



Workshop 20

Maritime Culture Heritage & Blue Growth: What's the Connection?



Thursday 28 May 2015, 11.00-12.30

Room: Skalkotas Hall

Speakers and presentation summary

Prof. Geoff Bailey, Professor of Prehistoric Archaeology, University of York

Geoff is a field archaeologist, with particular interests in coastal prehistory and submerged landscapes. He has led multi-national multi-disciplinary underwater projects in Europe and the Red Sea, including COST Action TD0902 SPLASHCOS and the ERC-funded project DISPERSE.

Geoff will outline the massive impact of past sea level change, the extent of the submerged landscape, and the growing number of underwater archaeological discoveries. These are likely to cast entirely new light on the early roots of European civilization, provide new data on past climate and sea level change, and offer insights into future sea-level changes and their socioeconomic impact. This is opening up a new era of Continental Shelf Prehistoric Research, stimulating new technologies of investigation, and engaging wide public interest. It is also vulnerable to destruction from many natural and industrial processes. If it is not to be lost for ever, this unique record needs to be investigated and managed at an international scale by research institutions working in partnership with industrial and commercial enterprises and government agencies.

Dr. Dimitris Sakellariou, Research Director of Marine Geology and Marine Geoarchaeology, Hellenic Centre for Marine Research

Dimitris manages and coordinates the scientific underwater team of HCMR, with the use of ships and underwater survey equipment including submersibles and remotely operated underwater vehicles. He is active in the search, survey and mapping of submerged archaeological remains in shallow and deep waters and the reconstruction of submerged prehistoric landscapes.

Dimitris will highlight the importance of transdisciplinary collaboration for research on the submerged prehistoric cultural heritage. Modern technology in seabed acoustic survey, data acquisition, diving technology, photographic and computer vision techniques, data storage and predictive modeling make it feasible to envisage a proactive strategy which would have been impossible 10-20 years ago. Costs can be kept to a minimum by combining initial surveys needed for Continental Shelf Prehistoric Research with those already being conducted for environmental impact assessment and national and regional environmental monitoring requirements.

Dr. Nena Galanidou, Associate Professor of Prehistoric Archaeology, University of Crete

Nena is active in research on the Palaeolithic and Mesolithic of SE Europe. She currently directs three research programmes addressing the Middle and Upper Pleistocene insular records of Greece.

Humanity's history is a long tale of mobility and travel, most likely including early experiments in sea travel. Sea-level fluctuations changed access routes both on land and by sea. Nena will present palaeogeographic research and archaeological discoveries from the Aegean Basin, a continental crossroads for past human dispersals.

Dr. Henk Weerts, Senior Researcher, Cultural Heritage Agency of the Netherlands

Henk works for the nationwide supervision of physical geographical research that is related to archaeological and landscape cultural heritage. He has been involved in the Maasvlakte 2 research since 2007.

A Mesolithic site was discovered 20m under water in the expanding Port of Rotterdam, using geological and geophysical survey techniques and was "excavated" in 2011. As this had never been done before anywhere in the world, planning and realisation of the excavation was very much a process of learning by doing. The site was carefully excavated by adapting a pontoon and crane used for dredging. A specially designed grab removed

slices of sediment and placed them in large bags on the pontoon. At the end of each day, this “harvest” was brought onshore, where the contents of some 360 big bags were sieved for archaeological remains. The spectacular results, including the methods used in survey and excavation, have recently been published in a book that is now available.

Tiedo Vellinga, Professor of Ports and Waterways, TU Delft & Director Environmental Monitoring, Maasvlakte 2, Port of Rotterdam

The Port of Rotterdam Authority (PRA) built a 2000 hectares port expansion – Maasvlakte 2: – involving removal of 240 million m³ of sand from the North Sea to create new land and a connecting channel and port basins in the former near-shore shallow sea. From the start, archaeology was part of the project planning, and detailed research plans and protocols were agreed between the PRA and the Dutch Cultural Heritage Agency. Initially intended to reduce the commercial risk of unexpected archaeological discoveries, the project evolved into a valuable and rewarding project asset. It serves as a key reference on how to deal with maritime cultural heritage in such a major infrastructure project. It included a dedicated budget and an “archaeological committee” to control expenditure (need to know versus nice to know). The 20m underwater excavation of the drowned landscape in the Yangtze harbour was only possible due to the innovative approach of the PRA and the cooperation of all involved. The PRA developed a special web application to record the prehistoric findings, integrate the scientific world and at the same time involve the general public and share the results with them.

Andrea Klomp, Senior Policy Advisor, Cultural Heritage Agency of the Netherlands

The North Sea floor has long been known to be rich in drowned Stone Age archaeology. For decades, trawler fishermen have found artefacts in their nets. The case-study from the Maasvlakte 2 is a fine example of in-situ preserved Mesolithic archaeology. Where in situ archaeology is present, it needs to be protected according to Dutch legislation. Offshore, this is especially necessary because of the many activities that threaten the archaeological heritage – oil, gas and sand extraction, offshore wind parks, etc. Although coring data, 2D and 3D seismics and detailed bathymetry are often abundantly available, this is not sufficient for the detailed mapping that is needed to identify locations of potential archaeological significance. Hence, different zones of archaeological potential will be identified, based on existing maps and data, and requirements of archaeological investigation will be formulated, so that industry knows well in advance what will be required to investigate the archaeology at a given location.

Euan McNeill, Director, Coastal & Marine, Wessex Archaeology on behalf of British Marine Aggregate Producers Association

Euan provides high level archaeological consultancy and managing archaeological assessments as part of the environmental impact assessment process, including regional environmental assessments, desk-based assessments and reviews of geotechnical and geophysical data. These have been for a wide variety of sectors, including the marine aggregates industry, ports and harbours, and numerous marine renewable energy projects. He also manages the administration of the BMAPA/EH/TCE protocol for the recording of finds from the seabed and its associated awareness outreach programme targeting aggregate industry employees.

Euan will present a review of the discovery of a Middle Palaeolithic assemblage off the East Anglian coast of England in aggregate dredging licence area 240 and its subsequent investigations. This will demonstrate the value of collaborative working between curator, seabed owner, industry and archaeology, the value of reporting protocols and the benefits that have accrued to our understanding of submerged prehistory in the region.

Elena Kountouri, Head of the Directorate of Prehistoric and Classical Antiquities, Hellenic Ministry of Culture, Education and Religious Affairs

Elena will give a presentation on heritage at the bottom of the sea-the experience of the Greek Archaeological Service.