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## Calculation of Methane Emissions from Wetlands in Slovakia via IPCC Methodology

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**Abstract :** Wetlands are a main natural source of methane emissions, but they also represent the important biodiversity reservoirs in the landscape. There are about 26 thousands hectares of wetlands in Slovakia identified via the wetlands monitoring program. Created database of wetlands in Slovakia allows to analyze several ecological processes including also the methane emissions estimate. Based on the information from the database, the first estimate of the methane emissions from wetlands in Slovakia has been done. The IPCC methodology (Tier 1 approach) has been used with proposed emission factors for the ice-free period derived from the climatic data. The highest methane emissions of nearly 550 Gg are associated with the category of fens. Almost 11 Gg of methane is emitted from bogs, and emissions from flooded lands represent less than 8 Gg.

Keywords: bogs, methane emissions, Slovakia, wetlands

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