

Outside the walls: excavations within the annexe at Camelon Roman fort

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In 2014 GUARD Archaeology undertook an archaeological excavation at Redbrae Road in Falkirk. The full results of this research, *ARO22: Outside the walls: Excavations within the annexe at Camelon Roman Fort* has just been published and is now freely available to download from the ARO website - [Archaeology Reports Online](http://www.archaeologyreportsonline.com).



ARO22 Cover © ARO

The 2014 excavation followed a previous archaeological evaluation that year by fellow GUARD archaeologist Christine Rennie, which had first revealed the presence of significant archaeological features within this site. Prior to this, a number of other archaeological sites were known in the vicinity, including a range of prehistoric find spots and burials as well as Camelon Roman Fort and a series of ditches and other Roman features that could be dated to the Flavian and Antonine periods of the first and second centuries AD and thought to represent a southern annexe to the Roman fort to the north-west. Previous excavations of an area to the north-west of the Redbrae Road site, by Falkirk Council archaeologist Geoff Bailey, indicated that there could be similar features across the development area, such as military V-shaped ditches, later ditches used as a rubbish dumps and smaller V-shaped ditches of an agricultural origin. Roman ditches were also found by another archaeological company to the immediate west of

the Redbrae Road site in another development-led excavation in 2010, though these results are currently unpublished.

The Redbrae Road site was stripped of overburden to reveal a sandy subsoil which had been cut into by a number of Roman features including a series of linear ditches representing possible field boundaries, post-holes, a possible bread oven and several pits containing discarded detritus including Roman pottery and industrial waste. Twenty-one iron artefacts, including a socketed bolt-head, an ox-goad and hobnails, as well as fragments of ironworking slag, were recovered from these features.



Socketed bolt-head (left); ox-goad (right) © ARO.

The excavation also recovered 35 sherds of Roman pottery including samian ware, coarse ware and a mortarium sherd. The samian sherds, representing two vessels from southern Gaul and Flavian in date, were recovered from just one pit that also yielded the ox-goad. The environmental samples from the site produced a small mixed assemblage of wood charcoal and cereal grain, mainly barley and spelt wheat.

The overwhelming majority of the industrial waste, comprising furnace lining and tap slag, was retrieved from a large pit that also yielded Roman Flavian era pottery sherds and a radiocarbon date of 41 cal BC - 116 cal AD. This pit was in turn sealed beneath a clay-lined ditch that yielded Antonine era Roman pottery from Northern Gaul and a radiocarbon date of 54-215 cal AD. The industrial waste indicates that bloomery smelting of iron was carried out, probably on a relatively small-scale, within or close to the area excavated, and that the waste material was likely

dumped in this pit. No evidence for smithing, including primary smithing of the iron bloom, was recovered so it may be surmised that this took place elsewhere.

Much debate has surrounded the function of fort annexes, and whether they were used by military personnel only and/or civilian or part civilian in use. It has been suggested that annexes could represent the early stages of the military vici, such as the one found to the immediate east of Inveresk Roman Fort in East Lothian. This was borne out by evidence from excavations at a number of fort annexes in Scotland, including Balmuily, Castledykes and Mumrills Roman forts, which uncovered material that could be classed as civilian in use. However, evidence of military buildings, bath houses, ovens and industrial activities such as metal working were also present within these spaces suggesting they had multiple uses and were occupied by a variety of different individuals. The recovery of metalworking waste, pottery, agricultural implements and cereal grains and the presence of a possible oven would suggest that the situation was no different at Camelon.

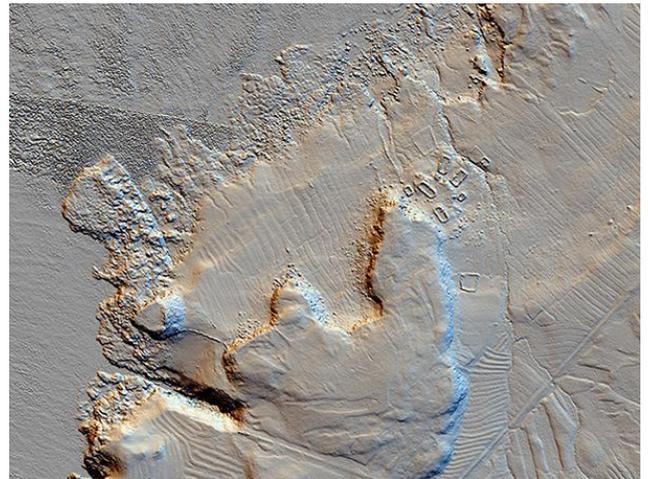
Lidar and Fieldwork at Kraiknish, Skye

George Geddes MClfA, Historic Environment Scotland

HES Survey and Recording and Forestry Commission Scotland are currently working together to investigate an area of the west coast of Skye between Loch Brittle and Loch Eynort. Now used for the grazing of sheep, cattle and horses, evidence for early settlement is scarce but includes a cairn that yielded two complete Beakers, now in the National Museum of Scotland, when it was excavated in 1929.

In more recent times the area supported a large population evidenced by the remains of townships, extensive areas of former cultivation, numerous shieling huts and shieling mounds. Previous surveys of the area relied in the main on vertical aerial photographs and rapid field survey, and the corpus of known sites was thus relatively small. That said, the data available to us from individual records, such as a dun or a large township, is complemented to some degree by landscape characterisation and analysis such as *HLA Map* and *Defining Scotland's Places*, the former identifying historic land-use, for instance the principal areas of cultivation and peat

cutting, and the latter defining the extent (size and shape) of any known site.



An extract of processed lidar data (©FCS) at 1:1500 showing a dun, a modern township and an intensively managed landscape of lazy bedding and peat cutting

The project is being undertaken by members of the HES Landscape Survey and Aerial & Remote Sensing teams in order to utilise and evaluate a high resolution lidar survey (airborne laser scanning) commissioned by FCS in 2014 to inform historic environment conservation management. The principal aim of the project is to learn about and understand the relationship between the analysis of lidar and field survey. While lidar can sometimes be promoted as an objective and 'complete' picture of archaeological landscapes, to exploit its full potential requires a significant degree of both technical manipulation (such as visualisations that mimic the effect of light and shadow from multiple directions) and archaeological interpretation, each of which powerfully influences the quality and quantity of the archaeological information recovered. Similarly, field survey can sometimes be conceived as a simple search for archaeological sites, but it too is complex, having strengths and weaknesses that are rarely adequately explained, leading to varying results across different surveys.

Initial assessment of the Kraiknish lidar data led to the identification of a large number of targets that included unrecorded buildings, shieling huts, and later prehistoric hut circles. Our first week of field survey, completed on 2 September, involved visits to each of the 220 'target' sites in order to assess and describe the archaeological features, and compare and contrast interpretation of the lidar (downloaded