

The flooding of November 2009 that caused such terrible destruction in Cocker mouth had one unexpected beneficial side effect. Many low-lying fields along the Derwent valley were also ruined and the opportunity then arose, prior to their reinstatement, to conduct a limited archaeological investigation. Members of Appleby Archaeology were amazed at their September meeting when they heard Mark Graham of Grampus Heritage describe the range and scale of what was found.

Grampus Heritage and Training Ltd is a non-profit making organisation based in Wigton. Since 1997 it has been involved in the management and promotion of European projects concerned with culture, heritage, archaeology and the environment. Grampus provides training opportunities to UK students, recent graduates and young workers to join excavations in counties such as Iceland, Slovakia, Bulgaria and Cyprus.

Mark, who actually lives in Cocker mouth and saw his own home inundated by the flooding, managed to obtain funding from the Heritage Lottery Fund to conduct a geophysical survey of a field to the north-west of the town known locally as Broomlands. An instrument called a gradiometer was used to sweep the site systematically and measure variations in the density of the subsurface. When analysed by a computer this information was then used to produce a picture of buried features. The project attracted an average of 10 volunteers each day for the six weeks it took to complete the survey. They walked a total of 168km to take their measurements!

The results were astounding. It was already known that the Romans had occupied Cocker mouth. The Roman fort at Papcastle on the outskirts of the town is well documented. However nobody had expected that the low-lying land on the flood plain had also been occupied. Nevertheless the geophysics revealed a complex of roads and buildings that showed clear signs of being from the Roman period. A circular feature appeared to be some sort of amphitheatre and there was evidence of an industrial site where iron might have been smelted.

This initial project was so successful that the Heritage Lottery Fund was prepared to fund a community-based four-week follow-up dig. This took place in August last year and was supervised by North Pennines Archaeology.

Only sample areas of the site could be excavated but enough was revealed to confirm that the features seen on the geophysical survey were indeed Roman, dating from the early 2nd Century to the mid 4th, and that some of them had military associations. Among many spectacular finds were the remains of a Roman watermill. This had been served by a wood-lined millrace and was constructed from massive stone blocks. No millstones were recovered but the bearings for the millwheel's axle were clearly visible in the surviving stonework.

Several fragments of inscribed stone were also found. One of these referred to the *Classis Moesia* (the Moesian navy). Moesia was a Roman province on the Black Sea. Clearly it was a surprisingly small world, even in the 2nd Century AD.

Mark was thanked for his stimulating and entertaining talk.

Appleby Archaeology's next evening meeting will take place on Tuesday October the 11th when Erik Matthews will talk about recent excavations at Hornby Castle. Non-members are always welcome at these meetings which take place at 7.30 in the Supper Room of the Appleby Market Hall. Full details of this year's programme can be found on Appleby Archaeology Group's website, applebyarchaeology.org.uk