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## Berwala Bird Safari

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The name of this wildlife sanctuary is perhaps unusual. But then it came to be created in rather unusual circumstances. In May 2001, Haryana's Chief Minister announced that he wanted to make the Morni area in the Shivalik Hills the finest tourist destination in north India; a Lion Safari laid over 1,000ha was to be the centre-piece of this utility. I was horrified as Morni is one of the few areas in the Shivaliks, which will qualify as a nature heritage site. I reasoned with the C. M. that he should instead create a Bird Safari that will require next to no infrastructure, no disturbance to the existing rich floral and faunal diversity and absolutely no relocation of villages. I learnt later that bureaucrats, without exception, were not happy with the idea of a Lion Safari but they did not wish to voice their opinion. So everyone backed my letter to the C.M. and the idea of a Bird Safari was accepted! For all intents and purposes it is a bird sanctuary but the word "Safari" has come to stay, for the present any way.

Berwala (30°41'N, 76°41'E; 300m a.s.l.) is a mere 16km from Chandigarh on the road to Morni. Situated at the junction of Shivaliks with the plains it is a bustling transit area in the back-and-forth movement of birds, butterflies and some mammals between the Himalaya and the plains, synchronous with the cycles of seasons the year long. It comprises the 260ha space in-between and over the last two major ridges of the Shivalik Hills range before they tumble down and eventually flatten out at the Ghagar River, merging with the plains of north India. At the widest the valley is about 2km and a mere 800m at the narrowest. There are three active springs that cater to the needs of birds and animals adequately. The valley, the numerous ravines and the slopes of the ridges are densely wooded with the dry deciduous flora typical of the Shivaliks. The predominant tree species are *Chaal* (*Anogeissus latifolia*), *Jhingan* (*Lannea grandis*), *Dhakk* (*Butea monosperma*), *Khair* (*Acacia catechu*), *Gular* (*Ficus glomerata*), *Ber* (*Zizyphus nummlaria*), and the climber *Bauhinia vahlii*. Some slopes support rich growth of *Bhabbar* grass (*Eulaliopsis binata*).

In keeping with the geology of the Shivaliks, Berwala has several bare and near vertical mud cliffs. The largest is almost in the centre of the sanctuary. It is approximately 40m at the base and narrows to about 30m as it rises dramatically for nearly 50m from the floor of the valley. In the month of May I found the Green Bee-eaters *Merops orientalis* covering the face of this cliff like a swarm of bees. About 20m above there were over 180 nest-tunnels so well placed that Shikras *Accipiter badius* and Common Kestrels *Falco tinnunculus* could not even get a toe-hold let alone prey upon the nestlings. And on 16.xi.2003, two Wallcreepers *Tichodroma muraria*

were sighted on this cliff face; I mention the date because this bird is a very rare vagrant from the Himalaya and it may well be the first record for this area.

So far 83 species of birds (resident, passage, vagrants and local migrants) have been sighted. Over a period of time, this list will surely cross the 200 mark. Occasionally encountered are the Great Barbet *Megalaima virens*, Blue-bearded Bee-eater *Nyctornis athertoni*, Yellow-billed Blue Magpie *Urocissa flavirostris*, Grey Treepie *Dendrocitta formosae*, Crested Bunting *Melophus lathamii*, Verditer Flycatcher *Eumyias thalassina*, Asian Paradise-Flycatcher *Terpsiphone paradisi*, Blue Whistling-Thrush *Myophonus caeruleus*, White-throated Fantail-Flycatcher *Rhipidura albicollis* and, Black Bulbul *Hypsipetes leucocephalus*. In the month of May, I sighted two male Crimson Sunbirds *Aethopya siparaja*. Surely they could not be nesting at such a low altitude? Those that delight your heart always and every time are the Red-vented Bulbul *Pycnonotus cafer*, Himalayan Bulbul *Pycnonotus leucogenys*, Oriental White-eye *Zosterops palpebrosus*, Great Tit *Parus major*, Rufous Treepie *Dendrocitta vagabunda*, Scarlet Minivet *Pericrocotus flammeus*, Oriental Magpie-Robin *Copsychus saularis*, Grey Bushchat *Saxicola ferrea*, Black Drongo *Dicrurus leucophaeus*, Jungle Babbler *Turdoides striatus*, Indian Peafowl *Pavo cristatus*, Red Junglefowl *Gallus gallus* and, Red-wattled Lapwing *Vanellus indicus*.

When summer is at its hottest and driest, the magic of this little sanctuary is hard to rival. The narrow valley reverberates with the incessant calls of the Lesser Cuckoo *Cuculus poliocephalus*, the Indian Cuckoo *Cuculus micropterus* and the Koel *Eudynamis scolopacea*. When rains are in sight, the Pied Crested Cuckoo *Clamator jacobinus* joins the chorus. Once the rains are well established, the Indian Pittas *Pitta brachyura* arrive in good numbers both to add colour and enliven the bird song. There is strong vocal evidence of the presence of Laughingthrushes (*Garrulax* spp.) as well but none have been seen nor identified from their calls so far.

There is one game trail in the sanctuary, which from the floor of the valley ascends to the top of the ridge and after a long traverse over the entire crest line again descends to the valley floor. The crest provides a total view of the entire sanctuary and a grand panorama of the Shivalik Range as far and wide as eyes can reach out. My first walk on the trail on 23.xi.2003 was very memorable. There were the tracks of a big Sambar *Cervus unicolor* with a fawn in tow, several heaps of droppings of the Barking Deer *Muntiacus muntjak*, spent quills of Indian Porcupines *Hystrix indica* and

feathered remains of a peacock suggestive of a meal made possibly by a Leopard *Panthera pardus*. Thrice I put up Himalayan Goral *Naemorhedus goral*, five in all, who gave remarkable displays of glissading down the cliff face and down the knife-edge of a spur at lightning speeds. A sounder of four Wild Boar *Sus scrofa*, when surprised, stood blocking my path and then in a sudden right turn disappeared inside the *bhabbar* grass, grunting their disapproving anger all the while. And one Bonelli's Eagle *Hieraetus fasciatus* exhibited the power and grace of his steep glide-dive from far above down to its prey in the valley in the flash of an eyelid. One solitary Eurasian Sparrowhawk *Accipiter nisus* was seen atop a

tree that was rooted in a cliff-face in sheer defiance of gravity. And quite unpredictably, every now and then a variety of butterflies – Grass Yellow *Eurema hecabe*, Great Orange Tip *Hebomoia glaucippe*, Indian Cabbage White *Pieris canidia*, Peacock Pansy *Junonia almana*, Common Mormon *Papilio polytes*, and others unknown to me – added to the charms of this two-hour walk.

Having sampled this fraction of Nature's riches of the Shivalik inside the Berwala Bird Safari, I wondered what the Shivalik Development Board (Haryana) mean by "developing" the area to make it more "attractive." They will no doubt spend crores but who has ever enhanced Nature's attractions?

## Nesting of Western Reef-Egret *Egretta gularis* in the saltpans of G.H.C.L., Dholera

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The Gujarat Heavy Chemical Ltd. (GHCL) saltpans, located on the western coast of the Gulf of Khambhat, near Dholera (22°15'N, 72°15'E) are well-known foraging site for both the species of Flamingos (Phoenicopteridae) during the non-breeding season (Jadhav and Parasharya 2004). Various sizes of salt works, spread over a vast area (c.40km<sup>2</sup>) support a large number of waterbirds throughout the year. During winter this place becomes a heaven for birdwatchers. A large number of Great White Pelicans *Pelecanus onocrotalus*, Eurasian Spoonbills *Platalea leucorodia*, Painted Stork *Mycteria leucocephala*, waders and Gulls and Terns (Laridae) have been recorded here during winter. The Western Reef-Egret *Egretta gularis* is one of the common birds inhabiting the saltpans and the coastal mudflats. During our visit on 8.vi.2004, we found Western Reef-Egret nesting on mangroves within the saltpans.

The Western Reef-Egrets were found nesting on the top of dried mangroves *Avicennia marina* standing within the saltpans. The saltpans were filled with water up to a depth of 15-20cm. The height of the mangrove plants varied from 0.6-1.5m above the water surface. Hence, the nests were very close to water surface. The platform nests were constructed using the thin dried sticks of mangroves. The nests were built on the forked vertical branches. In all, 24 nests were observed on 20 plants (Table-1). One nest was found on a 1.5m mangrove and was close to the road. There were three light sky blue eggs in it. No chick was present in any of the

nests. Both forms (Grey and White) of the Reef-Egret were present in this heronry, however the proportion of nesting birds showed dominance of grey forms (22) compared to two white forms. Along with Reef-Egrets, two nests of Little Cormorant *Phalacrocorax niger* were also recorded on the same vegetation of which one was along with nests of Reef-Egrets.

The Western Reef-Egrets are generally recorded nesting at the height of 5 to 15m or some time even at the height of about 2m from the ground, on forked vertical branches of trees. *Avicennia* is one of the plants used for building their nests in the coastal region (Parasharya & Naik, 1988, Hancock & Kushlan 1984). However, nesting at such a low height is recorded for the first time. Unlike other heronries on large trees, (Parasharya and Naik 1988) the mangroves supported less number of nests (1-4 nests per plant) due to their small canopy size.

The entire area was dominated by the mangroves *Avicennia marina* and Seepweed *Suaeda nudiflora*. No other tall plants were present in the surrounding area; hence the mangroves were the only plants available as nesting substratum. As the nests were built within the inundated saltpans, they were not approachable by any terrestrial predator. The saltpans having the heronry were close to the seacoast. Hence a large numbers of mudskippers (*Boleophthalmus* sp.) were found in the mudflats, which formed the staple food of nesting Reef-Egrets (Ali and Ripley 1983). The

Table 1. Nests of Western Reef-Egret on the *Avicennia*, in GHCL Saltpans

No.	<i>Avicennia</i>		Nests of Western Reef-Egret / <i>Avicennia</i> Plant								Other bird nesting	
	Height (m)	No.	Single		Two		Three		Four		Species	No. of nests
			G	W	G	W	G	W	G	W		
1	0.6-0.7	17	14	0	1	1	0	0	0	0	0	0
2	1.18	2	0	0	0	0	2	1	4	0	Little Cormorant	1
3	1.5	1	1	0	0	0	0	0	0	0	0	0
Total		20	24								2	

G = Grey form of Western Reef-Egret occupying the nest. W= White form of Western Reef-Egret occupying the nest.