



The emergence and development of Brussels (Belgium): the contribution of an interdisciplinary study of the urban soil.

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The actual Brussels' landscape is the result of a progressing anthropisation and urbanisation. Traces of these processes have been conserved in the urban soil. In order to clarify and identify them, a research protocol involving archaeopedology, micro-archaeology and archaeobotany has been developed (DEVOS et al., 2009). Research has so far focussed on the early phases of urban development (10th-13th century AD), which remains a historical poorly documented period. The study of the urban soil and more particularly of the Dark Earth witnesses profound transformations of the environment ensuing human activities such as agriculture, pasturing or quarrying.

A second research focus has been the accumulation of ancient pollution in the historical town centre. Ancient texts mention repeatedly nuisances caused by several artisanal activities, as well as the presence of all kind of waste deposits (DELIGNE, 2003). Unfortunately, these sources do not provide reliable data on the importance of the different kinds of pollution. The systematic application of the interdisciplinary research protocol during the follow up of archaeological excavations throughout the historical town centre shows a growing impact of heavy metal pollution for several sites in the upper part of the city while the sites in the lower part of the city are mainly affected by organic pollution, related to agricultural and artisanal activities.

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Bibliography

DELIGNE, C. 2003. Bruxelles et sa rivière. Genèse d'un territoire urbain (12e-18e siècle), Turnhout. (=Studies in European Urban History (1100-1800), 1).

DEVOS Y., VRYDAGHS L., DEGRAEVE A. & FECHNER K. 2009: An archaeopedological and phytolitharian study of the "Dark Earth" on the site of Rue de Dinant (Brussels, Belgium). *Catena*, 78, 270-284. (<http://dx.doi.org/10.1016/j.catena.2009.02.013>).