

Geoff Bailey, Nena Galanidou, Hans Peeters, Harke Jöns, Moritz Mennenga. (eds) *The Archaeology of Europe's Drowned Landscapes*. Springer Open: Cham Switzerland. 2020; 561 pp.; ISBN 978-3-030-37366-5; ISBN 978-3-030-37367-2 (eBook).

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This edited volume aims to describe archaeological remains submerged by postglacial rises in sea levels across the European continental shelf, culminating with the establishment of modern sea-levels 7000 – 2000 years ago. While this date cut-off means discussion involves predominantly Stone Age archaeological sites, those older than 6000 – 5000 BP, in some locations Bronze and Iron Age sites are included. What the date cut-off does exclude are more recent submerged remains, shipwrecks for example.

The book is one of several outputs from a four year research network (2009 – 2013), Submerged Prehistoric Archaeology and Landscapes of the Continental Shelf (SPLASHCOS). One is a partner volume (Flemming et al. 2017) to the work considered here dealing with the geological and environmental processes during periods of low sea level, and the preservation and visibility of archaeological features on now submerged landscapes. Another is the SPALSHCOS Viewer (<http://splashcos.maris2.nl/> and <http://splashcos-viewer.eu/>), an online database that provides information on the known European underwater archaeological sites, extensively referenced in the *The Archaeology of Europe's Drowned Landscapes* chapters. Two other SPLASHCOS outputs are edited volumes from conferences (Harff et al. 2016; Bailey et al. 2017).

The volume is organised into four parts, each comprising an introduction and a series of specialist chapters. The first three parts consider the submerged archaeology of marine basins: the Baltic, the North Sea, and the Mediterranean (the companion volume, Fleming et al. 2017 is structured in a similar way). Progression follows an anticlockwise pattern beginning with the Baltic basin and moving from west to east, ending with the submerged landscapes along the Mediterranean coast of Israel. Individual chapters discuss the underwater archaeological evidence for countries bordering on the basins. Thus for, Part 1 The Baltic and Scandinavia, there are individual chapters for Denmark, Sweden, Germany, and Norway. Part 2 includes chapters on the Netherlands, Belgium, Great Britain, Ireland, France, Spain, and Portugal. Part 3 covers Italy, Malta, Croatia, Greece, Bulgaria, the Ukraine, Cyprus, and Israel.

As Bailey and his co-authors discuss in the introductory chapter, this organisation raises some issues, one obvious one being that some countries have coastlines bordering more than one basin. There are also issues of coverage. Not all countries with marine basin coastlines are included in the chapters. Coverage is best for the Baltic and Scandinavia with which the volume begins but much less complete for the Mediterranean. In two instances, chapters dealing with Malta and the Ukraine, underwater archaeological potential is discussed rather than descriptions of actual finds. North Africa is not included at all. As is explained, this reflects the availability of experts on individual regions but also the existence of underwater archaeological finds. For some locations nothing at least at present is known. Other issues involve what should be classed as underwater archaeology. For the Atlantic coastlines, for example, the land and sea boundary is sometimes difficult to define leading to ambiguity in separating terrestrial from underwater archaeology. All these issues are extensively discussed in the volume's chapters.

The fourth part of the volume comprises an introduction and three chapters that consider the legal, historical, and managerial issues connected with the discovery of underwater sites and the commercial and industrial exploitation of the seabed. As these chapters document, there is a

considerable history to the discovery of underwater archaeological remains with commercial trawling as well as other more recent marine based industries involved in their discovery. This raises a number of issues around heritage protection and legislation.

The volume aims to provide a comprehensive description of the known underwater archaeology of submerged landscapes and this is very much what the individual chapters provide. Taking chapter 5, on Germany (Jöns et al.) as an example, the chapter begins by discussing palaeogeography and sea level changes, in this case for both the Baltic and the North Sea coasts. There follows a discussion of archaeological sequences, focussing on the early to mid-Holocene, the Mesolithic and Neolithic, because sites from these periods are the most abundant. These sites occur in depths ranging from 2 – 10 m, those that are the most accessible for survey and investigation along the Balkan coast. The chapter summarises the known major underwater sites and their composition beginning with those found in Wismar Bay and following with results from work on the coast of Rügen Island, where research was enhanced but integration with a state run heritage project, and sites along the Schleswig-Holstein coast. The abundance of submerged Baltic sites is contrasted with those known on the Wadden Sea coast where the depth of marine sediments means that archaeological materials are most often exposed as a result of storm induced erosion. A summary of preservation conditions and future challenges emphasises the visibility of sites are a result of systematic survey but also the nature of the marine preservation conditions. Along the Baltic coast, Stone Age sites were originally located on the shoreline but only material deposited in shallow waters has preserved. In many cases almost nothing is left of the dryland components of these sites. As the authors emphasize, underwater preservation is related to rapid inundation and the protection provided by marine sediments. Along the Wadden Sea, and in areas like the eastern Frisian Islands, burial by marine sediments is deeper leading to a higher proportion of sites represented by isolated artefacts exposed by storms. The chapter ends with a discussion of the management of underwater cultural heritage in Germany.

This format is followed by the majority of the chapters that make up the first three sections providing the reader with a good understanding of the currently known range and composition of underwater archaeological sites but also the importance of sea level changes and different preservation conditions. Each of the chapters is well illustrated, with abundant figures in colour providing details of the impact of sea level changes, the location of sites, and the items that were recovered as well as, in some chapters, illustrations of the process of investigation. This makes for an impressive looking volume in both the hardcopy and online versions. It is worth noting that all chapters are open access under the Creative Commons Attribution 4.0 International License. To facilitate readers who might want to consult individual chapters, the list of references appears at the end of each chapter. Both the individual chapter authors and the volume editors have worked hard to produce both an elegant looking volume and one that is easy to read, this despite the considerable quantity of material that is presented.

Bicho et al. note in their chapter on Portugal (ch. 14), the shift in recent scholarship recognising that marine resource use likely occurred much earlier in human history than once thought (e.g., Erlandson 2001). This forms one of the themes that Bailey et al. identify in their opening chapter. Other themes include interest in the routes taken by the hominins who entered Europe both from Africa and via Anatolia, the significance, timing, and distances covered by early sea faring, and the spread of early agriculture since this occurred during periods of reduced sea-level.

The volume does a good job highlighting the extent and preservation of the underwater archaeological record with the results from both Denmark and Israel providing standout examples of what can be achieved. But the volume also highlights the potential of the records in other countries

that border the European coastline where the records are not so well investigated. These examples will inspire archaeologists in these European countries interested in coastlines, but also those in other parts of the world, to initiate their own underwater investigations.

## References

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