

The Rebel Tree, Clifton

Recent instruction

PBA Consulting have been appointed to locate the root extents of this infamous tree with Tree Radar ground penetrating radar and plot to plan – the question is will we find any Jacobite graves? Our bespoke software accurately locates tree roots, however, we often are able to identify historical excavations and subsurface voids – never before have we had such an historical record before we scan. We look forward with interest to the outcome of our root scanning.

Historical facts

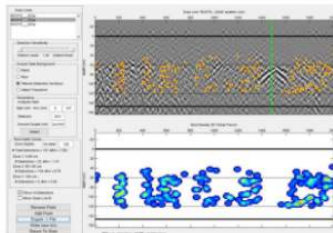
The Battle of Clifton on 18 December 1745 – the last Jacobite battle on English soil took place between a rearguard of Prince Charles Jacobite army as they retreated from Derby and elements of the Duke of Cumberland's forces that were in pursuit. But after their defeat at Clifton, some ten or so Jacobites were hanged on the infamous Rebels' Tree and buried underneath it.

Overview of findings

The root zones areas scanned contained high proportions of large non-root reflectors - large stones, artefacts etc. there was a predominance of non-root reflectors below 900 mm. Definition was exacerbated by the need to use high dielectric settings necessary for the wet soils. This can compromise accuracy particularly when associated with metal non-root reflectors.



In the field to south of tree the radargrams outputs revealed a featureless stratum down to approximately 800mm; this is evidence of historical made-up/cultivated ground. It may have been associated with ground re-contouring as part of the provision of spoil for the adjacent railway embankment. Majority of tree roots were around 60-120cm depth.



Under the track south west of the tree, where the scan lines extend across the track the root patterns are indeterminate as the area has been the subject of service laying and track resurfacing. As would be expected there is large amount of non-root reflectors; some metallic. It is assumed this is associated with the utility lines beneath the track.

The Radargram gives an indication of roots found and some large none root reflectors – rocks etc.