Welcome to Issue 32 of the A+M Newsletter and thank you to all who contributed. I would like to remind the AMWG community that we welcome any contributions related to archaeomalacology and are especially interested in member photos/images, news and updates.

About the Newsletter

The Archaeo + Malacology Newsletter warmly invites contributions related to archaeomalacology in its widest sense. Please email submissions and questions to the editor.

Annual deadlines are 31st January for circulation in February and 31st July for circulation in August. Current and previous issues of the newsletter are available at archaeomalacology.wordpress.com

Editor: Cindy Nelson-Viljoen

The content of this newsletter does not reflect the official opinion of the editor or online host. Responsibility for the information and views expressed herein lies entirely with the author(s).

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News & Announcements

Special Issue "Adaptive Capacity of Prehistoric Coastal Communities to Environmental Changes"

A special issue of Quaternary (ISSN 2571-550X). Deadline for manuscript submissions: 31 January 2020

Guest Editors: Dr. Elodie Brisset, Dr. Catherine Dupont and Dr. Francesc Burjachs

We are pleased to invite you to contribute to this Special Issue that aims to decipher the adaptive capacity of prehistoric coastal communities to the effect of the sea-level change and related phenomena.

Past socio-ecological adaptation to sea-level rise has emerged as a key field of study to investigate the sensitivity of human systems to global climate changes. Indeed, following the last glaciation, the melting of ice sheets induced a rapid sea-level rise, drastically modifying the configuration of coastal areas. The consequences of this sea-level rise not only consisted of changes in the territory occupied by prehistoric communities, but also induced changes in the availability of environmental resources, which could have had threatened the adaptive capacity of coastal human communities. By gathering case studies on this topic, this Special Issue aims to improve our understanding of the modality and rhythm of socio-ecological responses to sea-level rise, which is of major importance in the current context of global environmental changes. We thus encourage the submission of original manuscripts that contribute to better understanding past human–environment feedbacks in coastal areas.

Manuscript Submission Information

Manuscripts should be submitted online at www.mdpi.com by registering and logging in to this website.

Once you are registered, click here to go to the submission form. Manuscripts can be submitted until the deadline. All papers will be peer-reviewed. Accepted
Recent identification of *Turbinella pyrum* tools among previously reported shell artefacts from Chauldari shell midden in the Andaman Islands

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**Introduction**

Since the 19th century ethnographic observations of the indigenous people, the Onge, Jara was and Greater Andamanese, in the Andaman Islands have highlighted the important role of molluscs both as a food resource and raw material for making objects (Man, 1883a:b; Radcliffe-Brown, 1922; Cipriani, 1966). The presence of shell middens across the islands has further provided strong evidence for their dietary use in the past (Stoliczka, 1870; Cooper 1985: 1990: 2002). A list of shell artefacts sourced from ethnographic literature by Cooper (1988) records the common use of shells like *Cyrena* (**Polymesoda coxans**) as a scarper and/or knife, *Arca* (**Anadara**) in pottery making, *Tridacna* sp. as arrowheads, *Nautilus* for drinking water, and *Dentalium* shells as beads etc. Ethnographic accounts also indicate the frequent use of shell adzes prior to the use of iron (Radcliffe-Brown, 1922). Most of these observation were useful for interpreting the functional aspects of shell artefacts recovered alongside pottery, lithics, molluscan shells and animal bones from the excavations at Chauldari, a shell midden in south Andaman (Dutta, 1962: 1974; Cooper, 1985: 1993). However, no identifications were made of the shell tools recovered from the Chauldari excavations by Dutta in 1962. In 1985, when Chauldari was once again excavated by Cooper, 117 shell artefacts were reported from an assemblage of 8103 bivalves and gastropods whose taxonomic identification was attempted although two shell columellae remained unidentified (Cooper, 1988: see Figure 1). Similarly, explorations and excavations by the Archaeological Survey of India in South Andaman during the late 1980s also yielded shell artefacts which were not identified and were simply referred to as shell tools (IAR 1985-86, 1986-87; Pl.1, 1990-91).

![Fig.1. Columella of *Turbinella pyrum* (left) and *Pugilina buchephalia* (right) from Chauldari (Cooper, 1988: 39).](image-url)

While the shell artefacts from the Andaman Islands are important for learning about their functional and technological aspects, they are also important for understanding the origins of the indigenous populations and their contacts with the rest of the world. Shell species identification is equally vital to obtain information about the species used, their procurement,
ecological habitat, to establish trade networks and shell working technology etc. Today much of the ethnographic collections from the Andaman Islands are scattered in different museums across the world and the majority of the excavated shell artefacts are difficult to access. However, Illustrations and photographs of a few unidentified shell tools were discovered while researching published literature on shell artefacts from shell middens in the Andaman Islands, making it possible to identify the species used by the presence of certain characteristic shell morphological features. Given below are the tools from the Chauldari shell midden, whose shell identification was recently carried out. All the specimens were identified as Turbinella pyrum except for one Pugilina buchephala specimen.

1. Shell columella shaped into a spatula by grinding was reported by Dutta from the excavations at the shell midden site of Chauldari (Dutta, 1974; see Figure 2). This was identified as Turbinella pyrum columella based on the presence of the thick oblique grooves or ridges on its surface which is its characteristic feature.

2. A shell scraper made from the basal aperture part of the shell with part of the main shell whorl attached and the columella removed (Dutta, 1974; see Figure 3). This was also identified as Turbinella pyrum whose main shell whorl has been sawn probably with a sharp saw.

3. A middle portion of a large columella which is 4cm in length and 2.5cm wide was recovered from Chauldari at a depth of 1.5m by Cooper (1988). Its lower half of one side has been ground smooth and flat, while the ends of the shafts have been broken off unevenly. This was identified as Turbinella pyrum due to the presence of the thick grooves (Figure 1).

4. A columella, 5.4cm long and 1.6cm wide, also broken at both ends was recovered from Chauldari at a depth of 2.7m by Cooper (1988). The lower half of one side is worn flat though it is not smooth as the one described above. The columella bears no grooves, is smooth, the main whorl has been removed by sawing and it has an intact spire. The shell identified is that of Pugilina buchephala (Figure 1).

5. A shell columella identified as a tool was recovered from Portmout VI during the survey of shell middens by the Archaeological survey of India (IAR 1986-87, Pl.1). It is identified as that of Turbinella pyrum on the basis of the grooves.

Discussion

Turbinella pyrum is a large marine gastropod with a sturdy white smooth shell having a thick cylindrical columella located centrally within the shell with distinct grooves or ridges on its surface. Along the Indian coast it has a restricted occurrence in the Gulf of Kachchh and south Indian coast i.e. Gulf of Mannar and Palk Bay (Nayar and Mahadevan, 1973). Although it was intensively exploited in the Indian subcontinent for making bangles since the Indus valley times it was rarely used for making tools. Identification of the use of Turbinella pyrum shells for making shell artefacts at Chauldari is therefore significant as these shells are not readily available, are labour intensive and require complex techniques of procurement and cutting, while other shell artefacts identified at Chauldari were made...
using locally available shells which were easier to procure.

With the limited data available however, it is difficult to determine if the sawn columellae were produced locally or brought from outside the islands from areas such as the Indian mainland or adjacent areas of Bangladesh and Myanmar. Procurement from outside the islands, mainly from the Indian subcontinent is a strong possibility since evidence for the ancient use of this shell in other regions east of the islands is negligible. To a certain extent shell cutting could have been also done locally by procuring shells from the coral reef areas around the islands which they inhabit even today (Subba Rao and Dey, 2000). Interestingly however, none of the ethnographic accounts mention the use of this particular shell in the islands even though its biological aspects and use in the Bengal shell bangle industry were already known by the end of the 19th century (Hornell, 1913).

Compared to many large gastropods, *T. pyrum* has one of the hardest shells and was cut using a copper/bronze saw during the Harappan civilisation and later by iron. Discarded columellae and sawn shell parts resulting from the shell bangle industries located in peninsular India could have been brought to the islands through trade and exchange. In the 19th century Hutton (1926) reported the use of sawn *Turbinella pyrum* fragments by the Naga people residing in the eastern Himalayas which were procured from the then existing shell bangle industry at Dacca in Bangladesh. However, these aspects need further investigation with the examination of many more such artefacts which could provide crucial evidence for studying contacts between the Indian mainland and the islands in the last 2000 years or more.

References


Abstracts

**Conus Ornaments from Tel Bareqet in an Early Bronze Age Near East Context**

Bar-Yosef Mayer, D.E., Paz, S. and Paz, Y.


**Abstract**

The discovery of 16 *Conus* apex beads from the Early Bronze Age II site of Tel Bareqet in central Israel, prompted research concerning this type of personal
ornament. Theses ornaments were made of Indo-Pacific Conus shells, and they were discovered in numerous third millennium BCE sites in the Levant, the Sinai Desert, as well as in Mesopotamia, suggesting long-range contacts. The existence of a workshop of such artifacts in Oman might point to their actual origin. Ethnographic analogies, coupled with the size and distribution of these artifacts, suggest that these were prestige items.

Conferences & Events

**The materiality of purple dye production and use in Cyprus and the Aegean from Prehistory to the Late Roman period**

Workshop - Archaeological Research Unit (ARU), University of Cyprus, Nicosia

1-2 November 2019

The study of purple dye production offers a dynamic field for new research. Developments in maritime archaeology and the increasing application of specialized field methodologies and laboratory techniques have resulted in a wealth of new data and fresh approaches to older material. These results can now be added to the rich collection of ancient written sources describing the process; however, with the new evidence come particular challenges.

Concentrations of crushed purple shells are usually understood as evidence for the existence of a purple dye workshop at a particular location. Crushed shells, however, are found in a range of contexts, at different distances from the coast and in varying amounts. Purple shellfish are also edible and decorative. While traces of pigment can form an additional type of evidence, this is often found in contexts far removed from production sites. This plethora of possibilities has created a degree of confusion in the interpretation of such finds. The situation is further complicated by the fact that testimony from Greek and Roman sources is often used to interpret purple dye production in all periods.

In the last few years, interdisciplinary and historically situated analysis of several contexts in both the eastern and western Mediterranean have prepared the ground for a new attempt to examine the criteria used to identify installations for purple dye production in different chronological periods. Careful analysis of the same data also appears to offer an opportunity to distinguish primary and secondary uses of the products and by-products of these installations (workshops), thus uncovering the embedded nature of purple dye production and a more nuanced appraisal of its social, economic and cultural meanings.

The Workshop on *the materiality of purple dye production*, which is jointly organized by the Institute for Aegean Prehistory Study Center for East Crete (INSTAP-SCEC) and the Archaeological Research Unit (ARU), University of Cyprus, will place primary emphasis on the archaeological remains of purple dye production and use and the importance of context when interpreting these remains. It is also an opportunity to promote detailed presentations of new or little-known case studies from Cyprus and the Aegean spanning a broad chronological scope from prehistory to the Late Roman period. Within these parameters the event will make a meaningful contribution to contextualizing the form and development of this major craft in the eastern Mediterranean.

The Workshop is open to scholars and laymen alike (no registration fees are required). It will take place on the 1st (Friday afternoon) and the 2nd (Saturday morning to late afternoon) of November 2019 in the premises of the Archaeological Research Unit, University of Cyprus (12, Gladstone street, Nicosia, tel.22893560).

See [link](#) for list of presentations.

**40th AEA Conference – Living through change: the archaeology of human-environment interactions**

University of Sheffield, UK

29 November – 1 December 2019

As environmental archaeologists we recognise that human activity can impact local and regional environments, and, conversely, that dynamic environments can stimulate responses in human behaviour. The role of humans as agents of environmental change is increasingly central to debates far beyond our discipline and, given current global politics and the present threats of environmental change, it is more important than it has ever been for environmental archaeology to contribute powerful, vivid and evidence-based accounts of human-environment interactions from the deep and recent past. At the forefront of the study of past human-environment
relationships, environmental archaeologists are keenly placed to explore what it means to live through long- and short-term environmental change.

The 40th conference of the Association for Environmental Archaeology will provide an opportunity to reflect on the discipline’s past, and debate its future in the context of growing bodies of data, the integration of multiple proxies for change, new analytical techniques and fresh theoretical paradigms. We welcome papers that explore environmental change from the human perspective through engagement with questions of change, adaptation, sustainability and human impact. We welcome papers from across the breadth of the discipline, including – but not limited to:

- Human-induced changes to landscapes and environments at all scales
- Human response to anthropogenic and natural environmental change
- Sustainability and adaptability in changing environments
- Environment as a driver of economic and/or socio-political change
- The past as a proxy and model for future human-environment interactions
- The Anthropocene and other conceptual paradigms
- The contribution of environmental archaeology to policy-making and public engagement


**Australian Archaeological Association Annual Conference 2019 - Disrupting Paradise: The Archaeology of the Driest Inhabited Continent on Earth**

Gold Coast, Queensland, Australia

10-13 December 2019

We invite you to join us in (Surfers) Paradise this year to participate in the Australian Archaeological Association Annual Conference, ‘Disrupting Paradise: The Archaeology of the Driest Inhabited Continent on Earth’. Surfers Paradise and the Glitter Strip are famed for their sun, surf and sandy beaches along with a seamy underbelly after the sun goes down. But as Australia’s largest non-capital city, the Gold Coast arguably presents one of the clearest examples of complete terraforming and resurfacing of cultural and natural landscapes. Archaeology provides an arsenal of practical and theoretical tools to interrogate the long-term human interaction with and transformation of landscapes such as these.

In this conference we take the opportunity to reflect on how archaeology has developed as a discipline and as a community in the 50 years since John Mulvaney published his landmark Prehistory of Australia. How has archaeology disrupted and continued to disrupt understandings of the past and ourselves? How have our understandings of people and transformation in Australia changed in the last 50 years? How has archaeology disrupted our dominant paradigms in archaeological method and theory? How has the culture of archaeological practice changed?


We encourage everyone to take advantage of the early-bird conference registration rates, which will be AUD200 for students and AUD400 for regular members. These reduced rates, combined with other initiatives including travel subsidies for Indigenous delegates and students, aim to widen the appeal of the annual AAA conference and increase attendance.

**Important Dates**

- Call for Sessions Open: March 2019
- Call for Sessions Close: Friday 3 May 2019 (likely to be extended; check website)
- Call for Abstracts Open: Friday 7 June 2019
- Call for Abstracts Close: Friday 16 August 2019
- Subsidy Scheme Application Open: April 2019
- Subsidy Scheme Application Close: Friday 27 September 2019
- Early Bird Registration Ends: Friday 11 October 2019

**PAPERS**


**BOOKS**


**Summary**

For thousands of years, the inhabitants of the Middle Cumberland River Valley harvested shellfish for food and raw materials and then deposited the remains in dense concentrations along the river. Very little research has been published on the Archaic period (ca. 8900-3200 cal BP) shell deposits in this region. Demonstrating that nearly forty such sites exist, this volume presents the results of recent surveys, excavations, and laboratory work as well as fresh examinations of past investigations that have been difficult for scholars to access. In these essays, contributors describe an emergency riverbank survey of shell-bearing sites that were discovered, reopened, or damaged in the aftermath of recent flooding. Their studies of these sites feature stratigraphic analysis, radiocarbon dating, zooarchaeological data, and other interpretive methods. Other essays in the volume provide the first widely accessible summary of previous work on sites that have long been known. Contributors also address larger topics such as geospatial analysis of settlement patterns, research biases, and current debates about site formation processes related to shell-bearing sites. This volume provides an enormous amount of valuable data from the abundant material record of a fascinating people, place, and time. It is a landmark synthesis that will improve our understanding of the individual communities and broader cultures that created shell-bearing sites across the Southeastern United States.

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