

IDENTIFICATION AND ASSESSMENT OF CULTURAL ECOSYSTEM SERVICES IN THE ENGURE ECOREGION

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The identification and assessment of cultural ecosystem services is gaining increasing importance in biodiversity protection and sustainable management processes at international level. In the last decade, successful preconditions for the improvement of this field of research have also developed in Latvia. Of particular appreciation are the multidisciplinary studies published within the framework of ILTER (*International Long-Term Ecological Research Network*) for the development of a conceptual model for the Engure ecoregion (Engure Ecoregion, 2013). Currently, the recent document at the national level - "Plan for the Implementation of Landscape Policy" defines relatively broadly the importance of cultural values in nature protection, including in the context of biodiversity, preserving and developing the unified cultural and natural heritage, promoting economic activity, as well as strengthening the identity of place, improving the quality of life of people (Plan for the Implementation of Landscape Policy, 2024). Significant is the section dedicated by the UN-organised Millennium Ecosystem Assessment stating that cultural services provide recreational, aesthetic, and spiritual benefits; cultures, knowledge systems, religions, and social interactions have been strongly influenced by ecosystems, Cultural Services are the nonmaterial benefits people obtain from ecosystems through spiritual enrichment, cognitive development, reflection, recreation, and aesthetic experiences (Millenium Ecosystem Assessment, 2005). Conceptual Framework adopted by the Intergovernmental Science-Policy Platform on Biodiversity and Ecosystem Services (IPBES) includes six interlinked elements, including anthropogenic assets, constituting a social-ecological system, promotes biodiversity conservation and other relational and instrumental values associated with human health and cultural identity (IPBES, 2015). Academic researches indicate a number of approaches to the definitions and interpretation of cultural ecosystem services. Some publications analyse the Life Framework of Values developed by IPBES: framing of people–nature relations: *Living from Nature* (respect for tradition, livelihood, employment and revenue, heritage relation to living from nature); *Living in Nature* (respect for tradition, protecting the environment, place-based identity, historic and scenic values); *Living with*

Nature (desire to protect nature or heritage, living well with other species); *Living as Nature* (heritage of cultural and natural landscapes and identities are inextricably linked); (Willemen et al., 2023; Azzopardi et al., 2023). Cultural ecosystem services are understood as relational processes and entities that people actively create and express through interactions with ecosystems (Fish et al., 2016).

There is underestimated the potential of sustainable tourism and ecotourism in the Engure ecoregion, especially the use of cultural ecosystem services and biodiversity resources. Such an approach is already of increasing importance in similar ecoregions elsewhere in the world. Understanding the future is fundamentally important for making adequate business and industry strategies, management decisions, informing policy makers, and contributing to a development of sustainable tourism (Haukeland et al., 2023), sharing information with tourists about the natural history of different wildlife species and their habitats and by helping tourists to interpret the behaviours they witness (Sthapit et al., 2023), paths and trails are essential for movement, access, and egress, provide opportunities for social interaction (Fossgard and Stensland, 2021), it represents a local knowledge case, with the purpose of exploring local stakeholders' opinions on ecotourism, assessing ecotourism as a learning tool to link conservation and sustainable development objectives (Mondino and Beery, 2019), natural and cultural heritage is at the heart of the nature-based tourism experience, quality experiences are often dependent on more than that heritage (Mandić and McCool, 2023).

Significant resources of cultural ecosystem services are located in the parishes of the Engure ecoregion municipalities: 87 cultural monuments under state protection belong to archaeological, architectural, artistic, historical and industrial heritage typology groups (Heritage, 2024), diversity of Livonian and Curonian ethnography, including the names of species and habitats, toponyms (e.g. Livonian language: Aņģōrkilā - the village of Engure) and hydronyms.

The research and management capacity of cultural ecosystem services has also increased due to the interdisciplinary study programme "Cultural Environment Heritage" established at the Faculty of Geography and Earth Sciences of the University of Latvia, research conducted by the faculty scientists in paleobotany, paleogeography, human geography, ecology and environmental management. It is essential to link the development of the municipal strategies, development programmes and spacial planning of the Engure eco-region to the identification and assessment of cultural ecosystem services accompanied by active public participation. Good practice in the functioning of the conceptual model of the Engure ecoregion will serve as a basis for the

development of further scientific research in earth and environmental sciences, academic discussions and the creation of equivalent ecoregions.

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