Density and biomass of anurans (*Anura*) in the main habitat types of the Nida River Valley

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Abstract
The aim of the research was to asses the biomass and density of terrestrial anurans in the Nida valley and to describe relations among some population parameters and the area of habitat types. The research was carried out in the Nida valley, the river of lowland character, in its lower course of a length of 30 km. During each of the two years of research, 60 transects across the valley situated in the distance of 500 m from each other were controlled. In order to assess basic habitat characteristics, the cover of meadows, arable fields, ox-bow lakes, forest, tree plantations and build-up areas was calculated within the 500 m wide zones in the middle of which the transects were situated. In the study area there were 10 anuran species found: *Bombina bombina*, *Pelobates fuscus*, *Bufo bufo*, *B. viridis*, *Hyla arborea*, *Rana lessonae*, *R. esculenta*, *R. rdibunda*, *R. temporaria* and *R. arvalis*. Altogether 2 156 individuals were caught with the biomass of 14 796.8 g. The most numerous were the green frogs *Rana esculenta* complex and *Bombina bombina*. Amphibian abundance and biomass correlates positively with the area of ox-bow lakes, meadows and tree plantations. There is no correlation between amphibian population parameters and the area of arable fields and built-up areas. The area of forests is negatively correlated with the abundance and biomass of green frogs. The results confirm the statement that habitat diversity triggers amphibian species diversity. They show also that the character of terrestrial habitats can be a limiting factor for amphibian populations and that they are equally important to amphibians as the access to proper water habitats.

Key words
Anura, population abundance, biomass, Nida river valley.