Faunal World Reflected in Petroglyphs from Ratnagiri District, Maharashtra

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Abstract: The Konkan region especially the southern part of Konkan, i.e., Ratnagiri and Sindhudurg, was probably an important biogeographic zone for human and faunal adaptations. In the last 4-5 years, many petroglyph sites have been documented by local enthusiastic amateurs in this region. Recently, the Directorate of Archaeology and Museums, Maharashtra along with these locals initiated scientific documentation of the known petroglyphs. This documentation provided an idea about the environmental background of the early life of humans and animals in this region. The main focus of this paper is to highlight the faunal depictions characteristics of the carved petroglyphs. The style of the carving of these petroglyphs is different from the other rock art sites of India. Hence the documentation and compilation of these different kinds of faunal depictions can help us to understand the earlier ecological system of the concerned region. Furthermore, the petroglyphs could be an authentic commentary on the manland relationship during the so-called 'Dark Age' of Konkan and provide evidence of human dynamism on the western coast of India.

Introduction

The relationship between the human and animal world has been a subject of interest for scholars, and archaeological evidence in this regard is a vital source to understand this phenomenon in a better manner through time and space. This archaeological evidence is mostly seen in the form of skeletal remains of humans and animals, type of weapons and implements utilised for hunting and food processing, and pictorial evidence in the form of rock art. The third category of evidence is an authentic commentary on fauna as

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these are depictions in form of painted art or rock carvings captured by the human eye. In the absence of written words, these artistic forms give us an insight into the faunal world experienced by humans since the prehistoric era. Often these are simple representations of animal forms with certain stylisation in a static position or motion. In a majority of cases, the interaction between the human and animal world is reflected in the form of hunting scenes. For the prehistoric human mind, these beasts must have been the subject of curiosity, fear and source of food earlier on, and companionship plus amusement in later stages.

Apart from painted representations of animals, humans and their interaction on the walls of rock shelters, caves and boulders; these forms are also found in the form of petroglyphs or geoglyphs (Bednarik 1998, 2001). Images under this category are created by removing part of a rock surface by incising, picking, carving, or abrading. As an important form of rock art, it forms the base for later art traditions. Globally speaking, petroglyphs are spread across all continents and have a large time span from the Palaeolithic to the Medieval period. In terms of size, many of them are the largest expressions of human creative art, usually referred to as geoglyphs.

The Indian subcontinent has diverse evidence of rock art in the form of paintings and engravings in rock shelters, caves, open boulders and rocks. On lines of global counterpart, the rock art in India is spread from the Palaeolithic to Colonial period in time and is found from Ladakh to southern Indian peninsular region and hilly regions of Afghan-Pakistan to the northeastern part of India. So far, evidence of rock art from the coastal area of India was scanty as only two sites from Goa were reported so far. The present paper highlights animal representations revealed from rock art from the Ratnagiri district of Maharashtra.

Geographical Context

The western coastline of India, encompassing coastal districts of Maharashtra, Goa and Karnataka, collectively known as Konkan, lies between the Arabian Sea to the west and mountain ranges of the Western Ghats to the east and extends 720 kilometres north-south. The Konkan in Maharashtra State includes districts of Thane, Greater Mumbai, Raigarh, Ratnagiri and Sindhudurga. Geographically, this region is traversed by seasonal rivers that drain the heavy monsoonal rainfall from the crest of the Sahyadri Hills. Generally, uneven terrain is composed of eroded remnant ranges of the Ghats that form low lateritic plateaus in the west and terminate in a coastline of alternating bays and headlands. Laterite formations and plateaus near the Southern Konkan's coastline are comparatively thinly populated areas. In the modern context, this area is utilised for laterite mining which is a major threat to the petroglyph sites of the region. Evidence of human existence during the prehistoric period is very limited in this region; however, there is continuous evidence of human settlement(s) throughout the Historical, Medieval and modern periods.

Archaeological Evidence of Human Antecedents in Konkan

Konkan was known as 'Aparanta' in ancient times; and was a vibrant area since the Early Historical period as reflected in rich archaeological and historical records in the

form of port towns participating in international trade, rock-cut caves, forts, colonies of foreign powers in the form of factories, castles, and towns. Archaeological studies of Konkan have been done by various scholars such as Todd (1932, 1939), Guzder (1980), Joshi and Bopardikar (1972), and many others. In 2001, Ashok Marathe discovered a coastal Acheulian cave site at Susrondi, Palshet near Guhagar in Ratnagiri district, where two Early Acheulian cleavers were collected on the surface (Marathe 2005). A small-scale excavation here by the same scholar, later on, revealed that the cave was occupied by the Acheulian people during the Late Pleistocene (approximately earlier than 90 Ka BP). This was the first convincing discovery of the Late Acheulian coastal cave occupation on the coastline of India. This discovery of Palaeolithic artefacts from a cave site in a stratified context was of great significance for deducing the chronology of early humans, related sea level and environmental changes in Konkan (Marathe 2005, 2006).

However, discoveries in this region, so far, have also shown the absence of Mesolithic/Neolithic/Chalcolithic sites in Konkan. Archaeological evidence highlighting the transition from Late Acheulian to Early Historical was either missing or not reported earlier. The recent discovery of petroglyph sites throws light on these lacunas of archaeological research of the region. It seems hunter-gatherers in Konkan entered in Historical period without attending any technological transition experienced in the Neolithic and Chalcolithic stages. This technological transition is indicated by the presence of Mesolithic, indicated by several microlithic tools in the vicinity of petroglyph sites. Additionally, such evidence is also reported from Koloshi (a cave site) in the Sindhudurg district of Maharashtra. Hence petroglyph sites are not only important from an art-historical point of view but also for understanding the transition of human life from hunting-gathering to the settled stage.

Discovery of Petroglyphs in Konkan

Konkan petroglyph sites were reported from huge laterite plateaus locally known as 'Sada'. Among the reported sites so far, the first site with petroglyphs was near village Nivli, which was revisited and studied by several scholars. In 1990, while road widening work was in progress, abstract forms of carved lines were reported to the Ratnagiri Division of the Directorate. This discovery triggered the study of petroglyphs in Konkan. Subsequently, Deccan College and Post Graduate Research Institute, Pune, and many individual enthusiastic scholars worked on it and a few of them also started exploring nearby areas. Dawood Dalvi, a well-known historian from Konkan, wrote a book about the rock-cut caves in Maharashtra. In this book, he mentioned the sites of Nivli-Phata, Barsu and Devihasol with the evidence of petroglyphs, and assigned these rock carvings to the Neolithic period (Dalvi 1990). P.K. Ghanekar (1995) also mentions the site of Nivli-Phata in a Marathi book "Koknatil Paryatan (Tourism in Konkan)". He coined the term 'Katalshilpa' for the petroglyphs in Marathi. This book assigns the carvings reported from here to the prehistoric era (Ghanekar 1995: 156-176). In 2018, Ravindra Lad published a book, 'Koknatil Katalshilpe aani Sindhu Sanskriti' (Petroglyphs of Konkan and Indus Culture), in which he compared a few of these relief patterns and some figures; interpreted them as goddess type, with motifs appearing with the Harappan script and fertility cult respectively. He focused more on the huge carvings from Barsu, Nivli-Phata and Devihasol (Lad 2018).

A group of scholars (Vishwas Gogate, Shrikant Pradhan and Prabodh Shirvalkar) from Deccan College, Pune carried out scientific archaeological investigations on this matter in 2000-2001. In the course of the further village-to-village survey, they discovered a few more new sites at Palshet in Guhagar tehsil, Nivli-Phata and Nivli-Gawadewadi in Ratnagiri tehsil and Bhu (Devihasol) in Rajapur tehsil (Gogate et al. 2008). According to them, "Due to lack of any archaeological evidence such as habitation mound, pottery, any cultural material, etc., it is not possible to assign any particular period or a time bracket to them. Also, the engravings have a different stylistic form which indicates that they must have been engraved over a long period of time" (Gogate et al. 2008: 115-123). Anita Rane-Kothare surveyed a few villages of Ratnagiri taluka and discovered two more sites of Umre and Chindravali, situated near the known site of Nivli-Phata. She observed that "an intense study of this region and few more sites will push ahead the cultural period of this region to a much earlier phase and probably shed light on the early pastoral culture of the region" (Rane-Kothare 2013: 156-163). Satish Lalit discovered more sites in the Sindhudurg district at Kudopi and Hiwale villages. He noted more than 50 carvings within a single site that included human, faunal and geometrical figures (Lalit 2012).

Further, Sudhir Risbud with Surendra Thakurdesai and Dhananjay Marathe, working for Nisargayatri Sanstha (a Ratnagiri-based organization), discovered more than 40 new petroglyph sites besides the already known six sites. Their findings were published in local Marathi newspapers. Later on, the Ratnagiri Division of the Directorate of Archaeology and Museums, Government of Maharashtra initiated scientific documentation and study of the known petroglyphs. From September 2017 onwards, the Department started the survey with revenue record details with the intention to declare these sites as protected monuments under provisions of the Maharashtra Ancient Monuments and Sites and Remains Act, 1960. This survey was conducted by the Directorate jointly with Nisargayatri Sanstha, Ratnagiri. This joint survey of the three tehsils of Ratnagiri district not only documented the previously known 52 sites but also brought to light more sites (Garge et al. 2018). Ratnagiri tehsil alone is reported to have 550+ petroglyphs, Rajapur tehsil 350+ and Lanja tehsil has 90+ carvings. They are spread almost over 170 km in length and 20 km in width in a straight line along the coast. The size varies from a few cm (cup marks) to almost 18 m. These reported carvings are classified as follows.

- 1. Mammals: There are depictions of animals such as elephants, rhinos, animals belonging to the families of deer and antelopes, rabbits, wild boar, monkeys along with a few carnivorous animals like tigers.
- 2. Birds: Peacock and a variety of prey birds, i.e., eagle, falcons, etc.
- 3. Reptiles: These include alligators, monitor lizards and sea turtles
- 4. Fish: Various species of sharks, stingrays and various other types of fish are found. Many of these fish carvings are yet to get identified properly.
- 5. Anthropomorphic figures
- 6. The abstract figures: This category includes various geometric patterns and square-shaped relief patterns. These types of petroglyphs dominate in numbers followed by faunal carvings.

Fauna Reflected in Petroglyphs

As noted above, among the faunal carvings, different kinds of animal figures are noticed. Significantly, many animal images are either life-size or larger. So far, in the Indian rock art context, animal figures were noticed in a miniature form. There are so many petroglyph or pictograph sites where these types of figures are carved or painted on the vertical walls in miniature form. At Usgaimol, a petroglyph site in the Goa State, the animal figures are carved on a horizontal laterite surface (Directorate of Museums, Goa 2002). However, they are not life-size. In the faunal depictions, there are mammal figures along with birds, reptiles and a few aquatic animals.

1. Elephant

The elephant is one of the two most represented animals among the faunal depictions. The other one is the wild boar (see Table 1). Elephant figures are reported from Ukshi in north Ratnagiri and Sogamwadi located in the southernmost part of the Ratnagiri district. So far, there are about nine sites where elephant carvings have been reported, i.e., Sakharkombe, Vadikhurd, Goval, Devihasol, Mervi, Kasheli, Masebaav, Ukshi and Sogamwadi. Each elephant carving is different from the other.

From Kasheli, the largest known geoglyph in the South Asian context is reported by the present team, which covers an area of 16 x 13 m (Fig. 1). There are numerous other faunal depictions inside and around the elephant. The Kasheli elephant is represented only by outline, and no other details are attempted in order to accommodate other animal figures. Within its outline, almost 80 animal figures are carved alongside a few carvings outside the elephant figure. Various aquatic animals like sharks and stingrays along with terrestrial wild animals like tiger, monkey, boar, rhino and birds like peacock, and a few small elephant figures are noticed along with a few abstract figures. Peculiarly,



Fig. 1: Kasheli petroglyph - Elephant figure

Table 1: Number of depictions of different animals in the study area

Sl. No.	Animal name	Total no. of figures
1.	Elephant	13
2.	Tiger	11
3.	Wild boar	30
4.	Animals belonging to the deer/antelope family (blackbuck, spotted deer, sambar)	19
5.	Rhinoceros	05
6.	Birds (Prey, egret)	31
7.	Fishes (different types of sharks, stingrays and many unidentified species)	56
8.	Monkey	10
9.	Reptiles (sea turtles, monitor lizards)	08
10.	Unidentified species and a few other animals such as animals belonging to the civet family, hyaenas, rams, etc.	97
	Total	280

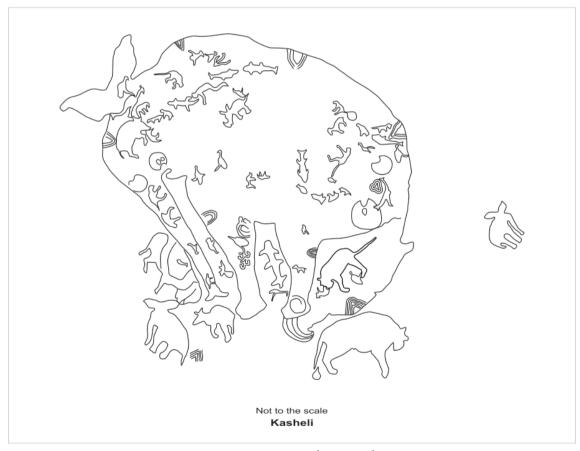


Fig. 2: Line drawing of Kasheli elephant figure

animal figures of Konkan petroglyphs including this large elephant are depicted in the lateral section showing two legs only and the other two legs remain hidden. The head is shown slightly tilted which makes both the ears visible (Fig. 2). A long trunk, originating from the head, reaches the length of feet. No details of other limbs are shown beside the outline. This is a unique composition of aerial, terrestrial and aquatic creatures gathering within and around the figure of an elephant, and is certainly distinctive in the context of known rock art sites in India. This also remains a classic representation of the visual experience of the wild Mesolithic fauna in the Konkan. There is no other known petroglyph site with such large and complex composition of engraved art in the Indian context. Certainly, Kasheli elephant represents a class wherein it is portrayed on a larger than life-scale. In the other three sites, Ukshi, Masebaav and Vadi khurd, it is depicted in the life-size of a living Indian elephant, while at Devihasol it is only 2 x 2 m in size (Fig. 3).

The elephant figure at Ukshi in Ratnagiri tehsil shows a detailed version (Fig. 4). Here, a large figure of an elephant is located slightly away from the village. Following the typical style of Konkan petroglyphs, the elephant is shown with two legs and the other two legs remain hidden. The head is in profile and two ears are marked with a noticeable cross motif and an eye is visible. Two long jutting-out tusks are clearly illustrated on both sides of the long hanging trunk. A clear depiction of phallic undoubtedly indicates that this figure is of a male. Pointed tail, trunk tip and teeth exhibit other features of stylisation. The ears and an eye are shown with a square-shaped linear feature. These artistic features in Ukshi elephant are absent in other elephant figures from other sites. The size of this elephant carving is 6 x 6 m.

In the modern context, elephants are not found in the Ratnagiri district. However, they still maintain their existence in the forest area near Maharashtra-Karnataka and Maharashtra-Goa border.

2. Rhinoceros

The depiction of rhinos in petroglyphs of Konkan is the most remarkable and unique feature in the field of rock art studies in India as this animal is not found in western India anymore. The rhino figures shown in petroglyphs are of single-horned rhinos found only in the northeastern part of India in the modern context. Among 52 known petroglyph sites so far, rhinoceros figures are reported from five sites in Ratnagiri and Rajapur tehsils.

The site of Deood in Ratnagiri tehsil has the largest rhino figure known so far (Figs. 5-6). This rhino figure spreads over an area of 4×3 m and is represented by an outline and a few other anatomical details including a short tail. For a change, instead of the static pose, it is depicted slightly animated in the form of leaping forward. Two ears raised upwards are depicted behind the single horn of the rhino figure. Only two legs of rhino are seen as they are seen laterally covering the other two legs behind. There is an attempt of filling in details of the figures as indicated by folds near the neck and leg joints of the rhino. In size, this carving is more than life-size.

Another image of a rhino, much smaller in size, is reported from Kasheli amongst various animal figures carved inside a large elephant figure. This rhino figure is just 1.5



Fig. 3: Small elephant figure, Devihasol



Fig. 4: Elephant figure, Ukshi



Fig. 5: Rhinoceros figure, Dewood

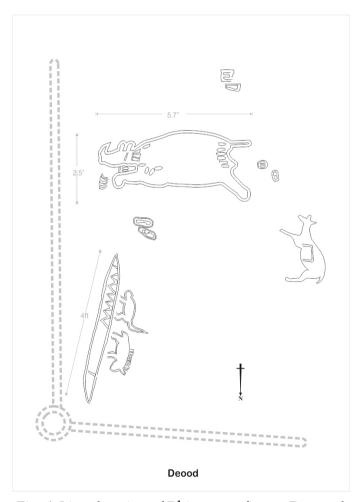


Fig. 6: Line drawing of Rhinoceros figure, Dewood

x 1 m in size, but again the horn and elongated ears are noticeable (Fig. 7). Mervi, Goval and Sogamwadi also have rhino figures having the same size as Deood rhino.

The depiction of rhinos in rock art is a common feature in central India. The faunal remains of rhinos reported from Manjra valley suggest that the rhinos were in existence on the Deccan plateau around 40000 BCE (Sathe 2015). A bronze image of a rhino is reported from Daimabad, a Deccan Chalcolithic culture site. Few rock art sites from central and western India have depictions of rhino hunting scenes which can be dated to the Mesolithic period (Pandey 1993). As far as the rock art or the petroglyphs in India are concerned, this could probably be the first evidence of depiction of rhinos in petroglyph form. The depiction of rhinos in Konkan also throws light on the ecological system of the prehistoric period.

3. Deer/Antelopes

Animals belonging to the deer and antelope family are reported from nine sites in Ratnagiri district so far. There are almost four variants of this group of animals that have been noticed in the present survey. These are sambar, blackbuck, an unidentified antelope and a small figure of deer without horns or antlers. Variations between these species can be differentiated in the form of body shape and limbs.

Alongside other animal figures, the depiction of the deer is prominent at Kolambe (Fig. 8). It is shown with an outline in a perfect sectional perspective. Two legs are visible and the other two legs remain hidden. However, following a standard rule of Konkan petroglyphs, the head of the animal is slightly turned as two large, rugged antlers typical to rusine are clearly seen. Here one antler does not overlap over the other and two perfectly symmetrical brow horns are visible with three tines with the beams forked at the tip. As with most deer, only the males have these; hence deer carving at Kolambe is certainly a male depiction, also indicated by a prominent depiction of genital. A triangular head with a wide-open mouth, thick neckline, fleshy body forms and short tail are other notable features. The antlers grow typically up to 110 cm in length in fully adult individuals and the depiction at Kolambe is certainly larger than life as it is spread over an area of 4×3 m. A similar figure was noticed from Umre in Ratnagiri tehsil, covering an area of 4×3 m (Fig. 9).

Besides these two, the other seven sites report animals of this group depicted in smaller dimensions. The carving pattern among these figures is the same at every site. Also, these figures are well spread in the entire Ratnagiri district. There are few figures which do look like the animal of the deer family, but it is difficult to identify the exact species of the animal. In the modern context, these types of deer species still exist on the laterite plateaus of the Ratnagiri district (Figs.10-11).

4. Wild Boar

The wild boar is another animal commonly seen in Ratnagiri petroglyphs. Among the reported sites, so far there are nine sites reported with this species. The variations in the size can be seen properly. While the tusk is not shown properly, the body structure and size helps to identify these depictions as those of wild boar as boars are generally bigger than normal domestic pigs.

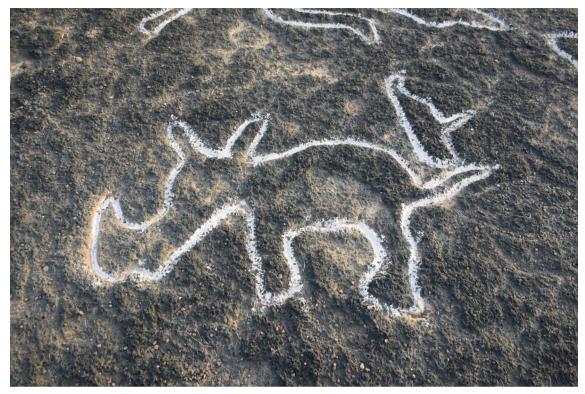


Fig. 7: Small rhinoceros figure, Kasheli

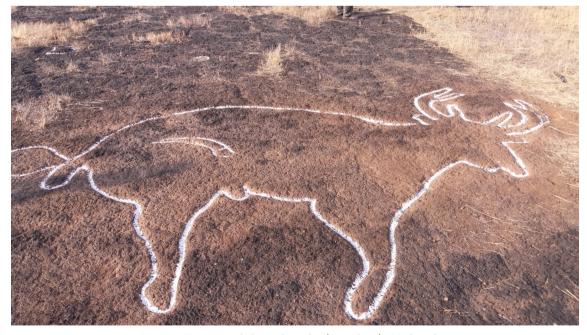


Fig. 8: Figure of deer family (Sambar), Kolambe



Fig. 9: Figure of deer family (Sambar), Upale



Fig. 10: Figure of deer family, Ukshi



Fig. 11: Figure of deer family, Dewood

At Chave, the lowermost and roughly western part of the group comprises a standing human figure in the centre flanked by two boars. The one on the left is small, while the other on the right side is even larger than the human figure. Both flanking boars are shown in longitudinal section wherein only two legs, one front and one back leg are visible, and the other two remain hidden. The boars are merely shown with outlines. The largest boar here is 2.5×2 m in size (Fig. 12), while on other sites it is around 2×1.5 m in size. Among carved figures reported from Rundhetali, there are almost 20 to 25 boars or pigs (Fig.13). As already noted above, this animal is identified based on a fat voluminous body with short legs, cylindrical projection of mouth and triangular ear. Earlier local villagers used to hunt wild boars as these animals exist in the same region. However, now there is a government ban against the hunting of this animal.



Fig. 12: Wild boar, Chave



Fig. 13: Wild boar or pig, Rundhetali

5. Tiger

The depiction of the tiger is reported from six sites in surveys carried out so far. The site of Barsu in Rajapur tehsil has been visited and discussed by several scholars working on petroglyphs. The site is famous for larger-than-life carvings of man and two tigers. The carving is spread over an area of 17.5 x 4.5 m. The man is shown standing between two figures of tigers leaping towards him. The human figure is 4 m in height. The man is shown with stretched arms to keep these tigers at the bay. The tigers are stylised within rectangular form shown with wide-open mouths. They also follow the standard rule of animal depiction in Konkan petroglyphs by showing only two legs. Though showing in an attacking posture, they appear more or less static. The stylisation seems to have dominated animism. The stripes on tigers are also composed of an arrangement of horizontal and vertical lines forming rectangles and triangles in a stylised manner. In contrast to the geometrical treatment of tigers, the human figure is treated with curves, for example, round head, curved waistline and rounded feet. The chest is shown with geometrical abstract forms. The carvings are not much deeper than 5 cm, and the gap between the outer and inner lines is 3-4 cm wide.

This petroglyph is visited by many scholars including Ravindra Lad who related this petroglyph with the Indus Valley Civilisation (Lad 2018: 97). The reason is obvious as a similar sort of depicted motif is seen on at least two Indus seals reported from the excavated sites of the Harappan Civilization - Harappa and Mohenjo-Daro. Tigers shown at Barsu are almost 8 x 4 m in size from head to tail. These are larger than life-size figures (Fig. 14). At three sites, i.e., Kasheli, Rundhetali and Goval Solgaav, the tiger figures are shown 4 x 3 m in size. (Figs. 15-16). The striped body, long tail and large head size with a superior body proportion help to identify these as tiger figures than of leopard. Tigers are now extinct from the Konkan region; however, they are still found in the Western Ghats which are not far away from the Konkan.



Fig. 14: Tiger figures, Barsu



Fig. 15: Tiger figure, Rundhetali



Fig. 16: Tiger figure, Kasheli

6. Birds

Besides terrestrial animals, avian species are depicted on 15 sites in three tehsils explored so far. The bird figures identified include prey birds, egret-type birds and peacocks along with a few unidentified species. Among these species, the falcons are shown in more than life-size proportion as the figure documented from Upale village shows. This figure is 12×8 m in size (Fig. 17). Similarly, another falcon figure is documented from Sakharkombe which is again larger than life having a size of 8×4 m (Fig. 18). In both of these depictions, the wings are unfolded (or in a flying posture). The tail and head of birds are also shown prominently and help to identify these depictions like those of falcons.

The depictions of the eagle are not shown in flying postures as was the case with falcons. Based on the beak and the head, these bird depictions have been identified as those of eagles. At five sites, eagles are identified, and the average size of these carvings is 1×1 m (Fig. 19). The depiction of peacocks is reported from four sites. This bird has been identified on the basis of the depictions of feathers and tail. As the head is shown in the sectional profile, the beak is visible. The average size of peacock depiction is 1.5×1.5 m which is close to the actual size, and there is not much variation in size among peacock depictions reported from different sites (Fig. 20). A figure of a bird reported from Sakharkombe looks like a bird of heron family or it could be the bird belonging to the flightless family of birds. The size of this depiction is almost 4×2 m (Fig. 21). The beak portion and the lower portion like legs and back go very different than the normal birds and this identification needs further examination. The bird figures are essentially two-dimensional in nature as most of these are indicated by an outline with a sectional profile and tilted head.



Fig. 17: Flying posture of the biggest bird figure, Upale



Fig. 18: Flying posture of bird figure, Sakhar Kombe



Fig. 19: Seated eagle figure, Goval



Fig. 20: Peacock figure, Ramroad



Fig. 21: Unidentified bird figure, Sakhar Kombe

7. Reptiles

The rainfall is high in Konkan as it is situated in between the Western Ghats and the Arabian Sea leading to the presence of a number of water bodies in the form of rivers and lakes. Along with birds and terrestrial animals, there are figures of alligators, sea turtles and monitor lizards which are recorded as reptiles. There are five sites with the depiction of an animal which could be either the depiction of an alligator or monitor lizard. The depictions are generally indicated by an elongated mouth along with four legs and a long thick tail. While it is difficult to identify these figures clearly, the alligator's sharp jaw is not shown here. Nevertheless, the average size of these reptiles is around 2 x 2 m in more or less at every site (Fig. 22).

The sea turtles are depicted at two sites- Kapadgoan and Jawari. Both of these sites are almost 20 km (in a straight line distance) away from the sea coast. The sizes of both sea turtles' carvings are different; one is $2 \times 2 \text{ m}$ while the second one is just $1 \times 1 \text{ m}$ (Fig. 23). It is important to note that sea turtles and alligators along with monitor lizards can still be seen in the region under consideration.

8. Aquatic Animals

The petroglyph sites of Ratnagiri districts are not far from the sea coast. Among the aquatic category, the authors have documented shark, octopus, stingray and numerous types of fish. The identification of a number of these fish is a difficult task. The sharks and stingrays have been reported from nine sites. At Kasheli, within the large figure of an elephant, two different types of sharks are engraved. At Umre also, the engravings of sharks are noted. The sharks are more or less the same in size, i.e., 2 m. The shark engravings are marked with triangular heads and their thick cylindrical bodies are marked with deltoid double fins narrowed down to a split tail (Fig. 24). The stingray figures are noticed at four sites. At Barsu, the depiction of a stingray is spread almost



Fig. 22: Reptile (Monitor Lizard), Bhalivali



Fig. 23: Sea turtle, Kapadgaon



Fig. 24: Shark figure, Kasheli

over an area of 2×2 m, while at Jambhrun it is a bit smaller having a size of 1×1.5 m (Fig. 25). It is interesting to see the depiction of sharks among these petroglyphs as sharks do not usually venture near the coast. This region could be the only one where the sharks have been depicted by early humans.

In this paper, the authors have dealt with those animals only which have been depicted on several sites. However, it is important to note here that in addition to the above-mentioned animals, several other animals have also been depicted. These include animals such as monkeys, rabbits, civets of the Viverridae family, hyenas, squirrels, snakes and many more (Figs. 26-27; Table 1). Some of these figures have been depicted in further remote areas and needed to be documented in a systematic manner in the future. While these animals have been recorded from a few sites, these animals can still be seen in the same region.

Summary and Observations

The faunal depictions in these petroglyph sites are mostly seen in life-size. There are few depictions of more than life-size carvings which make this rock art distinctive from any other rock art site. The depiction of rhinoceros is an exceptional discovery and could play an important part in understanding more about the period of carvings along with the ecology and environment of the contemporary period. These animal figures were seen in the painted form at many sites, mostly in connection with hunting scenes of



Fig. 25: Sting ray, Jambhrun



Fig. 26: Monkey, Golap



Fig. 27: Figure of Civet family, Goval

animals. While in Konkan petroglyphs known so far, hunting scenes are absent. After documenting these petroglyphs, it has been noted that there are no carvings of any domesticated animal like bull, cow or dog. The absence of the depiction of domestic animals points to the pre-domestication time period. Another interesting fact is that floral depictions are categorically absent here. Not even a single leaf has been carved within these documented petroglyphs. These depictions of various animals can also help to understand the palaeo-environment of the region. In India, almost in every rock art site, animals are depicted in miniature size but here in Konkan petroglyphs animals were depicted either in life-size or sometimes even bigger than that. Depictions of rhinos, elephants, tigers along with a few species of birds at a greater scale are an exceptional entity in Indian rock art studies.

The present research team intends to continue the documentation of these petroglyphs along with ethnoarchaeological survey of local traditions of the region to interpret these petroglyphs in a better way. The exploration work is still going on, and, every week, our team is getting references for another site. Therefore, it is very difficult to get to any conclusions like the patterns between the carvings and human animals' coexistence, etc. until the full documentation. Most importantly, the petroglyphs from Konkan fill the gap in the archaeological record between the Stone Age and the Historical period in the known human past. The Neolithic or Chalcolithic phase or any pieces of evidence related to these technological stages of human life were not known from the Konkan region so far.

According to Dr. Erwin Neumayer (*personal communication*), a well-known rock art expert, "...having seen much of the painted and bruised-engraved rock art in central India and the Southern Deccan, I have the feeling that one group of the laterite pictures are stylistically related to the Mesolithic rock art in the Deccan, as far as the large depictions of animals, birds and fish go. I came to this conclusion on account of the stylistic peculiarities of drawing mammals in a single outline with only two legs shown in profile. A surprising variation exists: Here in the laterite pictures are NO bovids, which are shown frequently in all other Mesolithic rock art in the Deccan or central India for that! Unique and without comparison are the depictions of sharks and stingrays. Interpretation is a very wide and subjective field, but the depiction of rhinoceros in unquestionable naturalistic outline came as a surprise."

The discovery of microliths near sites of Kasheli, Rundhetali and Chave lead to speculation that some of the petroglyphs may date back to the Mesolithic era and that suggests that at that time human's existence must have been there along with these animals.

REFERENCES

Bednarik, Robert G. (1998) The Technology of Petro Glyphs, *Rock Art Research* 15: 23-35.

Bednarik, Robert G. (2001) The Oldest Known Rock Art in the World, *Anthropologie* XXXIX(2-3): 89-79.

Dalvi, D. (1990) *Maharashtratil Len* (in Marathi, Ist edition). Mumbai: Granthali Publication. Directorate of Museums Goa (2002) *Rock Art at Pansaimol, Sanguem, Goa*. A Brochure published by Government of Goa.

- Garge, Tejas, B.V. Kulakarni, Rhutvij R. Apte and Sudhir Risbud (2018) Petroglyphs in Konkan: Historiography, Recent Discoveries and Future Endeavours, *Purakala* 27-28: 29-47.
- Ghanekar, P.K. (1995) Koknatil Paryatan (in Marathi). Pune: Snehal Publication.
- Gogate, Vishwas, Shrikant Pradhan and Prabodh Shirvalkar (2008) Lines on Rock: Petroglyphs from the Konkan, Maharashtra, *Journal of Indian Ocean Archaeology* 5: 111-115.
- Guzder, Statira (1980) Quaternary Environment and Stone Age Cultures of the Konkan Coastal Maharashtra, India. Pune: Deccan College.
- Joshi, R.V. and B.P. Bopardikar (1972) *Stone Age cultures of Konkan, in Archaeological Congress and Seminar Papers* (S.B. Deo Ed.), pp. 47–57. Nagpur: Nagpur University.
- Lad, R. (2018) Koknatil Katalshilpe Aani Sindhu sanskruti (in Marathi). Mumbai: Pithorimaya Publication.
- Lalit, Satish (2012) 'Kudopi Rock Art Gallery' Petroglyphs on laterite surface in coastal district Sindhudurg in Maharashtra, *Purakala* 22-23: 1-7.
- Marathe, Ashok (2005) Contribution of the Deccan College to the Study of Prehistoric and Historical Archaeology of Konkan, *Bulletin of the Deccan College Research Institute* 64/65: 21-26.
- Marathe, Ashok (2006) Acheulian cave at Susrondi, Konkan, Maharashtra, *Current Science* 90(11): 1538-1543.
- Rane-Kothare, Anita (2013) Discovery of New Petroglyphs and Evidences of Cartography on the South Western Coast of Maharashtra State, *Indica* 50(1-2): 156-164.
- Sathe, Vijay (2015) Discovery of a Fossil Bed in the Manjara Valley, District Latur, Maharashtra, Bulletin of the Deccan College Research Institute 75: 1-16.
- Todd, K.R.U. (1932) Prehistoric Man Round Bombay, *Proceedings of Prehistoric Society of East Anglia* 7(1): 35-42.
- Todd, K.R.U. (1939) Palaeolithic Industries of Bombay, *The Journal of the Royal Anthropological Institute of Great Britain and Ireland* 69(2): 257-272.