munemitsu Akasaka (South African National Biodiversity Institute, South African Republic)
- Others.

Another interesting symposium was the entitled “Social and ecological values: Charting a course forward for SCB Europe post-2020”. The topical called the attention because was strongly related with the PHD research plan submitted since some of the presenters use the same theories as for example the theory of planned behavior.

How can we balance social and ecological values and justice in the post 2020 conservation world, how much “good life” is too much for individual people or the collective human enterprise if we wish there to be good lives for the remainder of Earth's biodiversity? The presentations were divided in two days:

- Socio-psychological factors, beyond knowledge, predict people's engagement in pollinator conservation and reveal new opportunities for increasing uptake- Jessica Knapp (Lund University, Lund, Sweden; University of Exeter, Truro, United Kingdom)
- Learning from multi-method participatory approaches for protected area management- Veronica Lo (University of British Columbia, Canada)
- Spatial targeting to achieve the dual biodiversity goals – ecosystem service provisioning and species conservation as such- Henrik G. Smith (Department of Biology & Centre of Environmental and Climate Science, Sweden)

- Market solutions for conserving farmland biodiversity: how to establish a successful wildlife-friendly certification scheme? - Živa Alif (University of Ljubljana, Slovenia)
- How to encourage people to increase biodiversity in their gardens? An application of the Theory of Planned Behavior - Andreas Samus (University of Otago, New Zealand)
- Assessing People's Values of Nature: Where Is the Link to Sustainability Transformations?- Sanna Stålhammar (Swedish University Of Agricultural Sciences, Sweden)
- Others.

The poster session had a broad acceptance. Presenters had the opportunity to expose orally their research work during the afternoon session of 24<sup>th</sup> of October. The work "Citizen science for nature conservation in Hungary, an overview of experience in three dimensions" was presented under the affiliation of MATE University. It called the attention of many scientists, conservationists, post doc. and PHD students who had citizen science experience and were interested in the Hungarian context of nature conservation related citizen science projects in the country. The criteria for summarizing the three chosen dimensions (nature conservation, environmental education, science) attracted attention to be applied for other country experiences. Other PHD students representing MATE University also presented their works related to conservation and science during the conference.

- Investigating possible impacts of wild boar in the urban habitat of the strictly protected Caspian whipsnake (*Dolichopis caspius*) - Teffo, Thabang
- How to add monetary value to degraded rural landscapes through soil carbon sequestration in natural regeneration? – Boeni, Ana.

ECCB 2022 participants realized and showed the critical role of science-based knowledge and collaborations with the wider public citizens, including conservation and other practitioners, indigenous people and local communities in the conservation and restoration of biodiversity.

Consequently, the result of the plenary sessions, discussions and participations resulted in the signed statement adopted by the majority of ECCB 2022 participants on 26<sup>th</sup> of August 2022. It calls for immediate action in addressing anthropogenic climate change and mass extinction of biodiversity.

As a conclusion, considering nature declining and climate problems is the time to prioritize science-based actions for biodiversity conservation and restoration and take actions with initiatives that communicates the problems because is all people concern. Collaborative work was one of the key topics, it should be done between society, practitioners and researchers it can also efficiently widen the knowledge base of conservation and help avoid or resolve conservation conflicts. And finally, this collaboration between scientists and practitioners exposed in the manifesto can be done

through “citizen science” because it would expand and strengthen monitoring for biodiversity conservation and for enhancing knowledge transfer through collaborative learning as was shown in many of the presented results.



Figure 1. Participation of MATE/HUALS students at ECCB 2022.

Johanna Soria  
Hungarian University of Agriculture and Life Sciences  
Department of Nature Conservation and Landscape Management