

### Man and Environment ABSTRACTS Volume XLVII, No. 1 (January-June 2022)

#### 1. Re-investigating an Acheulian Site of Pedambe, Raigad District, Konkan Region of Maharashtra, India: A Preliminary Report Jayendra Joglekar

This communication attempts to re-interpret a lesser-known Acheulian site at Pedambe (Raigad District, Maharashtra) in the Konkan region. The site is associated with the hill slope colluvium formed through debris flow and soil creep processes. This deposit was probably formed during the late Middle Pleistocene when this humid zone was experiencing a relatively weak summer monsoon. The site has yielded Acheulian artefacts made from compact basalt and gabbro rocks. This is perhaps the first record of the use of igneous mafic rock (gabbro) for making artefacts across the Deccan Trap region. Previously, the artefacts were reported from a stream bed context and, are stated to be made using quartzite/quartzitic sandstone rocks. Observations of the present re-investigation differ from the earlier one.

Jayendra Joglekar, *Man and Environment* XLVII(1): 1-8 [2022]. ME-2022-1A01

2. From Stone Tools to Stone Jars: An Overview of the Archaeology of North Cachar Hills, Assam, Northeast India *Nisha Rani Das and K. Krishnan* 

The North Cachar Hills have been instrumental in determining the origins of Assam's culture. From the first prehistoric site to the exploration of subsequent cultures, the area yielded a wealth of information indicating human activity. North Cachar Hill falls within the present Dima Hasao District, the only hill district in Assam where Austro-Asian and Austro-Mongoloid tribes co-exist. The migration of various ethnic and linguistic groups played a significant role in the emergence of various cultures over time. There are five sites, namely: Daojalihading, Mailu, Asalu, Bolason, and Chikambo, four of which belong to two different cultural phases, and one with multi-cultural material evidence. Luminescence dating has been used at Daojalihading, one of the sites in this group. Bolason and Chikambo, two of the sites mentioned above, can be compared and linked to the migration of linguistic groups and trading. Three of the chosen sites have been previously explored and re-investigated in this study, while the other two have been discovered for the first time. The current paper will provide a brief overview of various cultural formations and transformations based on material evidence, as well as the people's journey from small stone tool users to using massive hollowed monolithic stone jars.

N.R. Das and K. Krishnan, *Man and Environment* XLVII(1): 9-18 [2022]. ME-2022-1A02

#### 3. Rare Boat Motifs in Rock Art of Sonbhadra District, Uttar Pradesh *Prabhakar Upadhyay and Swatantra Kumar Singh*

Boat-building technology in India has a long history going back to the Mesolithic period. There are several representations and depictions of boats and ships, including sailing ships in ancient Indian art in the form of terracotta models, bas-reliefs, seals, sealing, plaques and coins, and paintings on pots and walls, sculptural panels, etc. These representations of ships are in different art media and are widely spread across time. Such representations in art reveal useful information about their construction techniques and the use of ships through the ages. Boat motifs are uncommon in early Indian rock art, even though there are large numbers of rock shelters located near different kinds of water bodies. However, in our study area, we have found a few rare depictions of it along the river Son in the Sonbhadra District of Uttar Pradesh. The present paper attempts to understand the cultural association of rarely painted boat motifs depicted in the rock shelters of the Kaimur Range in Sonbhadra District.

P. Upadhyay and S. Singh, *Man and Environment* XLVII(1): 19-29 [2022]. ME-2022-1A03

4. Hinterland Survey around Kudheri Nala, a Tributary of Son River, Madhya Pradesh Sunil Kumar Singh, Sudarshan Chakradhari, Aftab Alam, Dhananjay Kumar, Brij Mohan, Kishor Chand Vishwakarma and Vikas Kumar Singh

Kudheri Nala is a tributary of the River Son that flows through the Sidhi District of Madhya Pradesh. The river banks of this tributary have preserved archaeological evidence of ancient human habitation on both sides at 11 sites. This paper discusses evidence of past cultures in form of various tools and fossils observed during archaeological exploration.

S.K. Singh *et al.*, *Man and Environment* XLVII(1): 30-37 [2022]. ME-2022-1A04

### 5. An Analysis of Human Skeletal Remains from the Neolithic Site of Sangankallu, Karnataka

Veena Mushrif-Tripathy and Ravi Korisettar

Sub-adult skeletal remains have been reported from a few Neolithic-Chalcolithic sites in Karnataka. Of these, other than the site of Budihal, human bones from the Neolithic sites have not been studied using anthropological parameters. The present paper presents an analysis of the human skeletal remains excavated from the Hiregudda locality of the Neolithic site of Sangankallu excavated in the year 2003-04. The analysis hopes to enrich the meager data of the present corpus of

anthropological studies especially of the Neolithic period. The site has been dated to around 2000 BCE. The human skeletal remains belong to the sub-adult category. Out of six, two are around 6-8 months old, one is around a year and a half, two are around two and half years, and one is 15 and half years old. All the bones are fragmentary and hence sex determination was inconclusive. Pathological findings are mainly restricted to adolescent individuals. These findings include a possible case of maxillary sinusitis, periostosis of long bones, dental chipping, and caries.

Mushrif-Tripathy and R. Korisettar, *Man and Environment* XLVII(1): 38-47 [2022]. ME-2022-1A05

6. The Changing Nature of Pastoralism in Jaisalmer-Ramgarh, Thar Region: A Complexity Perspective *Ajay Dandekar, Rahul Ghai and Sudeepto Bhattacharya* 

Despite the fact that the world's largest nomadic population resides in South Asia, and given that the range of herds found in the subcontinent is astonishingly diverse, pastoral nomadism in the South Asian context has remained a marginalised field of study. The Indian Thar is a region with rich prehistory and history where a range of cultures have coexisted and interacted with one another. The present paper aims to study and understand the interactive dynamics of the Solanki Rajput pastoralism social-ecological system of the Jaisalmer District of Rajasthan from a complex system-theoretic perspective.

A. Dandekar et al., Man and Environment XLVII(1): 48-56 [2022]. ME-2022-1A06

7. Archaeobotanical Investigations from Adichchanallur, Tamil Nadu and Development of Agriculture inSouth India *Satish S. Naik* 

This paper examines the archaeobotanical investigations from the Early Iron Age site of Adichchanallur, Tamil Nadu, which dates to  $2700 \pm 30$  cal B.P. The analysis is based on 84 samples of well-preserved carbonised as well as silicified plant remains, which comprise husk and spikelet bases of wild (Oryza sp.) and cultivated rice (Oryza sativa), carbonised cotyledon of green gram (Vigna radiata), a seed of Solanum sp., an un-carbonised dormant seed of Vigna sp., charred fragments of nutshells, and microcharcoal bits. A review of the archaeobotanical studies from Neolithic and Early Iron Age sites in South India provides for a background of important information on widespread crop packages, including plant food staples and supplementary species. The reconstruction of the palaeodiet has received considerable attention, particularly in the light of the realization that plant foods too played a significant role in the past economies of tropical areas and the development of agriculture.

S. Naik, Man and Environment XLVII(1): 57-65 [2022].

#### ME-2022-1A07

### 8. Revising a Forgotten Stupa of Sopara, Maharashtra *Virag Sontakke*

Modern Nalasopara is located in the compactly populous metropolitan city of Mumbai. This place has a long history going back thousands of years. It was known as Shurparaka or Suppara in ancient times and served as an active port and a famous commercial town in the west coast region. The earliest record of this urban site figures in the Buddhist text Therigatha thus indicating its early relationship with Buddhism. During the period of the imperial Mauryas, it served as the capital of Aparanta and itself was an established urban trading centre. Probably due to this reason, Asoka issued the placement of his edicts VIII and IX here. As per the general belief, Sopara had only one stupa, which was first brought to light by Bhagvanlal Indraji way back in 1882. However, Henry Cousens reported and excavated another stupa in Sopara in 1896. This second stupa was located beneath the Hindu temple and was ascribed as a Mauryan period remnant. Sadly, this significant discovery of a second stupa by Henry Cousens was not well publicised and escaped the consideration of many academicians. So much so that the modern scholars believed that Henry Cousens excavated the same stupa mound as excavated by Indraji, thereby missing the presence of a second stupa at Sopara completely. Nevertheless, a scrutiny of Cousen's excavations very clearly establishes that there were at least two stupas situated at different locations in ancient Sopara. The present paper tries to revisit the forgotten stupa at Sopara and bring it again to the front and to understand the factors which might have unknowingly led to its misidentification with the stupa excavated by Bhagvanlal Indraji. Furthermore, the author tries to establish the importance of Sopara among the Buddhist sites of the Deccan on account of the establishment of two stupas there.

V. Sontakke, *Man and Environment* XLVII(1): 66-73 [2022]. ME-2022-1A08

### 9. India and Evolving Structure of its Society: What have Historical and Anthropological Sciences to say? *K. Paddayy*a

This paper seeks to look at the Indian society and culture beyond the Harappan civilization and 'Aryan' culture which have an antiquity of mere 5000 years or so. It probes into the nature of the one-million-year-long prehistoric prelude to it. It is further emphasized that the country's prehistoric past, far from disappearing into aeons of time as a faceless entity, contributed in ways more than one both to the make-up of present-day regional peasant cultures and to the formation of the structure of Indian society

K. Paddayya, *Man and Environment* XLVII(1): 74-85 [2022]. ME-2022-1A09

#### **Man and Environment**

#### **ABSTRACTS**

Volume XLVII, No. 2 (July-December2022)

#### 1. Inferring Late Pleistocene Fluvial Environments through Geoarchaeological Studies of the Construction Pits in and around Pune City (2011-2019), Upland Western Maharashtra

S.N. Rajaguru, Sushama G. Deo, Jayendra Joglekar, Savita Ghate, Sudha Vaddadi, Nikhil Pawar and Sumitra Shinde-Nikam

Freshly dug building construction pits, in the heart of the historically important Pune city on the right bank of River Mutha, a tributary of River Mula, have provided new information on the Late Pleistocene climatic changes. Geomorphological observations of 13 such construction pits indicate that Pune and its surroundings likely experienced higher average annual rainfall of 1000 mm during the Last Interglacial period and was affected by reduced rainfall of 500 mm during the Terminal Pleistocene as against the present 730 mm. Archaeologically, Middle Palaeolithic (?) and micro-blade cultures existed during Late Pleistocene.

S.N. Rajaguru *et al., Man and Environment* XLVII(2): 1-12 [2022]. ME-2022-2A01

## 2. Mature Harappan Ceramic Assemblage from the Site of 43GB, Sri Ganganagar District, Rajasthan

Prabodh Shirvalkar, C. Shashank Babu, Sanjay Manjul, Esha Prasad and Arvin Manjul

The site of 43GB, located in the Sri Ganganagar District of Rajasthan, was excavated by the Institute of Archaeology, Archaeological Survey of India in 2016. The site belongs to the Mature Harappan period. This paper presents an analysis of the ceramic assemblage from 43GB. The ceramic assemblage from the site has been divided based on the ware and type-variety system of ceramic taxonomy. In the absence of any absolute dates from the site, the comparison of ceramic assemblage from 43GB has been carried out with the site of Kalibangan to understand the chronology of the site.

P. Shirvalkar *et al.*, *Man and Environment* XLVII(2): 13-22 [2022]. ME-2022-2A02

#### 3. Palynological and Archaeobotanical Investigations at Bhagatrav, Gujarat: A

#### **Preliminary Report**

Anjali Trivedi, Sandhya Mishra and Alok Kumar Kanungo

Harappans colonised both river plains and coasts for varied economic reasons. They not only built large-scale cities but also small-scale strategic settlements as per the needs of various subsistence economies. This paper reconstructs the palynological and archaeobotanical records through the sediments recovered from an archaeological trench at Bhagatrav, a small-scale coastal site in Southern Gujarat. The palynological investigation revealed that the region supported open vegetation dominated by grasses with few trees of *Holoptelea*, *Butea* and *Acacia* in a dry environment. The presence of winter crops was demonstrated by the seed grain studies of *Hordeum vulgare* (barley), *Elusine coracana*, *Lathyrus sativus*, and *Triticum* sp. (wheat), etc.

A. Trivedi *et al., Man and Environment* XLVII(2): 23-28 [2022] ME-2022-2A03

# 4. Distinguishing Change in Late Harappan Subsistence Pattern: A Comparative Study Jaya Joshi, Garima Tiwari and Anil K. Pokharia

The diverse environments in different periods led humans to adapt to diverse subsistence needs and hence adopt different subsistence strategies. These strategies, in turn, helped shape the cultural scene as well as the natural surroundings. The present review compares archaeobotanical evidence to explore the subsistence pattern of the Late Harappans in the core and peripheral regions of north-western India. For this purpose, archaeobotanical finds from the sites of Hulas and Alamgirpur in Uttar Pradesh are compared to those of Oriyo Timbo and Kanmer in Gujarat. Though lying in different geographical regions, the sites across the Subcontinent can help us understand the regional variations, if any, in subsistence patterns and the impact of the Indian summer monsoon between the two regions.

J. Joshi *et al.*, Man and Environment XLVII(2): 29-37 [2022]. ME-2022-2A04

#### 5. Preliminary Observations on the Contribution of Wild Herbivores to the Harappan Faunal Economy

at Bhirrana, District Fatehabad, Haryana Tarannum Caur Sodhi, Arati Deshpande-Mukherjee and L.S. Rao

The Harappan site of Bhirrana in Haryana, based on its chronology and cultural finds, is considered the oldest Indus Valley settlement in the Indian subcontinent and has yielded a rich cultural sequence from the Hakra/Pre, Early, and Mature Harappan periods. To date, faunal studies carried out for all these periods have revealed a diverse range of animals ranging from wild to domestic types. Of these, the latter (cattle, buffalo, and goat) played a dominant role in the subsistence economy. The presence of wild species such as gaur,

nilgai, barking deer, blackbuck, etc. is recorded, but their probable use as food, raw material, etc. is not well specified. The purpose of this paper is to determine their contribution to the faunal economy at Bhirrana. Since only a select part of the faunal assemblage has been studied for this purpose, some preliminary insights into these aspects could be gained and are presented here. The study reveals that despite the large-scale dependence on cattle, a continuous exploitation of wild fauna with *Boselaphus tragocamelus* and *Antelope cervicapra* being the most hunted herbivores is observed from Hakra to the Mature Harappan period. The prevalence of wild game hunting even during the mature urban phase of the IVC was in response to a deteriorating climate, an increasing population, and to supplement the food economy.

T.C. Sodhi *et al.*, *Man and Environment* XLVII(2): 38-50 [2022]. ME-2022-2A05

#### 6. A Preliminary Report of Excavations at Ter (Tagar), District Osmanabad, Maharashtra (2014-2015)

Maya J. Patil (Shahapurkar), Virag Sontakke, Vilas Wahane, Arati Aley, Jaya holwe, Amol Gote, Dnyaneshwari Hajare, Pankaj Goyal, Tejavikho Chase and Amol Kulkarni

Ter, ancient Tagar, is located on the banks of the River Terna in the Osmanabad District of Maharashtra. Periplus of the Erythrean Sea (c. 50-103 CE) makes the first literary reference to Ter. The site known as the 'ancient emporium', evidenced tremendous activity during the Indo-Roman trade. Since long, the site, has demonstrated its potential through various archaeological investigations. Owing to the fabulous significance of the site, an excavation was conducted in 2015, especially in the Bairagpandhar and Kot areas. The excavation was fruitful in various ways and produced substantial data on ancient Ter's chronology and trade linkages.

M.J. Patil *et al.*, *Man and Environment* XLVII(2): 51-63 [2022]. ME-2022-2A06

#### 7. Prospection of Natural-Disaster-Threatened Archaeological Sites of the Lower Brahmaputra River Valley, District Goalpara, Assam: A Rescue Archaeology Project Manjil Hazarika, Bratatee Barman, Shreya Sarmah, Y.S. Sanathana, Jiban Kalita, Jayanta Roy and Jutimala Misra

The confluence of the Krishnai-Dudhnoi (Mornai) rivers with the Brahmaputra is one of the regions of archaeological and historical importance in the lower Brahmaputra Valley. The site of Sri Surya Pahar, located within this region, is an important archaeological site that has yielded historical period (CE 400–1300) brick structures, rock-cut sculptures, rock-cut stupas, dressed stone architectural members, potsherds, and terracotta artefacts. Besides, archaeological remains belonging to different historical periods have been unearthed at many localities around the Krishnai-Dudhnoi confluence from time to time, either as

chance discoveries or through archaeological investigations. However, recurrent floods, riverbank erosion, and landslides have had disastrous effects on these archaeological remains. Hence, a field survey of sites in the Krishnai-Dudhnoi-Brahmaputra confluence was undertaken by a team with a rescue archaeological approach to document the sites and features that are under serious natural and anthropogenic threats. This paper discusses the findings of the survey and their significance for the historical archaeology of the region.

M. Hazarika *et al.*, *Man and Environment* XLVII(2): 64-83 [2022]. ME-2022-2A07

# 8. A Preliminary Report on Archaeological Investigation around Auricle Hill, Balumath Block,

Latehar District, Jharkhand *Himanshu Shekhar* 

The paper reports the results of a brief field survey in the area of Auricle Hill, covering roughly 102 km of area in the Balumath region of the Latehar District of Jharkhand. The area is geologically capped with sandstone formation and shaded by one of the rivulets of Harho River, a small tributary of Damodar River. The southern part of the hill is surveyed around the outskirts of Ramghat, Ganeshpur, and Hebna villages settled in the vicinity of Auricle Hill. The preliminary finding includes the occurrence of different microlithic localities near all three mentioned villages and a megalithic site represented by menhirs and slabs, also associated with a few temple relics used as monuments at the site. Several rock shelters have also been found on the foothill and above the slopes, which are devoid of any paintings, but an ethnographic survey reveals that the locals worship some of the shelters, for instance, the Pachparwa rock shelter, with faded paintings in red near microlithic and megalithic site nearby the Hebna village.

H. Shekhar, *Man and Environment* XLVII(2): 84-91 [2022]. ME-2022-2A08