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The history of a Bronze Age tell reconstructed from soil data

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It is a common place to say that human activity leaves an imprint not only on its environment but on the soil as well. As we all know the soil like a book, keeps a good record of all kinds of activities ever effected its structure. The understanding and interpretation of complete history of the Százhalombatta Földvár is more complex than that of the customary one layer archaeological sites. The site itself is situated on the high plateau on the right hand site of the bank of Danube River.

The reconstruction of 4000 years of history - from the middle of the Early Bronze Age /c. 2000 BC/ till the present day - became possible on the tell and its environment with the co-ordination of the archaeological finds and with following the changes within the soil cover. During this period the height of the area increased by an average of 4 m compared to the original soil surface level.

As the result of intensive human activities the phosphorus content of the soils rose from an initial value of 1000 mg/kg to an average of 4000 mg/kg. It can be calculated that this increase in the phosphorus content must have been derived from approximately 1 t of bones a year. Calculations based on the increase in the mass of tell indicate that at least 20 houses at a time must have stood on the area during the 600 year period.

Soil drillings and analytical data have proved that considerable earthworks were carried out for various purposes at different times, from the early years of settlement up to the present day. These affected both the material of tell itself and the soil of surrounding areas.