

Czúcz B., Molnár Zs., Horváth F., Botta-Dukát (2008): **The natural capital index of Hungary** *Acta Botanica Hungarica* **50**(Suppl.): 161-177.

[download \(2.1 MB, PDF\)](#)

Summary:

In this paper we present an implementation of the natural capital index (NCI), a highly aggregated policy-relevant biodiversity indicator for Hungary, based on the MÉTA database, a detailed field-based vegetation database with a habitat quality attribute. To this end, we introduce two different weighting schemes for the field-estimated MÉTA values, both rooted in the concept of ecosystem services: a linear “equal steps” (NCI_{lin}) and an exponential (NCI_{exp}) weighting scheme. The natural capital index of Hungary and its physical geographical regions are calculated and presented from both aspects. The national NCI_{lin} is 9.9% (indicating an overall 90% loss in the availability of the major supporting ecosystem services), and NCI_{exp} is 3.2% (indicating an even greater degree of loss in terms of the conservation of rare species). The geographical regions of Hungary exhibit considerable spatial variation, which reveals important information on their basic characteristics (e.g. agricultural potential) and land use history. As NCI can be calculated on any spatial scales from local to national, this indicator may become a useful tool for policy development and evaluation purposes, including environmental impact assessments (EIA) and strategic environmental assessments (SEI). However, due to several conceptual limitations (e.g. disregard for rarity, spatial structure and cultural values, questions of recency and repetition) NCI should not be regarded as a self-sufficient universal tool, and strategic decisions should be based on careful consideration of all potentially relevant factors.

Source URL (modified on 2016.07.19. - 23:34):<https://novenyzetiterkep.hu/english/node/483>