

Thomas Whitbread, from North Pennines Archaeology, introduced Appleby Archaeology Group to underwater archaeology when he spoke of his experience in working on Enderline Crannog on Loch Awe in Argyle.

Crannogs were artificial islet settlements which were occupied and reoccupied over a period of two thousand years from the late bronze age to the 17th century. Throughout their long history crannogs appear to have had a number of uses such as homesteads, status dwellings, refuges in times of trouble and hunting and fishing stations. They began to be studied in the mid nineteenth century and the first underwater investigation came at the end of the century but were limited due to the equipment available at the time. With advances in technology underwater techniques were developed on the continent and these are now employed in the investigation of crannogs.

Underwater excavation is demanding because of the cold, the lack of visibility and the problem of maintaining buoyancy. One of Thomas' colleagues described it as "doing archaeology in a hammock".

The greatest number of crannogs are found in the lochs of Scotland. They are usually built several metres into the loch, often at the point where the loch deepens, and are connected to the shore by a stone or timber causeway which is sometimes concealed as it lies just beneath the surface of the water. Crannogs are also found in Ireland and one has been located in Wales. The name "crannog" is derived from the Old Irish "crann" meaning tree.

In Scotland 370, from the Western Isles to Dumfries and Galloway, are known but the thousands of lochs in the country suggest that there are many more sites to be found. Few have been excavated. A number of surveys have been undertaken, most notably, in Argyle on Loch Awe and in Perthshire on Loch Tay and the Lake of Monteith.

The structure of the islet settlements differ, reflecting the natural resources of the area. In the barren north west, they are formed of boulder mounds and duns (small stone buildings). In Perthshire there is evidence of wooden round houses built on stilts and of crannogs built from brushwood, timber bracken and stones (described as packwerk) are widely distributed. Evidence suggests that after a period of abandonment the buildings were modified for reoccupation. Today crannogs appear as tree-covered islands or as submerged stony mounds.

Thomas then spoke about the excavation at Enderline. A detailed survey in 1973 was followed by underwater excavations in 2004-06. The results indicate a structure of brushwood timber and stones built on the bedrock. It is possible that it started off as a stilted structure which was later replaced by packwerk. There appears to have been three phases of occupation over a period of nine hundred years with the first phase in the 6-8th century AD.

One of the most important results of the Ederline excavations has been the production of an accurate record of the layers of the submerged deposits. In 2004, a trench measuring 3x5m was opened on the northern side of the site, in approximately 3m of water, and excavated to the loch bed. This trench contained organic deposits which appeared to be refuse material from domestic occupation.

Other finds provide clues to the nature of the occupations. Initial analysis of the large number of animal bones indicates the inhabitants ate good cuts of meat and this combined with the finding of fragments of E ware pottery suggest that this may have been a high status site. A rotary quern may indicate that the processing of cereal took place. Further analysis of environmental samples, which are well preserved in underwater conditions, will improve our understanding of the economic and agricultural activities. The site is built thirty metres from the shoreline which could be interpreted as a defensive position or that the owner sought isolation to emphasise his status.

In his conclusions Thomas spoke of the many unanswered questions and of the potential for further study. Many crannogs have been identified but have not been surveyed and a wealth of information could be gained from analysis of the well preserved environmental samples that are often found on the sites. Underwater archaeology is usually research based in contrast to land archaeology which is usually developer led.

The stimulating and informative talk delivered with enthusiasm led to many questions from the floor before Thomas was thanked and warmly applauded.

The next talk will be on the Tuesday 14th October at 7.30pm, in the Supper Room, Market Hall, Appleby, when Mark Brennand, Senior Environment Officer, Cumbria County Council will speak on *Current Archaeology in the North West*..

PHR 6/11/2008