

## HABITAT PROVISION ECOSYSTEM SERVICE EVALUATION OF EXTENSIVE PRODUCTION SYSTEM

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**Abstract:** Sustainability is a key challenge for humanity in the 21st century. Ecosystem services, the benefits that people derive from nature and natural capital is a concept often used to help explain human reliance on nature and frame the decisions we make in terms of the ongoing value of nature to human wellbeing. The key to sustainable development is achieving a balance between the exploitation of natural resources for socio-economic development, and conserving ecosystem services that are critical to everyone's wellbeing and livelihoods. In case of ecosystem services, it is about the primary production of natural resources (food, wood, water ...), but especially to protect against erosion, water natural disasters and protection of cultural and aesthetic values of the country. In this context, the biodiversity of ecosystems is indispensable, because has an important role in creating and regulating ecosystem processes, functions, and services. The contribution presents the role of biodiversity for the sustainability of ecosystem services and the possibilities of its evaluation. The research was conducted on permanent grasslands (PG) at study site Kečovo. At the study site, seven plastic traps were placed in spring 2015 for one month in line with 3 m distance. The habitat provision was identified by Biotope Valuation Method (BVM). The calculated value of the study sites was 41.67. According to the Catalogue of habitats in Slovakia this study site belongs to lowlands and sub-mountain mowed grasslands. In Kečovo, a total of 547 individuals of soil arthropods were captured, of them two eurytopic species (*Poecilus Cupreus*, *Calathus fuscipes*) and one relict species (*Lebia Cyanocephala*).

**Key words:** biodiversity, sustainability, permanent grasslands, Biotope Valuation Method