The Missing Piece: A Review of Lower and Middle Palaeolithic Archaeology in Southern Karnataka

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Abstract: Southern Karnataka, the region composing of the erstwhile kingdom of Mysore, and occupying the Mysore Plateau at the heart of the Indian peninsula, falls in between regions which have been subjected to extensive prehistoric research. Research in the Hunsgi and Baichbal basins, and the Ghataprabha. Malaprabha and Kaladgi basins to the north, the Kurnool and Chittoor regions to the east, and the Kortallaiyar basin to the south, has resulted in the establishment of a firm stratigraphy, and at some sites, of a chronology, as also new information on hominin behaviour, all of which are lacking in this area. This paper seeks to outline the current state of Palaeolithic investigations in this region, pertaining to the Lower and Middle Palaeolithic phases, something which is found wanting, and in turn, it aims to double-up as a foundation and spring board, off which more detailed, multi-disciplinary studies in this region can be undertaken.

Keywords: Lower Palaeolithic, Middle Palaeolithic, Archaeology, Southern Karnataka, Site Distribution, Geomorphology, Lithic Technology

Introduction

Karnataka, a state in the south-western part of the Indian peninsula, is usually divided, along cultural, linguistic, geographical, and geological lines into three regions – North Karnataka (*Uttara Karnataka*), South Karnataka (*Dakshina Karnataka*) and Coastal Karnataka (*Karavali*). Southern Karnataka roughly corresponds to the region under the erstwhile kingdom of Mysore, prior to the reorganisation of Karnataka state. It presently comprises of 15 districts (Figure 1), and houses the large urban centres of Bangalore (*Bengaluru*), Mysore, Tumkur and others. This region occupies a central position in the southern part of the Indian peninsula.

The earliest Palaeolithic evidences from this region were made by Robert Bruce Foote, who is credited with pioneering Palaeolithic studies in India after his initial discovery of Lower Palaeolithic finds from Pallavaram, near Chennai (then, Madras), in 1863 (Foote 1916). Foote, carrying out geological surveys on behalf of the Kingdom of Mysore, identified Palaeolithic artefacts in the shingle-beds near Nyamathi in 1881 (Foote 1916). This initial discovery was followed by the identification of more

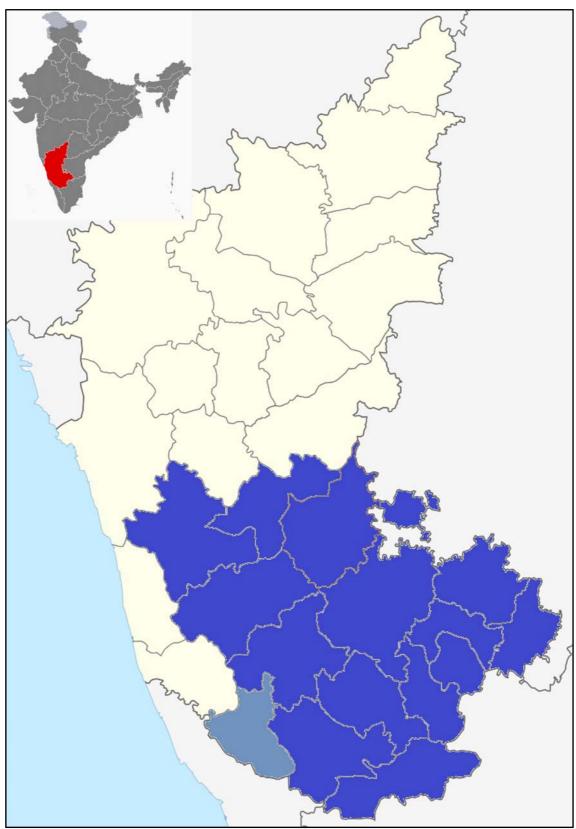


Figure 1: Location of Southern Karnataka. Dark blue: Districts from the erstwhile kingdom of Mysore; Light blue: Kodagu (Source: wikicommons)

Table 1: Palaeolithic Localities of Southern Karnataka

Site	Year	Context	Culture	Reference
Nyamathi	1881	Quartzite shingle-bed	Lower Palaeolithic	Foote (1916)
Kadur	1884	Quartzite shingle-bed	Lower Palaeolithic	Foote (1916)
Nidaghata	1901	Lateritic debris	Lower Palaeolithic	Foote (1916)
Lingadahalli	1901	Lateritic debris	Lower Palaeolithic	Foote (1916)
Jyankal	1901	Lateritic debris	Lower Palaeolithic	Foote (1916)
Talya	1901	High level gravels	Lower Palaeolithic	Foote (1916)
Kibbanahalli	1922	Rain wash	Lower Palaeolithic	Sampat Iyengar (1924)
Biligere	1922	Rain wash	Lower Palaeolithic	Sampat Iyengar (1924)
Ranganathapura	1930	Alluvium	Middle Palaeolithic	Sripada Rao (1930)
Karadigudda	1956	Lateritic debris	Lower Palaeolithic	Seshadri (1956)
Ranganathittu	1975	Alluvium	Middle Palaeolithic	Nagaraju et al. (1975)
Naravi	1983	River terrace laterite alluvium	Middle Palaeolithic	Shivarudrappa et al. (1983)
Mysore	1985	Weathered kankar	Middle Palaeolithic	Shivarudrappa and Gururaja Rao (1985)
Talakad	1985	Flood-plain alluvium	Middle Palaeolithic	Shivarudrappa and Gururaja Rao (1985)

(Modified After Shivarudrappa 1990:38, Table 1; Srinivas 2014a)

Palaeolithic localities in the region during the early part of the twentieth century by members of the Mysore Geological Department, under the patronage of the Kingdom of Mysore (Table 1) (Foote 1916; Radhakrishna and Vaidyanadhan 2011; Sampat Iyengar 1924, 1925; Shivarudrappa 1990). But after these initial discoveries, impetus on Palaeolithic research, post-Independence, shifted to northern parts of the state. Extensive surveys, complemented by excavations, in the Hunsgi and Baichbal basins (Paddayya 1970, 1975, 1975-76, 1976, 1977a, 1977b, 1978a, 1978b, 1979, 1982, 1984, 1985, 1987a, 1987b, 1989, 1990, 1991a, 1991b, 2006-07, 2007, 2008, 2010, 2017; Paddayya and Petraglia 1993, 1995, 1997, 1998, 2004; Paddayya et al. 2000, 2002; Petraglia et al. 1999), and in the Ghataprabha and Malaprabha basins (Joshi 1955; Pappu 1974, 1981, 1984,

1985, 1990, 2001; Korisettar 1979; Pappu and Rajguru 1979; Korisettar and Petraglia 1993; Pappu and Deo 1994, 1996; Deo et al. 2017) have led to the identification and characterisation of many Lower and Middle Palaeolithic sites of Northern Karnataka. Regions to the east - the Kurnool and Chittoor regions, have also been subjected to detailed Palaeolithic and ethnoarchaeological research (Murty 1966, 1974, 1979, 1990, 2004), as well as to the south – the Kortallaiyar basin (Pappu 1996a, 1996b, 1999, 2001a, 2001b, 2001c, 2004, 2007; Pappu et al. 2003, 2004, 2010, 2011; Pappu and Kumar 2006; Akhilesh and Pappu 2015; Chatterjee et al. 2017), have resulted in the establishment of a firm stratigraphy, and at some sites, of a chronology (Paddayya et al. 2002; Pappu et al. 2011), as also new information on hominin behaviour (Shipton et al. 2009; Shipton 2013), all of which are lacking in this area. This paper attempts to consolidate all currently available details of the Lower and Middle Palaeolithic of Southern Karnataka in an attempt to address the missing piece necessary for a better understanding and integration of the datasets derived from the Palaeolithic record of the adjoining regions. In doing so, it is also expected to serve as a platform to base future work and research into the Lower and Middle Palaeolithic of Southern Karnataka, a region which might help in a more organic synthesis of the Lower and Middle Palaeolithic of peninsular India.

Background of the Region

Southern Karnataka, is the southern part of Karnataka comprises the districts of Bengaluru Rural, Bengaluru Urban, Chamarajanagar, Chikkaballapur, Chikkamagaluru, Chitradurga, Davanagere, Hassan, Kodagu, Kolar, Mandya, Mysuru, Ramanagara, Shivamogga, and Tumkur (Figure 1). The region is geomorphologically situated in the Mysore Plateau, the southern planar surface of the *Maidan* region (the flatlands east of the Western Ghats). The region falls within the watershed basins of the Kaveri and the Tungabhadra, divided by the 13° N watershed divide.

Location

The region of Southern Karnataka encompasses an area bounded by 11°35′ N to 14°34′ N latitudes, and 75°8′ E to 78°35′ E longitudes (Figure 1). It is bounded by Andhra Pradesh and Telangana on the east, Tamil Nadu and Kerala to the south, the Western Ghats and coastal Karnataka (*Karavali*) to the west, and Northern Karnataka to the north. It is presently composed of 15 districts, and includes within it most of the region under the erstwhile kingdom of Mysore, including its former capital, Mysore (*Mysuru*). The present capital of the state of Karnataka, Bangalore (*Bengaluru*) is also located in this region.

Geomorphology

Karnataka is generally divided into three geomorphological zones – the coastal plains, the *Malnad* region (Western Ghats and associated uplands), and the *Maidan* region (flatlands and planar surfaces east of the Western Ghats, sloping eastwards; also known as *Bayaluseeme* region). The *Maidan* region is further divided into the northern *Maidan* region, and the southern *Maidan* region comprising of the Mysore Plateau.

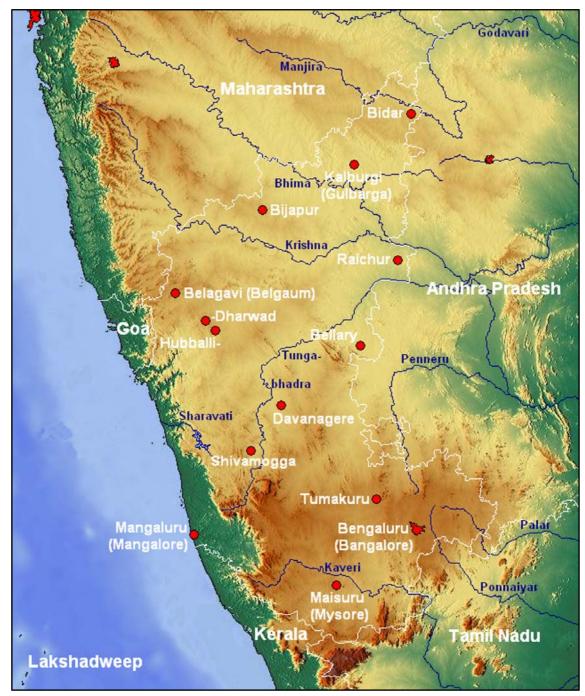


Figure 2: Topographical Map of Karnataka (Source: wikicommons)

Most of Southern Karnataka falls in what is categorized as the Mysore Plateau (Figure 2). It ranges in altitude from 900 to 1200m AMSL. It has a planation surface, called the Mysore surface ranging in altitude between 760 to 850m AMSL. It slopes gently towards the east in a step like manner till the Tamil Nadu Upland, which has a difference of around 300m in altitude. It also has a water divide cutting across it in an east-west direction along the 13° N latitude. The Mysore Plateau also contains a variety of hills within itself. This includes isolated and prominent inselbergs and smaller

inselbergs called locally as *koppies*. These are common in the present arid and semi-arid landscapes of this region. There are also exfoliated domes of granite gneiss called *bornhardts*. An example of this is seen at Karadi, in the surveyed area, very near to the Palaeolithic region of Kibbanahalli. There are also other low hillocks made up of granite and granite gneiss called whalebacks (Radhakrishna and Vaidyanadhan 1994: 262-265, 1997: 311-315). The plateau also plays host to a number of buttes, mesas and minor plateaux. These are the result of prolonged sub-aerial erosion coupled with intense vertical denudation (Radhakrishna and Vaidyanadhan 1994: 267, 1997: 315). Dolerite dykes are also common in the Mysore Plateau (Radhakrishna and Vaidyanadhan 1994: 262-265, 1997: 311-315).

Geology

The base of the entire region is the Peninsular Gneiss. This generic term of Peninsular Gneiss is no longer in vogue, and the term 'Older Gneiss Complex (OGC)' has been suggested to describe the gneisses of this region (Radhakrishna and Vaidyanadhan 1997: 78). Within these gneisses, there are present enclaves of deformed and metamorphosed granulitic rocks, inferring the existence of an older group of sediments and associated igneous intrusives, called the 'Ancient Supracrustals', generally considered as belonging to the Sargur Group (Radhakrishna and Vaidyanadhan 2011). Some of the oldest preserved rocks of the world are seen in this region – the komatiites from Banasandra, dated to between 3.3 and 3 billion years (Srikantia and Bose 1985).

The OGC is unconformably overlain by the schist belts (Radhakrishna and Vaidyanadhan 1997: 79). The oldest of these belts are the Auriferous Schist Belts of the Kolar type. They are located in the eastern side of this region. They are a series of basic igneous rocks, of basaltic composition, with associated intrusives. Their characteristic feature is their auriferous, or gold-bearing, nature (Radhakrishna and Vaidyanadhan 2011). These rocks have been exploited historically for their gold.

On the western side of Southern Karnataka, are the Dharwar Type of Schist Belts. Also known as the Larger Schist Belts, they are the most prominent schistose rocks of Southern Karnataka. These rocks are Late Archaean in chronology, dated to between 2.9 to 2.6 billion years (Radhakrishna and Vaidyanadhan 2011). Two main divisions (Supergroups) are recognised – the Bababudan Group and the Chitradurga Group (Srikantia and Bose 1985; Srikantia and Rao 1990; Radhakrishna and Vaidyanadhan 1994: 88, 1997: 121). The older, Bababudan Group in mainly igneous in character, and host the main iron formations of the state. The Bababudan series has been dated using the SHRIMP U-Pb method on the zircon grains to give a date of 2.7 bya (Radhakrishna and Vaidyanadhan 1997: 137). Overlying this group is the more extensive group of sedimentary schistoise rocks, the Chitradurga Group. They are composed of conglomerates, quartzites, limestones, and associated manganiferous and ferruginous cherts (Radhakrishna and Vaidyanadhan 2011). Quartzites, identified in the OGC and the Chitradurga Group serves as the primary raw material for the Palaeolithic artefacts of this region (Srinivas 2014a, 2017a).

A narrow belt of younger granites, belonging to the 'Closepet Granite Group', transverses Karnataka in a north-south direction. Dating to around 2.6 billion years, this belt is believed to mark a major geo-suture joining the two distinct western and eastern Late Archaean crustal blocks of Southern Karnataka – the western block, characterised by its well-developed, iron and manganese rich, granite belts (OGC), and the eastern block, of younger granites (YGC) with its auriferous schist belts.

Other geological formations include the Younger Gneiss Complex (YGC) in the eastern parts of the region; the Granulites, south of the 13° N latitude; and the Younger Intrusive Dykes (Radhakrishna and Vaidyanadhan 2011). The YGC, dated to between 2.7 and 2.4 billion years, represents remobilised older crust with the addition of newer granitic material (Radhakrishna and Vaidyanadhan 2011). Granulites, also known as 'Charnockites', are a result of transformation of older gneisses through the infusion of fluids rich in carbon-di-oxide, due to a major tectono-thermal event (Radhakrishna and Vaidyanadhan 2011). The Younger Intrusive Dykes, dating to younger than 2.4 billion years, are of doloritic composition. There are also younger, alkaline intrusives, younger than 800 million years, around Bangalore and Mysore (Radhakrishna and Vaidyanadhan 2011).

Hydrology

The two main river systems of the region are the Kaveri and the Tungabhadra, and their tributaries, both originating in the Western Ghats and flowing eastwards. The two basins are divided by the 13° N watershed divide of the Mysore Plateau. The northern part of the region is fed by the Tungabhadra river system, which itself empties into the Krishna, which flows into the Bay of Bengal. The southern part of the region is watered by the Kaveri which flows into Tamil Nadu, and into the Bay of Bengal. The hydrology of the region is heavily dependent on the Indian Summer Monsoons, as the two river systems are rain-fed and ephemeral.

Geo-archeological study at the Palaeolithic site of Kibbanahalli carried out by researchers from Mysore University (Gururaja Rao and Shivarudrappa 1985; Gururaja Rao 1990; Shivarudrappa 1990) identified evidence of Palaeolithic occupation along the shores of a lake, derived from a natural spring. But geologists challenge this claim, and state that there are no natural springs or lakes in the region, and that Karnataka has no natural lakes at all, and all lakes in the region today are a result of anthropogenic activity in the recent past (Radhakrishna and Vaidyanadhan 1994: 281, 1997: 329, 2011).

Palaeolithic Archaeology

Crudely made quartzite Palaeolithic artefacts were discovered for the first time in Karnataka in the shingle-beds of Nyamathi in 1881 (Foote 1916). This was followed by the discovery of more Palaeolithic artefacts from a similar context at Kadur. Palaeolithic artefacts were also discovered in a thin deposit of high level lateritic gravel at Talya, and in lateritic debris near Nidaghatta and Lingadahalli (Foote 1916, reprint 2002: 66-67).

Three more sites were discovered by the workers of the geological department of the erstwhile princely state of Mysore, set up and headed by Foote in 1894 (Sampat Iyengar 1924, 1925; Radhakrishna and Vaidyanadhan 1994, 1997; Srikantia 2013). Kibbanahalli and Biligere, in Tumkur district, and Ranganathapura, in Mysore district were the sites discovered as a result of such explorations.

M. Seshadri reinvestigated and reclassified all known Palaeolithic sites till then and also initiated a research into the Palaeolithic of Southern Karnataka (1956). Stray discoveries of Middle Palaeolithic sites in Mysore district were reported by S. Nagaraju (1975), Shivarudrappa et al. (1983) and Shivarudrappa and Gururaja Rao (1985). It was also during this period that the University of Mysore undertook extensive geo-archaeological explorations of the Banasandra Hill Range (Gururaja Rao and Shivarudrappa 1985) and the Talakad sand dunes (Shivarudrappa and Gururaja Rao 1985).

Apart from the stray discovery of a unifacial chopper from Naravi in 1992 (Rao 2004), no Palaeolithic investigations were made until Shivatarak (1996, 1999, 2001, 2004) discovered many Palaeolithic sites in Tumkur district as a result of extensive field surveys undertaken by him as part of his doctoral thesis. In more recent times, the author's own work has focussed on the Lower Palaeolithic of the region, in the vicinity of Kibbanahalli and the Banasandra Hill Range (Srinivas 2014a, 2014b, 2017a, 2017b). Unfortunately no detailed work has been undertaken at Palaeolithic sites in this region, after their initial reporting, except for the site of Kibbanahalli. Hence, all inferences and understanding of the Palaeolithic of Southern Karnataka is based on the Palaeolithic of the Kibbanahalli Palaeolithic Complex.

Site Distribution and Context

Unfortunately the locations of most of the Palaeolithic localities of Southern Karnataka are not known as these sites were identified and reported prior to the standardisation of archaeological documentation, and most of the discoveries were serendipitous discoveries by geologists. Even the location of Kibbanahalli, the most well-known and studied Palaeolithic complex, is uncertain (cf. Srinivas 2014a) with many possible locations being claimed and investigated by different investigators (Sampat Iyengar 1924-25; Seshadri 1956; Shivarudrappa 1990; Shivatarak 1996). This doubt in locating Kibbanahalli is due to the nature of the site – a large expanse of foothills/pediplains of the Banasandra hill strewn with artefacts wherever the overlying topsoil is eroded/removed. Thus, the Palaeolithic locality of Kibbanahalli is not one single site or locality, as such, but encompasses the entire foothills zone. It is for this reason the author prefers the term 'Kibbanahalli Palaeolithic Complex', as there is no stratigraphic, typological or technological difference amongst the lithic elements from different find-spots throughout this region (Srinivas 2014a, 2014b, 2017a, 2017b).

Palaeolithic sites in the region are reported from river gravels and fluvial deposits (Nyamathi, Kadur, Talya, Ranganathapura, Ranganathittu, Naravi and Talakad) as well

as from colluvial deposits and regoliths (Kibbanahalli Palaeolithic Complex, Nidaghata, Lingadahalli, Jyankal and Karadigudda) (Figure 3). It is necessary to revisit, identify and subject these Palaeolithic localities to detailed documentation, before carrying out any further discussions with regard to the nature and context of their archaeological record.

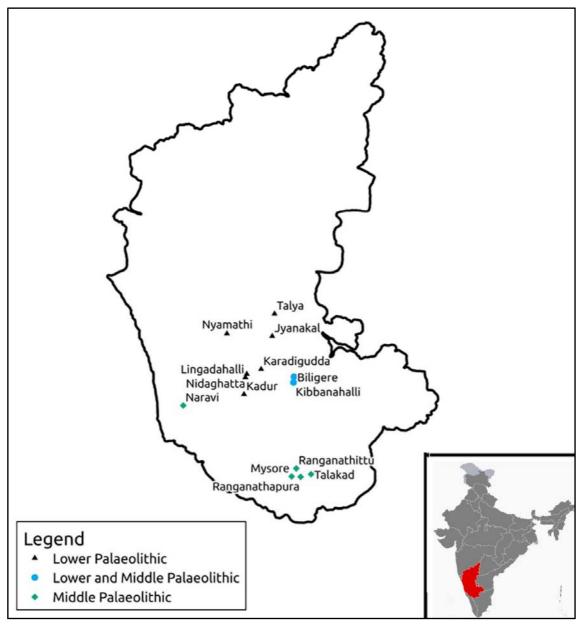


Figure 3: Lower and Middle Palaeolithic Sites of Southern Karnataka (Map Not to Scale; After Srinivas 2014a)

Lithic Technology

Quartzite, either coarse-grained or fine-grained, is the dominant raw material for the lithic elements of this region. Raw material is almost always locally available, within the fluvial or colluvial/regolith deposits. Based on the typology of the artefacts

collected, the Palaeolithic localities were classified as either Lower Palaeolithic (Acheulean, with bifaces), or Middle Palaeolithic (absence of bifaces and a dominance of flake scrapers). Unfortunately detailed analyses of the lithic techno-complexes is still lacking and unavailable for most sites.

Recent reinvestigations by the author (Srinivas 2014a, 2014b, 2017a) at the Kibbanahalli Palaeolithic Complex has included a technological and *chaîne opératoire* reanalysis of its lithic techno-complex. Locally available quartzite boulders were knapped to produce large flakes which, along with angular clasts from the regolith/colluvial artefact horizon, were retouched into flake tools, and used along with bifaces. The lithic reduction sequence of the Kibbanahalli Palaeolithic Complex is outlined in Figure 4. They belong to a Mode 2 techno-complex, and can be ascribed as being Acheulean (Figure 5).

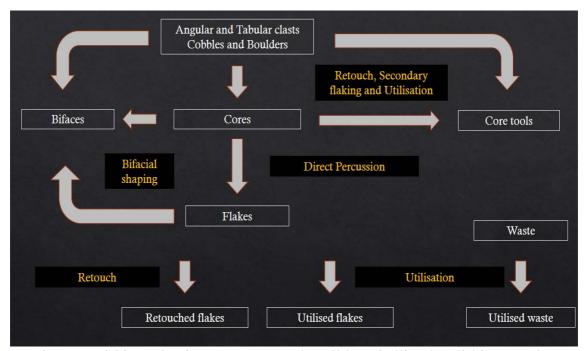


Figure 4: Lithic Reduction Sequence at the Kibbanahalli Palaeolithic Complex (After Srinivas 2014a, 2017a)

Middle Palaeolithic sites are suggested due to the absence of typical bifaces in the assemblages of said sites (Seshadri 1956). Raw material is also different, with a higher proportion of fine-grained and/or crypto-crystalline silicates being preferred. Assemblages also have higher percentages of 'retouched flake tools'. But, sites which were previously described as having Middle Palaeolithic affinities (Kibbanahalli and Biligere – Seshadri 1956) did not show any such elements in more recent reinvestigations (Srinivas 2014a, 2017a). Thus, due to the lack of detailed lithic analyses of other Middle Palaeolithic techno-complexes, and the application of a simplistic criterion for technological attribution (presence/absence of bifaces), in light of recent trends in technological attribution of Palaeolithic assemblages (Barsky et al. 2013;

Gallotti and Peretto 2015; Mosquera et al. 2013; Srinivas 2016), there is a need to reinvestigate the presence of Middle Palaeolithic techno-complexes in Southern Karnataka. This can be achieved by reinvestigating previously collected assemblages, complimented by fresh documentation and collections from these previously reported Middle Palaeolithic sites, as well as field investigations for locating and identifying other Middle Palaeolithic localities and scatters.

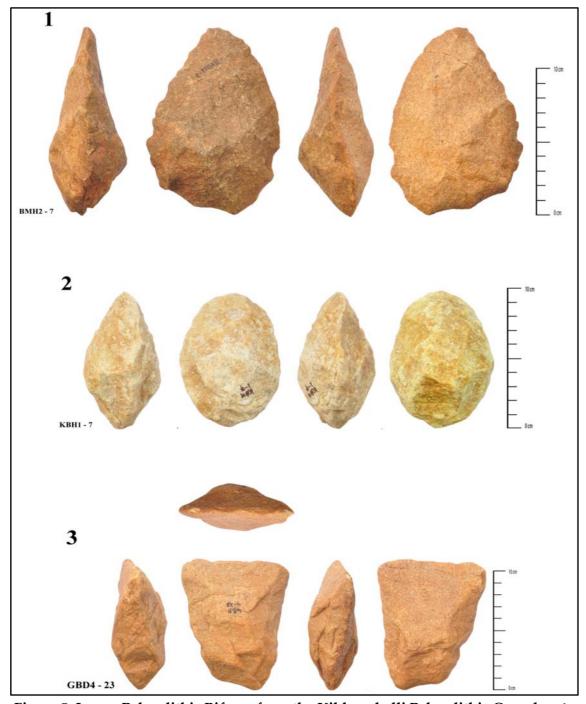


Figure 5: Lower Palaeolithic Bifaces from the Kibbanahalli Palaeolithic Complex. 1-2: Bifaces; 3: Cleaver (After Srinivas 2014b, 2017a)

Discussion

Palaeolithic Studies in Karnataka

A cursory review of literature on Palaeolithic research in Karnataka immediately shows the bias towards the northern regions of the state. Large scale, and long term projects investigating the Palaeolithic of the Upper and Middle reaches of the Krishna basin by generations of researchers such as R.V. Joshi, K. Paddayya, R.S. Pappu, R. Korisettar, S.G. Deo and others, has resulted in a thorough examination of the Palaeolithic record of Northern Karnataka, especially in the regions of the Kaladgi formation. Such intensive research has not been replicated anywhere else in the state. Thus, research in Northern Karnataka has built up the Palaeolithic chronology in this region, and has also established a firm Quaternary stratigraphy of the same. A detailed analysis of the geological and geomorphological settings of the Palaeolithic sites has been conducted, and various attempts to deconstruct the palaeoenvironmental and palaeoclimatic conditions prevalent during the prehistoric occupation of Northern Karnataka have been attempted. Some researchers have also taken their research further, and investigated the relationships between the prehistoric populations, and their landscapes and land-use patterns (Paddayya 1982; Pappu and Deo 1994), leading to the identification of various loci of activities, such as quarrying and tool manufacture. Even patterns of seasonal mobility have been identified.

This, when contrasted with the other regions of the state, highlights a great disparity. The central and the southern parts of Karnataka have never been subjected to intensive explorations of the kind which have been conducted in the north. The Palaeolithic record of the rest of the state in largely unknown, spare a few reported localities. The explorations of Shivatarak (1996, 1999, 2001, 2004) highlight the rich potential and possibilities of discovering many prehistoric sites in the region.

This region also occupies an important zone as it lies between the highly investigated regions of Northern Karnataka, Northern Tamil Nadu, and South and South-western Andhra Pradesh. As no intensive work has been undertaken in this region, it results in a barrier to understand the relationships and interconnections (if any) between these heavily studied regions. This further hinders the ability to develop models of population and cultural movement and transmission, and hominin occupation.

What little is known about the Palaeolithic record of this region is also contradictory (Srinivas 2014a) or needs to be updated along currently accepted lines of understanding of the Palaeolithic times and populations. This strong bias in the Palaeolithic research in Karnataka needs to be addressed and corrected before a holistic understanding of the Palaeolithic of Karnataka, or even the subcontinent, can be achieved or even attempted.

The Palaeolithic Record of South Karnataka: A Broader Picture

Situating the Palaeolithic evidence of Southern Karnataka in the broader picture of the

Lower and Middle Palaeolithic of the Indian subcontinent, it is evident that technologically, typologically and morphologically, the archaeological record of Southern Karnataka seamlessly integrates into the Mode 2 of the Indian subcontinent. This was even shown as early as the 1950s, when Seshadri equated the Lower Palaeolithic evidence of Kibbanahalli with Attirampakkam V (Seshadri 1956). Recent reinvestigations corroborate the same (Srinivas 2014a, 2017a), even showing technological affinities with other Lower Palaeolithic/Mode 2 assemblages such as Isampur, Singi Talav and Bhimbetka with regards to use of non-flake based blanks for the manufacture of retouched tools (Srinivas 2014a, 2017a). Thus, with continued efforts and research in this region, possible datasets necessary for understanding hominin landscape use, movement and migration can be more effectively tackled, and a more nuanced synthesis of the Palaeolithic of Peninsular India can be achieved.

Modern Land-use Patterns and Archaeological Visibility

Pioneering efforts in understanding the role of modern day land-use patterns, their changing trends, and its effect on the visibility of the archaeological record has been carried out at the Kibbanahalli Palaeolithic Complex (Srinivas 2014a, 2014b, 2017a, 2017b). Previous studies indicated that only the eastern slope of the Banasandra hills were occupied (Sampat Iyengar 1924, 1924-25, 1925; Seshadri 1955, 1956; Gururaja Rao and Shivarudrappa 1985; Shivarudrappa 1990; Shivatarak 1996, 1999, 2001, 2004) and it was hypothesised that this was because the hills acted as a natural barrier against the rains and the wind, and thus proved to be a selective criteria for occupation by Palaeolithic populations (Shivarudrappa 1990). Recent reinvestigations in the area, which employed intensive field investigations and the use of remote sensing data identified Palaeolithic find spots on the western slope of the hill range, and also correlated changing trends in modern day landscape use patterns and the increased visibility of the archaeological record (Srinivas 2014a, 2014b, 2017a, 2017b). More detailed work is planned in this regard, and the methodology perfected for possible replication in other regions, which could show the efficacy of the method, and also help in better explaining Palaeolithic settlement patterns by identifying and excluding those which are the result of changing trends in modern day land-use patterns.

Conclusion

The above review of the Lower and Middle Palaeolithic record of Southern Karnataka is an attempt to address the visible spatial and geographical lacunae in the discussions regarding the Palaeolithic record of Peninsular India. Even though the current state of the record is not at par with evidences and information inferred from the archaeological records from the surrounding areas, this review outlines the important role the region plays in attempting to assimilate and integrate the available datasets. Recent reinvestigations have also highlighted the increased rate of industrialisation and urbanisation in the region, coupled with extensive changes in modern day landuse patterns which point towards an *invisibilisation* of the Palaeolithic record in the region (Srinivas 2014a, 2014b, 2017a, 2017b). It is of utmost importance to undertake

more detailed work, with respect to field and laboratory studies, as well as the initiation of multi-disciplinary and inter-disciplinary researches to recover as much data and information as possible before its eventual disappearance. It is also necessary to reinvestigate already identified localities and assemblages to update their status along contemporarily accepted lines of the discipline. Thus, further work in the region aims to fill an important lacuna in the Palaeolithic of the Indian subcontinent, to better enable the understanding of past hominin behaviour, the primary objective of Palaeolithic archaeology.

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