

Trent Valley GeoArchaeology Research Strategy:

using the earth sciences to understand the archaeological record of the Trent Valley



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Trent Valley
GeoArchaeology

1. Resource assessments

1. Extend and enhance the palaeochannel database developed during earlier TVG research; identify channels with potential for high resolution studies of vegetation and land-use changes
2. Quantify the resource of grey and published environmental reports for the Trent Valley
3. Update the TVG 2003 survey of grey and published literature for the Trent Valley
4. Characterise the range of archaeological evidence likely to survive within Trent Valley landform elements and identify areas of potentially high preservation
5. Define high-threat areas requiring priority focused study (e.g. Nottingham Trentside; M1 corridor)
6. Review the LiDAR resource for the study of palaeochannels, earthworks *etc.*)
7. Review Historic Landscape Characterisation (HLC) work and collate county-based work to investigate spatial variability within the Trent Valley

2. Climate change

1. Investigate past climate change (e.g. from evidence preserved in organic palaeochannel deposits) and human response
2. Elucidate peat formation processes and sea-level changes in the lower Trent
3. Assess the potential impact of climate change upon the historic environment resource (e.g. impact of increased frequency and intensity of flooding; drying out of organic deposits on floodplain and terrace sites)
4. Develop aerial reconnaissance pilot study to monitor the impact of climate change upon cropmark and soilmark identification and to enhance the air photographic database
5. Investigate the protective role of particular farming practices (e.g. water meadows)
6. Explore the outreach potential of TVG work on climate change

3. Pleistocene and Holocene environmental change and early human colonisation

1. Enhance the record of Trent Valley interglacials as a framework for studying Palaeolithic colonisation
2. Prospect for and investigate traces of early human activity. Especially:
 1. Bytham River deposits (e.g. Brooksby, Leics.)
 2. Marine Isotope Stages 4-6: is evidence for human activity genuinely absent?
 3. Late Upper Palaeolithic open sites
3. Focus research on gaps in the record of vegetation, soils, *etc*, and develop and execute a strategy for the sampling of appropriate deposits
4. Elucidate processes of Holocene alluviation, colluviation, coversand reworking and river channel development (especially avulsion)
5. Design a strategy to enhance the palaeoenvironmental dataset, including the provision of best practice guidance on sampling methodologies

4. The site prospection toolkit

1. Review previous TVG work on site prospection techniques (e.g. Trent Valley GeoArchaeology 2002) to create a springboard for further research
2. Define the range of prospection techniques that are most appropriate for Trent Valley landform elements and prepare a non-technical guidance booklet for a professional audience
3. Continue to refine the assessment and evaluation toolkit in collaboration with the minerals industry and other partners

5. Refine chronologies

1. Collate radiocarbon, dendrochronological and Optically Stimulated Luminescence dates for the Trent Valley and identify weak points in the Pleistocene and Holocene chronological sequences (e.g. Neolithic to Early Bronze Age periods)
2. Develop a guidelines document specifying the priorities for scientific dating in the Trent Valley

6. Cultural role of River Trent

1. Investigate the role of the river as a corridor of population movement, trade/exchange and cultural influence (e.g. studies of Mesolithic flintwork; later prehistoric and Saxon granitoid-tempered pottery)
2. Assess the social and symbolic significance of the river (e.g. focus for Neolithic and Bronze Age ritual deposition; role as social or political boundary)
3. Investigate the role of crossing points and confluence zones (e.g. as foci of Neolithic and Bronze Age monument complexes)
4. Investigate the historic role of the Trent (e.g. as a corridor for Scandinavian colonisation)
5. Encourage community involvement in studies of the historic environment of the river