

SHORTER NOTES

Palaeoenvironmental constraints on Mesolithic to Romano British communities of the Severn Estuary.

by Denise Druce

In the light of the wealth of intertidal archaeological and palaeoenvironmental evidence now available for the north side of the Severn Estuary, research is currently underway to examine the nature of the intertidal submerged forests and peat beds found on the south side of the Estuary. These deposits, part of the Wentlooge Formation, consist of intercalated layers of blue-grey clay and peat deposited during the general rise in sea level after the last glaciation c.10,000 years ago. A clearer picture is needed of the nature of this rise in order to place the archaeological record in its environmental setting in both space and time. The main approaches adopted by the research are:

1. A synthesis of archaeological and palaeoenvironmental work carried out on the English side of the Estuary in order to compare results with research carried out on the Welsh side. If differences in the nature of the deposits and the archaeological record are identified these will be investigated. A database of all known sites and associated details from published and unpublished sources is being created, and the author would appreciate any details of new sites being investigated on the English side of the Estuary.
2. Palaeoenvironmental analysis is in progress on sequences from several sites on the English side of the Severn Estuary, including Burnham-on-Sea, Woodspring Bay, Gravel Banks, and possibly Oldbury. The data will be used to identify changes in past water/land relationships, and to highlight the cause, nature and magnitude of such changes. The results will be compared with other research from the Estuary.
3. To discuss the chronology of sea-level change in the Severn Estuary through the analysis of the geological and archaeological record, by establishing sea level tendencies and other parameters. This will ultimately provide an environmental context for past human exploitation

through both space and time, allowing an interpretation of an archaeological site with regard to its proximity to the original coastline and other natural resources. A pilot study assessing the feasibility of using a G.I.S for modelling the coastline in relation to archaeological sites will be implemented.

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Preliminary survey of coastal archaeology including the intertidal zone between Wains Hill (Clevedon) and Sand Point (Worle), North Somerset.

by Mark Hildich

As part of the 'Introduction to Archaeology' Certificate course at Bristol University, a rapid coastal and intertidal survey has been carried out between Wains Hill (ST 389 708) and Sand Point (ST 315 658). Where possible, features found within the intertidal zone (eg the remains of fish traps) are linked to evidence for related activities further inland (eg a fish processing structure on Middle Hope). It has been noted that the English side of the Severn Estuary is far muddier than the Welsh side, and in this study area there are indeed extensive deposits of soft mud which are generally greater in depth around the various tidal creeks that cross the intertidal zone. A comparison of air photographs taken in the early 1990s (prints 45/93/245,45/93/247: Environment Agency) and 1995/96 (prints AF/95C/430, AF/96C/543 nos. 9104 & 9102: North Somerset SMR) shows that this mud cover is decreasing, while a comparison of recent air photographs and those taken in 1946-1950 indicates that erosion is also taking place of the saltmarsh immediately in front of the seawall. The result of this erosion has been to expose sites that had previously been under saltmarsh cover, including the remains of sea defences which existed prior to the extensive work carried out during the 1950/60s.