

A Geophysical Survey at Rocky Clump 1998, Conducted by the Brighton and Hove Archaeological Society Field Unit.

Part of the research programme conducted at Rocky Clump during 1998, was an extensive geophysical survey in the field to the north of the copse. The lands used as the basis for the survey were to the north and west of the existing open excavation. The excavations have revealed a number of interesting features of post holes and ditches. A line of post holes running south to north disappears under the excavation baulk. There are two ditches that also disappear under the baulk, one going from east to west and the other south to north. The ditches are linked by a third small ditch already excavated. The presence of another possible Medieval ditch is known to run to the west of the site in a northerly direction. The geophysical survey was organised to understand the extent and nature of these features. In the autumn of 1997 the grand-daughter of Mr Charlie Yeates, one of the original excavation archaeologists, conducted a dowsing exercise in this same area. The young lady picked up the Medieval ditch without being informed of its location. She also indicated that the flint cobbled upper surface of the south/north ditch extended northwards and broadened out as it progressed. A small sample trench cut north of the existing site tends to confirm this. Aerial photographs of the fields at Rocky Clump had been obtained from RCHME Swindon and examined, but no significant features were observed. Over twenty photographs were examined from 1947 onwards.

The geophysical survey was used as a training exercise for members of the Brighton and Hove Archaeological Society Field Unit, under the supervision of Mr Gary Bishop and Mr Bill Santer who are the most experienced operators. Grids were set out in 20M squares, with a reading taken at every one metre. The measurements were taken in ohms. Each square produced 400 separate readings. The survey encompassed a total of 9 squares with a total number of readings of 3600. The location of the survey was logged and located and drawn on the site plan of Rocky Clump. The readings were transferred to computer and a graphical image produced using Geoscan software. The weather had been a mixture of both sunshine and showers making an ideal subsoil for the survey. Previous surveys have been conducted at Rocky Clump using an RM4 resistivity meter and colouring by numbers to produce results. The surveys had produced no significant anomalies and contradicted the evidence of the features found as a result of excavation.

Conclusions

The graphical image produced with the RMI 5 resistivity meter has a number of interesting anomalies. An area of high readings to the west of the site shape is irregular and ovoid in configuration. It is possible that this feature is clay with flint. The ditch running westwards is quite clearly defined as an area of "low" resistance, however it is not clear at the west end as it loses its definition when joining the previously mentioned feature of high resistance. High resistance in ditches is not unusual and was found in a ditch at Bignor Roman villa, where greensand slabs had been used to fill an earlier ditch (D.Rudling pers. comm.). The results produced a large quantity of linear features running south to north and culminating in an area of high resistance immediately north of the existing excavation. The linear arrangements are rectangular by definition and clearly observed in the print. A parallel set of readings run north to south joining a further rectangular area of high resistance at the southern end. The rectangular features are noted in grid numbers 5, 6 and 8. The ovoid shaped area of high resistance lies in grid numbers 2 and 3. A smaller collection of linear features are noted in grid numbers 4 and 9. There are a number of smaller areas of high resistance over the whole area. The low resistance anticipated with regard to the line of postholes running north is not observed in the information collected or is the location of the

'Medieval' ditch. The north/south ditch may be determined as a small low resistance set of readings, terminated by the high resistance rectangular block to the north of it.

This area of the South Downs is covered with a layer of clay with flint. It is possible that the anomalies revealed are part of this geology. Several areas in the existing excavation include 'solution hollows', areas of clay with flint cutting into the chalk subsoil. The grids are numbered 1-9 and are displayed on the site plan of Rocky Clump 'Rocky Clump 3 1/10/98'. The graphics displayed are anomalies and only excavation of assessment trenches will determine the nature of these features.

Acknowledgements

I would like to thank Brighton and Hove Council, Mr G.Bennett, and Mr D.West for allowing access to the field. Mr G.Bishop, Mr W,Santer and the members of the Brighton and Hove Archaeological Field Unit for their endeavours and finally Mr D.Coombes for allowing use of his computer programme.

John Funnell 21/2/99

Site : rocky98		Resist. Survey		Scale	1:738
Mesh : r1					
Shade Plot (Clip)			Size x 1	Block	Off
Minimum	-1	Grey Levels	17		
Maximum	1	Palette	Positive		
Contrast	1			Black	
Units	Std.Dev.			White	

