



## Man and Environment ABSTRACTS Volume XLVI, No. 1 (January-June 2021)

1. **Koloshi – A Newly Discovered Prehistoric Cave Site in the Konkan Region, Maharashtra**  
*Tejas Garge, Parth R. Chauhan, Sudhir Risbud, Rutwij Apte and Snehali Kulkarni-Khadke*

The Konkan region, along the western coast of India, was an important biogeographic zone for human and faunal adaptations, especially given its proximity to the nearby areas of high biodiversity and rainfall. While it is best known for its post-Chalcolithic multi-cultural records, recent evidence has shed light on prehistoric adaptations in the region. The oldest known archaeological evidence is that of Acheulian artefacts in a cave context, while other prehistoric occurrences have also been reported from several localities. Most of this record is dominated by microlithic assemblages in open-air contexts and a few reported cave sites; all of these remain undated and poorly understood. One of these includes the cave site of Koloshi which is being archaeologically investigated over the last two years. Situated relatively close to the coast, this cave is represented by a large cavity formed through weathering by various processes in the lateritic bedrock. Based on the typo-technology of the lithic assemblages recovered thus far, the site appears to represent occupation by prehistoric Homo sapiens group(s). The cave preserves (typologically) later Palaeolithic and microlithic assemblages, including hammerstones, anvils, choppers, core scrapers, flake scrapers, tanged points, microblade cores, bladelets, and debitage, all in surface and buried contexts. Such well-preserved caves are extremely rare in the Konkan region and one with prehistoric evidence, even more so. This work at Koloshi represents the first systematic multidisciplinary investigation into the prehistoric archaeology of the Konkan region by the Directorate of Archaeology and Museums (Government of Maharashtra).

Garge *et al.*, *Man and Environment* XLVI(1): 1-7 [2021].  
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2. **A Note on the Palaeolithic Finds from Bajpur, Khurda District, Odisha**  
*Jayendra Joglekar*

The Khurda District is well known for its Neolithic-Chalcolithic settlements that are sequentially followed by sites of the Early Historical period. A recent exploration in the Mandakini river basin brought to light a Late Palaeolithic artefact-bearing locality at Bajpur. The present communication is a brief description of the context of the artefacts and an analysis of the assemblage. This is the first report of a Late Palaeolithic locality in this part of Odisha.

J. Joglekar, *Man and Environment* XLVI(1): 8-12 [2021].  
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3. [Late Pleistocene Environments of South Asia: A Review of Multidisciplinary Research and Relevance for Understanding Hominin Environmental Adaptations](#)  
*Shashi B. Mehra and Parth R. Chauhan*

Palaeoenvironmental studies in relation to prehistoric hominin dispersals, adaptations and cultural transitions have been frequently applied to data from Europe, Africa and the Levant. In South Asia; however, very few studies have been carried out to test comparable hypotheses of hominin ecological adaptations. The region's geographical location suggests a corridor for hominin expansions towards Southeast Asia, making it relevant for palaeoanthropology. The Late Pleistocene archaeological records of South Asia have been increasingly studied over the last two decades in relation to the number of sites, chronological information, and contextual palaeoenvironmental data available, especially in India and Sri Lanka. This paper presents a general summary of Late Pleistocene environmental studies done till date in South Asia and associated implications derived from different proxies, i.e. sediment, carbonate, ostrich eggshell, pollen, speleothem, and multi-proxy approaches, including some archaeological sites. The records tentatively show that the period from 125-80 ka is predominantly characterised by humid environments and was followed by varied results/changes in climatic conditions at 79-70 ka and arid environments at 69-60 ka. Between 59 ka and 30 ka, South Asia's environmental conditions were again generally humid. The period from 29-20 ka (LGM) again represents varied results, which was later followed by arid conditions from 19-11 ka, i.e. following the Last Glacial Maximum. Studying archaeological and palaeontological records within environmental contexts will help to understand past human-environment relationships and associated behavioural transitions as well as explain specific faunal speciation and extinction events. This general review also demonstrates that many more Quaternary studies are required to fill major geographic, chronological, and methodological gaps in Late Pleistocene environmental research.

Mehra and Chauhan, *Man and Environment* XLVI(1): 13-44 [2021].  
ME-2021-1A03

4. [Analysis of the Microlithic Assemblage from the Late Mature Harappan Site of Kotada Bhadli, Nakhatrana Taluka, Kachchh District, Gujarat](#)  
*Riza Abbas, Sitaram Toraskar, Prabodh Shirvalkar and Yadubirsingh Rawat*

The lithic assemblages of various Harappan sites such as Shikarpur, Banawali, Bagasra, Mohenjo-Daro, Dholavira and other Indus Valley sites have evidenced a sizeable percentage of Rohri chert blades. In contrast, the analysis of the microlithic assemblage recovered from the excavations of the Late Mature Harappan site of Kotada Bhadli indicates that the production of tools was on high quality white translucent chalcedony sourced from a nearby source. Among the finished tools, backed and modified pieces, and burin dominate the assemblage. The high percentage of burins reflect that the majority of tools were used to perform activities such as groove making on material like wood or bone. A sizeable presence of backed and modified pieces indicates that they were probably used to serve some purpose concurrently with the burins. The high percentage of blade cores and near absence of blades shows that they were used and discarded away from the site.

The core reduction sequence shows that knappers were aware of the various techniques used in the manufacture of different types of microlithic tools but, at the same time, the assemblage also shows that they were not at all heavily reliant on siliceous stone as compared to the Mesolithic populations.

Mehra and Chauhan, *Man and Environment* XLVI(1): 45-56 [2021].  
ME-2021-1A04

5. [Recent Radiometric Dates and Their Implications in Understanding the Early Writing System and Early Historic Archaeology of Tamil Nadu](#)

[K. Rajan, V.P. Yathees Kumar, M. Rajesh, R. Sivanantham, J. Ranjith and J. Baskar](#)

In Tamil Nadu, nearly 1571 Tamil-Brahmi inscriptions were documented till date from 79 Early Historic sites. Of which nearly 1464 specimens are of Tamil-Brahmi inscribed potsherds recovered from 41 archaeological sites. Irrespective of a large number of Tamil-Brahmi inscriptions, the earliest date could not be assigned to the Tamil-Brahmi script due to the non-availability of the scientific dates. The date of the Tamil-Brahmi script was generally determined based on stratigraphy, palaeography, orthography, linguistic features, internal historical evidences, and other external cultural/trade contacts. The recent archaeological excavations conducted at Iron Age and Tamil-Brahmi yielding Early Historic sites such as Porunthal, Kodumanal, Keeladi, Alagankulam, Adichchanallur and Thelunganur provided 45 radiometric dates. Of the 45 AMS dates, 39 dates belongs to Early Historic sites and remaining 6 are from Iron Age sites. Of the 35 samples (4 contaminated out of 39), 14 dates are assigned to pre-Ashokan (i.e., before 268 BCE) and the earliest date goes back to the sixth century BCE. The metallographic analysis carried out on the sword collected from an Iron Age grave at Thelunganur revealed that it was made of ultra high-carbon steel and yielded two calibrated dates (cal. 1334 BCE and cal. 2742 BCE). Even if one considers the lowermost date as the possible date of introduction of steel, it could be placed around the mid-part of the 14th century BCE. The AMS dates obtained from samples collected from the sites such as Raja Nala-Ka-Tila, Malhar, Lahuradewa, Watgal, Gachibowli, Bukkasagara, Thelunganur and Mangadu placed the manufacture of the iron in India somewhere around the second millennium BCE and steel around the 13th/14th BCE. Thus, the introduction of iron in South India goes back to as early as the second millennium BCE and the beginning of Early historic period, and could safely be placed around the sixth century BCE as the evidence stands today.

Rajan *et al.*, *Man and Environment* XLVI(1): 57-86 [2021].  
ME-2021-1A05

6. [The Significance of Recent Research in Megalithic Cairns and Cists at Pallavaram, Tamil Nadu](#)

[A.M.V. Subramanyam, C.R. Gayathri, R. Ramesh and S. Vetriselvi](#)

Pallavaram is the celebrated site where Robert Bruce Foote found the first Palaeolithic artefact in India in May 1863. The megaliths at Pallavaram were first noticed and excavated by Alexander Rea in 1888. His finds were subsequently deposited at the Government

Museum, Chennai. In 1946, the site was declared as a centrally protected site. Due to the rapid urbanization of recent years, many archaeological sites within the city limits have either been destroyed or encroached upon. Pallavaram is one among them. In order to know the present status of the site, explorations followed by a trial excavation were undertaken recently by the Chennai Circle of the ASI almost 125 years after the initial discovery. Excavations led to the finding of a terracotta sarcophagus with a lid that throws light on burial practices at this site.

Subramanyam *et al.*, *Man and Environment* XLVI(1): 87-91 [2021].  
ME-2021-1A06

7. [Rice Production in the Early Iron Age of Vidarbha: Archaeological and Archaeobotanical Evidence from Rithi Ranjana, Maharashtra](#)  
*Nihildas N., Anil K. Pokharia and Himani Patel*

The Early Iron Age settlements in the Vidarbha region of Maharashtra have given evidence on the well-settled protohistoric lifeways sustaining on agro-pastoral economy, craft production, and the hinterland trade and commerce. The archaeobotanical evidence comes from sites like Naikund, Khairwada and Bhagimohari where a number of plant species were identified as part of people's diet with rice being dominant among them. The recent excavation conducted at Rithi Ranjana, near Nagpur, brought to light added archaeological evidence related to food production and its surplus storage. At this site, the evidence of rice at all levels indicates that it was an essential item of consumption; and production continued throughout the Early Iron Age in Vidarbha. This paper focuses on the subsistence strategy adopted by the Early Iron Age people at Rithi Ranjana, and its archaeological significance in the context of protohistoric archaeology of the Indian subcontinent.

Nihildas *et al.*, *Man and Environment* XLVI(1): 92-100 [2021].  
ME-2021-1A07

8. [Explorations of Lesser Known Old Port Sites along the Eastern Saurashtra Coast, Gujarat](#)  
*A.S. Gaur, Sundaresh and Pramod K. Maurya*

Explorations were carried out along the shore from Khambhat to Jafrabad along the Saurashtra coast during the 2018-19 and 2019-20 seasons. The main objective of these explorations was to locate ancient ports along this coast and to document the present condition of the coastline. The ports surveyed include Dharabandar, Jafrabad, Mahuwa, Pipavav, Victor port, and Dholera, besides a few Medieval period sites at Babarkot and Gogha. The investigation revealed that these ports which have played a significant role in trade and commerce are now abandoned due to siltation; and also help to trace the emergence of new ports where modern facilities are available. Though a few fishing boats still visit these ports, it is not to the extent that one can call these fishing harbours.

Gaur *et al.*, *Man and Environment* XLVI(1): 101-105 [2021].  
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