

Saving the Unknown!

In India, conservation efforts are largely forest-centric in order to cover the maximum diversity in a minimal area. Nevertheless, there are a few other critical habitats which lack attention and protection due to varied reasons, which we need to conserve also. Among such habitats are rocky outcrops, scattered sporadically within our country, unnoticed and least understood. Rocky outcrops are generally defined as portions of exposed bedrock protruding above the soil due to geological activities. The term includes landforms ranging from cliffs, isolated hills and inselbergs to rocky platforms of diverse nature. These constitute a recognized habitat category under IUCN habitat classification. In India, open rocky areas in the form of naturally exposed plateaux, monoliths, kopjes and cliffs are major components of the landscape. Large monolithic inselbergs and kopjes are common in southern India. Cliffs are the dominant outcrop type in the mountainous regions. Rocky plateaux of basalt and laterite are present along the Western Ghats and Konkan region in western Maharashtra.

Konkan – as it is popularly known – is a rugged segment of the western coastline of Maharashtra, resting between the “Sahyadris”, the Western Ghats mountain ranges and the Arabian Sea. The region extends over about 720 km north-south and 44 km east-west and is characterized by various land forms having gently undulating low plateaux and cliffs in the west to very steep slopes, ridges and high hills towards the eastern portion. The most remarkable of all these variations of landforms met with in Raigad, Ratnagiri, and Sindhudurg districts of the Konkan are the lateritic plateaux which cover the largest surface.

These plateaux are highly characterized by seasonality, appearing totally barren during the dry season, but full of life during the wet season. Lack or scarcity of woody species make rocky plateaux appear barren or “waste lands” for the eight months long dry season covering winter and summer. The region enjoys heavy rains during the monsoon, which goes up to an average of 2,000 mm. There is visible dynamism on the plateaux during the four months of this season, as the plateaux experience gregarious flowering of different species at different times. Monsoon also invites a lot of faunal activities, especially among invertebrates and small vertebrates, such as a wide range of insects, amphibians and reptiles.

Plateaux experience an array of adverse environmental conditions, such as very high and low temperatures, fluctuating humidity, flooding, drought, harsh wind, salinity and lack of nutrients. As a result, plateau communities are known to harbour habitat specialist plants which can cope with the extremes and flourish.

Recently, most of these coastal rocky outcrops are experiencing heavy biotic pressures such as rapid conversion for settlements, paddy fields, orchards, quarries, grazing fields, windmill farms and industrialization. Lack of awareness about their role as a special habitat, and consequent absence of baseline understanding regarding their ecology, are major hindrances in bringing them under a formal framework of protection. New management approaches are thus imperative to conserve these highly accessible landscapes. BNHS has recently undertaken an in-depth study of plant and animal communities on the coastal rocky plateaux of Ratnagiri



district, along with a detailed documentation of various disturbances, which is certainly an important step towards conservation. With this and other projects, we will continue to strengthen our work on neglected ecosystems.



While we continue to debate on species, habitats, and policies, a larger threat of climate change looms over us and our lives continue to hang precariously. One need not go far to find evidence that the sea level is rising. Those who are familiar with Mumbai and have stayed here for a couple of decades may realize the gravity of sea level rise. Do Mumbaikars recollect where the low and high tide boundaries used to be in Dadar and Juhu beach, two decades ago? . Today, during high tide the water touches the road, especially in the monsoon. The sea has moved several metres towards the shore within two decades. With this reality, it is ironical that instead of moving away from the sea we are moving towards the sea, and we are diluting laws like the CRZ. Confrontation with nature is the last thing we need; such is the power of nature.

In the light of the vast environmental challenges that surround us, expectations from BNHS to scale up conservation research and action are always very high and rightly so. It is the sole purpose why BNHS exists in the first place. The starting of the base in Sikkim is one such step where we aim to work on issues like threatened species and climate change impacts on our habitats and species.

Deepak Apte