



## **A history of forest management in a Hungarian karst area**

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Due to their geographical position the natural vegetation in Hungarian karstlands is mixed deciduous forest. The composition and growth rate of the vegetation is defined by the interaction between the environmental factors and therefore can be used to indicate changes in the karstecosystem. Changes in the vegetation also have an effect on the other factors: they directly affect microclimate and soil. Thus a better understanding of forest dynamics might prove a useful tool in the research of the fast-changing, sensitive karstecosystem.

The state and processes of today's forests are defined by forest management in the past; in order to understand the natural dynamics the history of the forest should also be investigated.

The study area called Haragistya is part of the Silička planina, a karst plateau divided by the Hungarian-Slovakian border. Due to their peripheral situation, some of the Haragistya forests have remained entirely untouched in the last decades. Some others have been turned into coniferous plantations but were later left off when the area was designated strictly protected zone of the Aggtelek National Park. The area's forests are in a state of dynamic change but whether it is part of the natural process or the mere result of earlier land use remains a question. By the spatial analysis of information gained from historical maps, forest management plans, aerial imagery and satellite imagery we attempt to locate those relatively unaffected areas that may serve as a basis for the construction of a potential vegetation model of the area. Such a review of the land use history also allows us to estimate the magnitude of human impact

on the karst.