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Evidence for waste management and disposal in Scottish Royal Burghs

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Urban Anthrosols are distinctive owing to their location and that their properties are modified through waste amendments. Much consideration has been given to how these properties reflect current human influence, however, recent studies indicate the potential of anthropogenic soils in reconstructing past human activities spatially and temporally.

Waste disposal practices throughout antiquity have had a profound impact on the nature, properties and formation of urban soils. This is particularly resonant for Scottish Royal Burghs where the extent and complexity of refuse management practices is only just emerging (Davidson *et al*., 2006, Golding and Davidson 2005).

The aim of this study is to characterise and understand the modes of anthropogenic soil formation in Scottish Royal burghs with specific reference to processes of waste management and disposal in the post-medieval period (1500-1800AD). Three small Scottish towns were chosen for investigation: Lauder (Borders), Pittenweem (Fife) and Wigtown (Dumfries and Galloway), on account of their geographic and past functional diversity and because they have seen minimal modern urban infill and expansion.

Initial results from the investigation of topsoil depth, organic matter content, pH, elemental concentrations and soil micromorphology suggest that certain spatial patterns within and near to post-medieval urban limits are attributable to sustained application of waste materials.

Davidson D.A., Dercon G., Stewart M. and Watson F. (2006) The Legacy of Past Urban Waste Disposal on Local Soils J*ournal of Archaeological Science*. **33** (6) 778-

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Golding K.A. and Davidson D.A. (2005) The effect of waste disposal on soils near to Scottish burghs *SEESOIL Journal of South East England Soils Discussion Group* **16** 28-37