What is the first thought that flashes across your mind when you hear ‘Rajasthan’? Is it the unending golden hues of sand dunes, the desert, the camels, the colourful and lively culture, the folklores of kings and queens or the aesthetic food?

For wildlife researchers like us, it was the earthy call of the desert wilderness and that’s where we began our journey into the Desert National Park (DNP) with the hope of experiencing some wildlife exclusive to the topography.

It was indeed a spectacle of a different kind, in stark contrast to the lush green forests, the golden beaches with the vast ocean or the snow-capped peaks of the Himalayas. Lying in the country’s extreme west dominated by semi-arid conditions, DNP spread over an area of 3162 sq km is the largest national park and the sole representative of desert ecosystems in India. Most of the national park is a part of the Great Indian Desert also known as the Thar Desert.

Accompanied by the forest department staff, we journeyed into this dry, sandy, desolate region inappropriately termed ‘lifeless’ by many. We were keen to get a glimpse of the species that have successfully adapted themselves to this resilient topography. On our way, the accompanying forest guards entertained us with little anecdotes about the land.

Our jeep took a detour as the guards had to patrol the area. This gave us an opportunity to get a glimpse of the Indian spiny-tailed lizard (Saara hardwickii) locally known as ‘Saanda’. Each individual is known to excavate its own burrow not more than 2 m long, usually basks close to the entrance and swiftly recedes back at the slightest hint of danger. They can be easily seen throughout the summer, are predominantly herbivores and mostly preyed upon by raptors.

To get a good look at the entire landscape, we visited the second tallest hills of the area with a temple named ‘Nabh Dungar’, situated at a height of around 700 ft. Herds of camels walking in...
a single file through the barren landscape provided a classic backdrop. The summer was not in its scorching glory; hence we could see small ponds partially filled with water providing refuge to winter visitors like Northern Pintail and Common Pochard and quite a few resident birds.

The desolate landscape, however, had a few patches of vegetation specific to these conditions. These include Bhui (Aerva pseudotomentosa), Phog (Calligonum polygonoides), Kair (Capparis decidua), Saniya (Crotalaria burhia), Tumba (Citrullus colocynthis), Sewan (Lasiurus sindicus), Kheimp (Leptadenia pyrotechnica), Khejri (Prosopis cineraria), Piloo (Salvadora oleoidis), Ber (Zizyphus mauritiana), etc.

After a small ride further, we finally reached our camp at ‘Sudasari’ nearly 40 km from the Forest Department Headquarters at Jaisalmer. This place is towards the northern part of the sanctuary which is maintained by the Forest Department. One has to be careful with the water shortage and it is suggested to hire a vehicle for easy access to the surrounding area.

Among antelopes and small mammals, the state animal Chinkara or Indian Gazelle (Gazella bennettii), Black buck (Antilope cervicapra), Indian Desert Fox (Vulpes v. pusilla), and Bengal Fox (V. bengalensis) are easily spotted. The area is also rich in bird diversity with about 270 reported species. House sparrow which is otherwise rapidly disappearing from the urban areas was noticeably seen in huge flocks. Grey Francolin, Tawny Pipit, White-eared Bulbul, Black-crowned sparrow lark, Eurasian collared dove, Common babbler, Desert wheatear, Variable wheatear, Steppe eagle, Tawny eagle, Indian silverbill, Laughing dove, Spotted dove Striolated bunting, Chestnut-shouldered petronia, Griffon vulture, Short-toed eagle, Greater short toed lark were also easily spotted.

The Spotted Sandgrouse, a winter visitor, was an easy bird to sight by its typical flight pattern. Stoliczka’s bushchat, a vulnerable species, made an extended appearance. Few harriers and eagles could not be identified owing to their flying height.

The highlight of the trip was none other than the state bird of Rajasthan, the Great Indian Bustard (Ardeotis nigriceps), which has made this region a hotspot for global conservation. It is locally known as ‘Godawari’.

The population of this critically endangered species is confined to the states of Rajasthan, Gujarat, Maharashtra, Madhya Pradesh, Karnataka and Andhra Pradesh. Their numbers are estimated to be less than 300, which is dwindling at an alarming rate across its distribution. Thanks to our skilled forest guards we were able to locate a few, stretching their neck up and peeking through the ‘Sewan’ (Lasiurus sindicus) grass.

According to geomorphologists, two major dune types are found – the naturally stabilized ‘old’ dunes and currently forming mobile ‘new’ dunes. Dunes that have attained natural stability in the past few decades are now under different phases of degradation.

The bird is known for its very sensitive nature and in the words of the forest guards if disturbed more than twice, it might fly up to 2-3 km straightaway abandoning its post. The forest department has undertaken various measures under the ‘Project Great Indian Bustard-2013’, like habitat enrichment by planting grasses like Lasiurus sindicus, providing water facilities through water guzzlers and habitat protection through the creation of open enclosures of appropriate size to restrain the locals and grazing cattle from entering. This move has alienated the locals from the green pastures for their increasing cattle population, which further aggravated the tension between locals and the forest department. According to the Forest Department report (2014), 103 GIBs were recorded from the park. Stabilizing the GIB population in the present scenario seems to be an uphill task.

DNP is also known as a good wintering ground for another near threatened bustard species, the Houbara bustard (Chlamydotis macqueenii) which
we could not sight during our stay as the bird probably would have migrated back to its breeding ground. Nevertheless, the place is a heaven for wildlife enthusiasts. A stroll by the road itself gives ample opportunity to witness the wildlife around this region starting with beetles, desert ants, skinks or small rodents.

Apart from the birds mentioned above, another interesting sighting was that of Indian Desert Bird (*Meriones hurrianae*). They make numerous intricate interconnected subterranean holes preferably under the bush in soft soil. It is incredibly amusing to observe them entering one hole and exiting another in a flitter. They seem to spend most of their time digging or feeding on plant matter.

Breathtakingly beautiful sand dunes were our next stop. Sam sand dunes, 14 km from Sudasari are a major tourist attraction. It offers recreational activities like camel rides and cultural shows in the nearby desert camps. Though this place provides ample opportunity for tourists. But none of us enjoyed the blemished panorama of the dunes overpowered with camel ferry carts and cluttered garbage. Fortunately, we got a chance to see a few enclosed sand dunes managed by the Forest Department away from tourist footfall. Here we cherished the opportunity to spot the intricate patterns on sand made by the beetles, skinks, Chinkara, Desert cat, Desert fox.

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and various other animals. We were expecting snake species like ‘side winder’ slithering across the glistening sand but unfortunately they had still not emerged from hibernation.

It was pointed out by the forest guard that some years ago this particular dune and several others used to be about 60 metre higher than their present height. Locals and forest officials also said that these stunning sand dunes are fast losing their height. It has reduced to half and is in fact vanishing from some places.

According to geomorphologists, two major dune types are found – the naturally stabilized ‘old’ dunes and currently forming mobile ‘new’ dunes. Dunes that have attained natural stability in the past few decades are now under different phases of degradation. Government policies of afforestation for controlling desertification occasionally become counterproductive, along with unregulated tourism, desert camps, construction activities and jeep safaris which are further taking a toll on the dunes and turning them into garbage dumps. This might lead to the disappearance of certain sensitive species if not the entire dunes, in the near future.

Nevertheless, for exploration there are still some places where one can find taller dunes like those of Sudasari dunes which we visited on a full moon night. If one enjoys star gazing and night photography, this place provides an excellent setup as artificial light in this area is limited. Owing to its flat terrain we observed the sun setting with its last orange gleam for the day and the moon rising with its silvery shimmer together in different directions simultaneously. It was indeed an unforgettable sight.

Our journey culminated with a visit to the Akal wood fossils, an area spread across 108 hectares about 18 km from the city of Jaisalmer. This place contains an extraordinary collection of fossilized wood, dating back to 180 million years, reminiscent of the luxuriant forest that this area might have supported in the past. There are dozens of logs lying in random orientation protected inside enclosures; the largest log measures 13 m long and 1 m wide. The fossils were those of pterophyllum, ptilophyllum, equisetites species, dicotyledonous wood, and gastropod shells of the lower Jurassic period. We were amazed when the person in-charge struck these fossils with a stone and each of them made metallic sound upon striking. Petrified wood makes a distinct clink (glass like) noise when hit with metal or stone due to the deposition of minerals in the hollowed cervices.

DNP is a unique gem among the biodiversity treasure chest that India has to offer. It is fascinating how the same latitudes towards the east of the country have regions receiving maximum rainfall while in west the minimum. This region, which once supported a luxuriant forest as evident in Akal wood fossils is now a barren desert ecosystem.

Ever increasing needs of people have resulted in encroachment upon this so-called ‘lifeless wasteland’. With good potential to harness wind energy, substantial investments have been pouring into the state for developing wind farms that are known to be the largest on-shore wind farms in the world. Though it might seem to have spoilt the aesthetics of the landscape and is a threat to wildlife, these developments are a prerequisite for economic growth. It’s a mounting challenge for the future conservationist to maintain and preserve these unique ecosystems in this era of gross development.

We eventually bid farewell after spending four days in this land of uniqueness, wonderful people and not to forget the delicious ‘Dal-Baati Churma’ with a promise to explore the unexplored life in this ‘lifeless’ land of dunes.

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