# THE DORSET DIGGER

#### THE NEWSLETTER OF THE DORSET DIGGERS COMMUNITY ARCHAEOLOGY GROUP

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#### Signalling and Beacon Sites in Dorset

## Richard Hood has kicked off this new project. He needs somemorevolunteerstohelpwith the research

#### Introduction

The ability to send or receive a message over a distance to warn of impending attack has been used to mobilise troops for defence since the Roman times. The Romans developed a system using five flags or torches to carry a simple message over short distances. This was usually used in battle to pass information out to army commanders. To carry a simple message further, a bonfire was used set on a high point, usually from a mini fort within vision of one or more other sites. This type of warning system was used during the invasion of Britain, when vexation forts could come under attack from tribes yet to be persuaded of the advantages of Roman living. Near the end of the Roman occupation signal stations were employed on the East and South coasts to warn of Saxon pirates. Roman signal stations on the NE coast of England took the form of mini forts, with a ditch and bank for defence. Black Down in Dorset, excavated by Bill Putnam and re examined by Dorset Diggers in 2016 is of this type.

The Saxons appear to have had a system of inter divisible beacon sites to warn of Viking attack from the ninth century onwards. Later, beacons were erected to warn of the approach of the Spanish Armada, followed by a similar, but unused system, to warn of Napoleonic invasion. Beacon sites have often been re used and in fact many are still lit for celebrations in the present day.

The news of the success at Trafalgar and the death of Nelson had to be sent from Falmouth to London by fast horse. To reduce the time taken for messages to be received in London the Royal Navy developed three types of communication systems using mechanical semaphore signals. One of these though started was never completed.

Finally the Royal Navy used coastal signal stations to pass on orders to ships. This was first carried out by the use of a semaphore system using flags flown from masts. Improvements in optical enhancement increased the useful range of this system. The invention of Morse code, sending messages by flashing of signal lamps was the last optical system before the radio age.

All the above systems suffered from being unreliable in poor light conditions.

#### The Study

The purpose of this study is to find and record the sites of signalling stations and beacon sites in Dorset from the Roman period to the invention of radio communication. The first part of the work is desk based with the county being split between various volunteer members of Dorset Diggers to look for references to sites at libraries, museums and the internet. Google Earth, aerial photographs, Lidar and geo physical web sites help with identification.

The second part of the study includes visits to sites to identify any visible remaining earthworks and also to confirm inter visibility between sites of similar period. Physical changes to the land surface and coastal erosion have destroyed much evidence from the early period. For this reason some signal sites have been postulated as they fit into a chain, though no direct evidence is available.

#### **Roman Sites**

#### 1. Nether Compton to Ilchester

Using Geocontext-profiler geo physical web site, there is inter visibility at ground level between the Roman fort at Nether Compton 60.4E, 17.4N elevation 100m and the Roman town/fort at Ilchester 52.5E, 23.00N elevation 6m. Distance between sites 9.3km. There may be a possible half way point for a link station near Mudiford.

#### 2. Black Down to Waddon Hill/ Black Down to Dorchester

Inter visibility between the signal station at Black Down 60.3E, 88.1N elevation 200m and the fort at Waddon Hill 45.00E, 01.5N, elevation 200m, was proved by archaeologist Bill Putnam using a bonfire. Using Geocontext an interference of approximately 5m was found, the distance between sites is 20.5km. This could be explained by fires being on raised platforms to improve visibility. A near mid point second signal station would make communication more certain. At 55.6E, 91.8N is an earthwork next to the A35 at 218m elevation; also from Eggardon hill fort both sites are visible.

Inter visibility between Black Down and Dorchester is proven using Geocontexprofiler, though optical proof was hampered by modern forestry obscuring the view. Bill Putnam successfully used bonfires to check inter visibility before the trees grew.

#### 3 Lewesdon/ Waddon to Hogchester

Lewesdon hill fort, 43.6E, 01.3N is inter visible with Hogchester farm, 35.3E, 94.6N, 95m elevation which is 2km from Charmouth. Lewesdon is approximately 250m elevation and is about 15 min (1km) from Waddon Roman fort by fit Roman soldier. The distance between the sites is 10.6km. Charmouth is thought to have been a Roman harbour and from its name Hogchester is a Roman settlement. Lewsedon is visible from Eggardon, Pilsdon Pen and Lamberts Castle, all Iron Age hill forts that may have been re used during later periods.

#### 4 Waddon to Stonebarrow/Charmouth

Stonebarrow 148m elevation, the hill immediately to the East of Charmouth, is inter visible with the Roman fort on Waddon Hill. Further West, Seaton in Devon was a Roman port (*Moridunum?*) with a signal station (*Uxelis*). Though the position of the signal station is unknown it was probably on Beer Head. There appear to have been a number of sites that were inter visible along the SW coast. A caveat to this is that the

coast may have eroded by as much as a mile in Lyme Bay since the Roman Period and evidence for any permanent signal stations may have now disappeared into the sea.

#### **Saxon Sites**

The Saxons were late comers to Dorset being repulsed by the relatives of the Durotriges tribe until the battle of Penselwood in 658 AD. Keith Briggs has written about Saxon signal stations along the Hampshire and Dorset coast citing The Nothe map ref 686 787, White Nothe 775 805, Wardstone Barrow 792 813, Nath Point 986 681 and Corfe Mullen 983 953 as probable sites. Nath Point is midway between Corfe Castle and Poole. The name Nothe seems to relate to lookout sites from the Saxon period.

Golden Cap 406 919 at 191m elevation, as the highest point on the South coast would seem to be an obvious look out/signal point. Saxons settled in this area and Hardown Hill 405 949 207m elevation, just North of Golden Cap, has Saxon burial barrows on its summit. The Saxon Saint, Saint Wite, is said to be buried close by at Whitchurch Canonicorum. She was allegedly killed by Vikings.

Golden Cap provides sea views from Portland to Beer Head and Hardown Hill affords uninterrupted views across Marshwood Vale to the ring of Iron Age hill forts to the North.

Later sites

David Northam has been looking at more recent signalling methods and discovered this site

#### http://www.tfo.upm.es/ImperialismoWeb/CosasChappe/UK.pdf

Both the Murray system of shuttersandthe Popham semaphore towers had stations in Dorset on the route from the Admiralty in London to the navy in Plymouth.



We plan to identify and visit some of these locations next year and go to the Blandford Signals Museum to find out how it worked.

### <u>AGM</u>

Dorset Diggers are now 4 years old and it is time for our AGM in January.

Saturday 28<sup>th</sup> January 10.30 am at St Peter's church hall in Dorchester (next to the museum) This will be a chance to share what we found in 2016 and plan our activities for 2017. New members welcome.

### MERRY CHRISTMAS