

gen, als dies weithin geschieht. Damit dies gelingen kann, ist es zu wünschen, dass mehr Arbeiten im Stil der Studie von Beckerman durchgeführt und publiziert werden.

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MARTIN MAINBERGER / JOSEF MERKT / ANGELIKA KLEINMANN, Pfahlbausiedlungen am Degersee. Archäologische und naturwissenschaftliche Untersuchungen. Mit Beiträgen von J. Bank-Burgess, T. Baum, J. H. Dickson, M. J. Kaiser, S. Million, E. Stephan, Ch. Vieth, R. Vogt, L. Wick und I. Wiesner. Materialhefte zur Archäologie in Baden-Württemberg Heft 102 = Berichte zu Ufer- und Moorsiedlungen Südwestdeutschlands 6. Konrad Theiss Verlag, Darmstadt 2015. € 59.00. ISBN 978-3-8062-2970-7. 535 pages with 280 figures, 41 plates, 52 tables and 1 CD-ROM with 17 figures and 74 tables.

It would be an understatement to say that this volume is not the result of ‘perseverance’. The hope to find evidence of a prehistoric lacustrine settlement on the Degersee dates back to the 19th century when priest, teacher, cartographer and antiquarian Konrad Miller, influenced by the ‘contagious’ ‘Pfahlbaufieber’ triggered by the Obermeilen discovery on Lake Zurich (F. KELLER, Die keltischen Pfahlbauten in den Schweizerseen – Erster Bericht. Mitt. Ant. Ges. Zürich 9,3, 1854, 65–100; J. GISLER / M. FLÜELER-GRAUWILER [eds], Pfahlbaufieber: Von Antiquaren, Pfahlbaufischern, Altertümerhändlern und Pfahlbaumythen. Mitt. Ant. Ges. Zürich 71 [Zürich 2004]), became convinced that similar settlements were also to be found on this rather small lake. It was however only more than a century later that his dream would come true when, in December 2002, divers Wolfgang Hohl and Adalbert Müller identified a Neolithic lake-dwelling on the northern shores of the Degersee. With the sighting of a second settlement not far from the first one in 2009, and even the discovery of an Early Bronze Age dugout, the efforts and tenacity of a number of scholars within several disciplines had finally paid off. It was now time to find out who were those brave communities that decided to settle this area instead of the ‘more comfortable’ shores of the nearby Lake Constance. The answer finally came after several years of painstaking underwater excavations in conjunction with an array of outstanding scientific analyses, whose results are summarised in this remarkable volume.

This substantial and extremely detailed book is simply, but cunningly, divided into two main parts: the *on-* and *off-site* investigations of the two Degersee’s lake-dwelling prehistoric sites. Part one (“On-site Untersuchungen”) consists of a thorough description of the two sites, De I and De II (chapter 1), and a series of specialist reports (chapters 2 to 9) on various scientific analyses: flint and textile studies, dendrochronology, archaeobotany, palynology and zooarchaeology carried out on both settlements. The last chapter (chapter 10) of part one is an in-depth appraisal of the Early Bronze Age dugout discovered near site De I in 2004 (M. MAINBERGER, An Early Bronze Age logboat from Degersee, Southern Germany. Internat. Journal Nautical Arch. 10, 2009, 1–10). The three chapters (11, 12 and 13) of part two (“Off-site Untersuchungen”) deal with sedimentological, palynological and pedological analyses in the Degersee’s surrounding areas (off-site) in order to gauge the environment’s ‘carrying capacity’ and its potential for economic sustainability. The volume concludes with a good synthesis of the various themes discussed throughout the book, but with the addition of very useful insights and elaborations of the obtained results.

As briefly mentioned above, chapter 1 describes the two sites (De I and De II) in detail, from the history of research to the various excavations, sampling (for subsequent scientific analyses), the identification of anthropogenic layers and their relationship to artefacts and house building material, and finally the determination of the four occupational phases. Most of the chapter focuses on site De I, which was the most extensively studied, and has multiple occupations spanning (although not continuously) from the early fourth to the early third millennium BC. The first settlement phase (A) occurred in the early / mid-40th century BC; the second (B) in the 38th / 37th century BC; the third (C) between the 35th and the 33rd century BC; and the last one (D) in the 30th century BC. Despite the well-studied stratigraphy linked to the four distinct anthropogenic layers, and the availability of well-preserved construction timbers, only two phases (first and fourth: A and D) of occupation could be precisely supported by dendrochronology. The other two (second and third: B and C) could only be determined by calibrated ¹⁴C dates. A last occupation (named De I E) is presumed to have occurred in the Early Bronze Age as hinted by the dugout (dated to c. 19th/18th century BC) discovered near site De I in 2004 (MAINBERGER 2009). The intrusion of much earlier pottery sherds (one of them typologically linked to the Linearbandkeramik culture, LBK) as well as a few late Mesolithic flints, show that human activity in the area (but not necessarily on the lake) dates back as far as the sixth millennium BC.

The second site (De II) on the Degersee, discovered a few years later in 2009, is considered in less detail. The settlement, situated 700 m as the crow flies west of De I, is much smaller than De I, and has only one single occupation. Unfortunately, also in this case, precise dendrochronological dating / wiggle-matchings could not be applied; and, due to a radiocarbon curve plateau which the settlement's chronology falls into, also the ¹⁴C date cannot be fully precise (p. 289). However, the occupation seems to have occurred from the 33rd to the 31st century BC, making the site almost contemporaneous to De I Phase C. The number of artefacts of De II is very limited, and only a few of them could be associated to the anthropogenic layer (p. 92).

An important aspect of chapter 1 is that it places the various occupations (A, B, C and D, the presumed Early Bronze Age 'E', and the single occupation of De II) into regional and supra-regional contexts in order to show the significance of the Degersee's settlements in terms of external influence, economy and long-distance trade / contact. By doing this, Mainberger has been able to demonstrate that in spite of their location which might trigger possible logical assumptions, the two settlements of the Degersee (including all their occupational phases) have no cultural / trade connection to the east, namely the Allgäu region, Bavaria and further beyond, whatsoever. In fact, from the early to the late occupations, the Degersee lake-dwellers were more connected with the western areas of Lake Constance (including part of Switzerland), the north as far as the Federsee, and the Alpine region to the south through the Rhine valley, as typological studies of artefacts show. The chapter concludes with an attempt to link the various occupational phases to climatic variations, although Mainberger cleverly postpones the full discussion on this topic until the last chapter (the "Synthese") when the reader has (or should have) read all the chapters (and especially those in part 2 – "Off-site Untersuchungen"), which certainly add crucial information.

Chapters 2 to 9 are specialist reports concerning the numerous scientific analyses carried out during the Degersee project. Both chapters 2 and 3 deal with flint artefact analyses; Christina Vieth (chapter 2) places the Degersee flint objects into a wider geographical context to understand where the raw material (or perhaps the already-made objects) originated from, considering that the lake's immediate surroundings are poor in flint deposits. In chapter 3, Michael Kaiser is faced with the fascinating enigma as to why a number of late Mesolithic flint artefacts have 'infiltrated' in the De I layers.

The constant anaerobic conditions of the submerged site De I, has facilitated the excellent preservation of a number of textiles, all belonging to the earliest occupation (A). In chapter 4, Johanna Banck-Burgess notices differences in style between the Degersee and the almost-contemporary sites of Hornstaad-Hörnle, and Sipplingen-Osthafen. Despite being slightly older, the Degersee's textiles are more sophisticated than those of the Hornstaad group. Ingrid Wiesner's chapter 5 purely describes the techniques used to conserve the delicate textiles.

Chapter 6, by S. Million and A. Billamboz, is a detailed account of the dendrochronological and dendrotypological analyses carried out on the various building timbers found in the two sites. The chapter is particularly useful as, in addition to chronological issues, it discusses woodland management in connection to agricultural activities, and possibly their link to settlement dynamics. The authors also mention climatic variability linked to the environment as well as human behaviour – this point is particularly interesting and can be further developed in association with themes discussed in part 2 (“Off-site Untersuchungen”) of the volume.

Thanks to the good level of preservation of plant macro- / micro-remains, chapters 7 and 8 are entirely dedicated to palaeoenvironmental reconstructions as well as the identification of plant cultivation and gathering activities. Although a detailed account of subsistence strategy was only possible for the first occupation (A) of De I, U. Maier (chapter 7) has nevertheless been able to identify, for instance, a change in flax seeds size (from large to small) from Phase B to Phase C. L. Wick's on-site pollen analyses do confirm the results of Maier's studies, adding more insights on livestock farming, which are confirmed also by E. Stephan's zooarchaeological studies in chapter 9. The fact that 80 % of the analysed animal bones from De I (Phase A) consist of wild fauna is not surprising; more or less contemporary settlements on the western Bodensee (including the Untersee) show similar statistics, highlighting the importance of hunting in that period. Surprising is however the absence of cattle and pigs from Phase A, and the clear presence of ovis (sheep / goat), denoting a distinct animal husbandry in the area.

The last chapter (10) of part one provides additional information about the Early Bronze Age dugout discovered near De I. Fascinating is the fact that the particular moss used to caulk the board of the canoe near the stern was not local, implying that the boat itself might have been caulked elsewhere, or maybe the ‘special’ moss might have come from far away (trade?).

The second part of the volume (“Off-site Untersuchungen”) consists of a series of off-site sedimentological, palynological and pedological analyses to study the environment at a local (the immediate surroundings of the De I and II settlements) as well as regional scale. By combining sedimentological and palynological analyses, Angelika Kleinmann, Josef Merkt and Helmut Müller (chapter 11) have managed to identify seven secondary-forest cycles from the Neolithic to the Bronze Age, with one lasting c. 810 years, and others spanning between 220 and 480 years (p. 453). These cycles show an alternating interaction with the woodland which is possibly linked to settlement dynamics (in itself also influenced by climatic variations). In chapter 12, R. Vogt shows the correlation between erosion / accumulation processes and agricultural activities in the area. Although the chronology was only traceable back to the Bronze Age (p. 484), due to a very deep sedimentation (3 m), the chapter shows the relationship environment – agricultural activity very clearly. Tilman Baum (chapter 13) goes a step further by calculating the land ‘carrying capacity’ of the Degersee's surrounding areas – a combination of pedological geomorphological and GIS investigations have revealed an area not particularly suitable for agriculture. Despite this though, the Degersee's lake-dwellers were not the only people in the region – contemporary inland / terrestrial settlements did certainly exist.

The volume concludes with a very useful “Synthese” (by M. Mainberger et al.), which not only summarises the entire Degersee project, but also discusses a number of crucial points highlighted throughout the chapters. Amongst them we have, for instance, the significant change in agricultural activities from the early to the late Neolithic, the remarkable woodland management linked to the seven secondary-forest cycles, the study of the surrounding landscape carrying capacity with the prediction of higher demographic impact and more inland settlements, and finally the unexpected cultural connections and contact networks. The authors also dare to discuss the clear link between human activity, settlement dynamics, and climate without falling into a too obvious environmental deterministic trap. The overwhelming evidence of settlement occupations coinciding with drier and warmer climatic phases is carefully discussed, taking into account lake-level fluctuations and human impact on the surrounding landscape. Once the reader is almost convinced of the inexorable prevalence of climate over people, with an interesting twist the authors advance the idea of the Degersee’s Neolithic groups taking advantage of the unfavourable climate of the region (p. 534). If we consider the complexity of micro-climates around the Circum-Alpine region lacustrine areas, this suggestion is more than plausible.

Apart from the usual typos and minor editing imprecisions (e. g. the m ü NN, pp. 25–26), it is difficult to criticise such a volume. In fact, it should be praised for the remarkable amount of information that it provides. It also shows how synergetic efforts between the various disciplines lead to better and more reliable results. The fact that the methodology is clearly explained and the data used are readily perusable facilitates comparative analyses and future elaborations. My only criticism is on the designation of the Neolithic periods. In Chapter 1 and in the “Synthese”, Mainberger uses the *Endneolithikum* straight after the *Jungneolithikum*. This could be confusing especially if absolute dates are not listed because the majority of scholars in Germany use the five-period division, placing the *Spätneolithikum* between the two (e. g. *Altneolithikum*: 5500–5000 BC; *Mittelnolithikum* 5000–4400 BC; *Jungneolithikum*: 4400–3500 BC; *Spätneolithikum*: 3500–2800 BC; and *Endneolithikum*: 2800–2200 BC; see J. LÜNING, Erneute Gedanken zur Benennung der neolithischen Perioden. *Germania* 74,1, 1996, 233–237). It is of course understood that Mainberger’s division (*Jungneolithikum* [4400–3500 BC] → *Endneolithikum* [3500–2200 BC]) is not wrong; some scholars do use it, but this difference should at least be pointed out in the publication. Nonetheless, this is a book that all archaeologists should have on their bookshelves.

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ANDREAS SATTLER, Die Gräber der Aunjetitzer Kultur im Saalegebiet. Zum Totenritual auf Grundlage der älteren Befunde. Universitätsforschungen zur Prähistorischen Archäologie Band 267. Verlag Dr. Rudolf Habelt GmbH, Bonn 2015. € 55.00. ISBN 978-3-7749-3941-7. 216 pages with 15 figures, 9 tables, 6 maps, 6 plans and 1 supplement.

As we read in the introduction (I. Einleitung, pp. 1–5) to this book, which is the published version of Andreas Sattler’s PhD thesis, from the University of Halle / Saale, the author reanalyses graves and grave goods of the Únětice culture from the Saale Valley that were originally investigated and published prior to 1989. Graves investigated after 1989 were, as he notes, analysed in detail elsewhere (s. Deutsche Forschungsgemeinschaft FOR 550 “Der Aufbruch zu neuen Horizonten”). Unpublished graves and cemeteries were not considered in this work. For example, the cemetery of