

Dudhwa, Katarniaghat

Those two Indian reserves are situated in Uttar Pradesh state on the border with Nepal. In the past they were connected each to other and constituted part of so called Western Terai Landscape Complex. That rich and diverse environment has been heavily logged and settled both in India and Nepal in last forty years. As a result very few forest are now left outside the reserves. Fortunately both Indian sanctuaries are still connected with Nepali national parks of Suklapantha (Dudhwa) and Bardia (Katarniaghat). Maintaining corridors between those protected areas is crucial for their survival and constitute one of the main goals of the WWF Terai landscape project.

The status of Dudhwa and Katarniaghat is different as first is gazetted as national park and tiger reserve whilst the later is listed as wildlife reserve. The gazettment of Katarniaghat as tiger reserve and national park is one of the steps that Indian authorities should undertake quickly in order to save the place. The next step could be the creation of the large transnational 'peace park' connecting two reserves in India (Dudhwa, Katarniaghat) and two in Nepal (Bardia and Suklapanta).

Both Indian reserves are under constant pressure from growing rural population and poaching. Forest are being encroached and grazed by feral and domestic cattle. Firewood is being collected by local population. Many cars and trains pass daily through sanctuaries. Environmental authorities as well as several NGO's are struggling to close railroads crosscutting Katarniaghat and Dudhwa which are blamed to bring poachers and wood collectors deep inside the forest as well as killing wildlife. Another threat for the Katarniaghat reserve is a local border (and ferry) crossing with Nepal, which is situated in its core zone. Efforts undertaken by Indian forest service and NGOs to limit the disturbance of both sanctuaries should gain as much support as possible as both places are of international importance for wildlife conservation and have huge potential for the development for sustainable tourism.

As reserves administration is doing its best to protect sanctuaries mammals and birds is still present in the reserves in relatively large numbers. Both places hold population of tigers, swamp dears (barasingha), leopards and elephants. Katarniaghat is also famous for being the last stronghold of fish eating crocodiles-gharials. The place remains also key breeding habitat of several species of birds including sarus cranes and vultures.

Dudhwa Tiger Reserve lies on India-Nepal Border. It is spread over the area of 811 sq kms although only 490 constitute a core zone. In addition to that reserve is divided in two units: Dudhwa National Park and Kishnapur wildlife sanctuary separated by 15 kms of agricultural land (planted mostly by sugar cane). Connecting and enlarging both units of the sanctuaries should constitute priority for the

environmental authorities as both sectors of sanctuary host one of the last remaining large populations of swamp deer in India.

Dudhwa Tiger Reserve was made famous by 'Billy' Arjan Singh- Indian officer turned environmentalist who, a part of being supporter of Project tiger, tried to introduced captive leopards and tigers back into the wild. One of such stories ended badly as tigress released in Dudhwa named Tara probably turned man eater and was consequently shot by park authorities. In addition to that release of tigress was blamed for bringing genetic pollution to Dudhwa as Tara was of mixed blood of Bengali and Siberian tigers. That fascinating story was described in several books written both by Arjan Singh and people involved in the hunt on tigress.

As far as practicalities are concerned Dudhwa is reachable by car in few hours from Lucknow airport, Katarniaghat is not further away. My trip was organized by Indian nature photographer Suresh Chaudari so I was somehow a guest of forest administration and had an access to larger parts of reserve than an average tourist. Probably the best way for arranging the trip inside the reserves is to contact Katarniaghat foundation- local NGO active both in Dudhwa and Katarniaghat (<http://sites.google.com/site/katarniaghatfoundation>).

My first stop was in Kishnapur range of Dudhwa. That part of tiger reserve holds one of the largest population of swamp deer (*Barashinga- Cervus douvaucelli*) in the world. The highlight of the place is large marsh formed by drying lake. I would not hesitate to call that place one of the most beautiful spots ever seen in my life. Hundreds of birds (duck, geese, storks, cormorants, herons) fighting dears, wild boars, mugger crocodiles are sharing the lake and can be observed from a platform on its shore. The place is also perfect for observing smooth-coating otters although I have not seen them during my visit.

Kishnapur wildlife reserve, although part of national network of tigers reserves is far from being secured. Apart of 'standard' threats of Indian sanctuaries such as poaching, overgrazing by domestic cattle, fires etc. threatened by severe floods. Last year part of the reserve of several square kilometers were virtually washed away and turned into wasteland by the flood aggravated by opening of dams upstream by Nepal authorities. It will take years before that part of the reserve recovers.

Spotted deer (chital- *Axis axis*) are fairly common both in the Kishnapur range and Dudhwa core zone. I have also seen a barking deer (munjac -*muntiacus muntjak*) there as well as wild boars (*Sus scrofa*). Rhesus macaques (*Macaca mulatta*) and Langurs (*Semnopithecus entellus*) are plentiful, also along the roads bordering the reserves as they 'hunt' for sugar cane transported to sugar mills.

Tigers, leopards and sloth bears are also present in both parts of the sanctuary but, unfortunately, I have only seen their tracks.

The main part of Dudhwa National park is situated 15 km away of Kishnapur. It was created as hunting reserve by British during the Raj and still hold the traits of hunting landscape park. That makes it a perfect spot for watching wildlife and organizing high value tourism. Old British lodges with elephant stables and ramps, brick bridges, crossroad marks, watch towers and forest houses are beautifully build and still fairly well maintained. In addition to that park keeps a dozen domestic elephants which are used both for patrolling and transporting tourist.

Local environment is mainly composed of natural Terai sal forest and old grown teak plantations. In addition to that park authorities actively maintains several grasslands which are home to large populations of deer. The most common species of mammal in Dudhwa are chitals (spotted dears). National park is also a perfect spot to see hog deer (*Axus porcinus*) which is present in large numbers on reserve grasslands. Sambars (*Cervus unicolor*) are also present but less frequently seen as they are usually active at night. Barking deer (muntjaks) is also relatively common. Swamp deer are less numerous in Dudhwa core zone than in Kishnapur but also relatively easy to see. Hanuman Langurs and Rhesus macaques are easily seen especially around the park headquarters and along the road.

The number of tigers in the reserve is debated but at the moment there is no less than 20 individuals. Unfortunately I haven't seen any. I had also missed the group of elephants which was present in the park during my stay. Elephants often migrate between Dudhwa and Suklapanta reserve in Nepal. As a result sightings of them is not guaranteed. Few rhinoceros (*Rhinoceros unicornis*) were reintroduced to Dudhwa. At the moment dozen of those majestic animals is kept in an large fenced area. Even that part of the reserve is infiltrated by poachers. During our stay a huge snare of 100 meters in length was found there by forest guards.

Dudhwa is a wonderful place for birdwatchers, with hundreds of resident and migrant species of birds. See my list above the report.

Katarniaghat reserve is situated 60 km from Dudhwa headquarters and is easily reachable by car. The reserve is a long strip of forest along the Indian- Nepali border. From one side the reserve is limited by a huge dammed reservoir on Shirva river- perfect environment for waterfowl and crocodiles- both muggers and gharials as well as gangetic dolphins. The reservoir also constitute the barrier against the infiltration of poachers, wood cutters and livestock herders into the reserve.

I was unlucky with tigers in Katarniaghat as much as in Dudhwa but instead had a chance to spot (and film) a pair of beautiful leopards (*Panthera pardus*)- male and a female there. In addition to that I've

observed rhesus macaques, hanuman langurs, five striped palm squirrels (*Funambulus palmarum*), spotted, barking and hog deers (*Axis porcinus porcinus*), golden jackals (*Canis aureus*) and nilgais (*Boselaphus tragocamelus*).

Shirwa river is a good place for observing gangetic dolphins (*Platanista gangetica*), gharials, muggers as well as several species of turtles. Small ponds along the river perfect spots for huge Indian pythons.

Birds are also present in large numbers in forest, grasslands and along the Shirwa river. Among others big colony of vultures nesting on giant threes can be visited inside the reserve.

Below is the list of mammals observed during my trip to India as well as very incomplete checklist of birds and reptiles.

Mammal checklist:

1. Barking deer (muntjac *Muntiacus muntjak*)- Dudhwa,
2. Five-striped Palm squirrel (*Funambulus pennantii*)- Delhi, Dudhwa,
3. Gangetic dolphin (*Platanista gangetica gangetica*)- Katarniaghat,
4. Golden Jackal (*Canis aureus*)- Dudhwa, Katarniaghat,
5. Hanuman Langur (*Simia entellus*)- Dudhwa, Katarniaghat,
6. Hog deer (*Axis Porcinus*)- Dudhwa, Katarniaghat,
7. Leopard (*Panthera pardus*)- Katarniaghat
8. Nilgai (*Boselaphus tragocamelus*)- Katarniaghat,
9. Rhesus Macaque (*Macaca mulatta*)- Delhi, Bhopal, Dudhwa, Katarniaghat,
10. Spotted deer (chital- *Axis axis*)- Dudhwa, Katarniaghat,
11. Swamp deer (*Barasingha- Cervus duvaucelli*)- Dudhwa,
12. Wild boar (*Sus scrofa*)- Dudhwa.

Birds checklist:

1. Asian Openbill (*Anastomus oscitans*)- Dudhwa,
2. Barred Jungle Owlet, (*Glaucidium radiatum*)- Dudhwa
3. Black-winged Stilt (*Himantopus himantopus*)- Katarniaghat
4. Bank Myna (*Acridotheres ginginianus*)- Dudhwa,
5. Cinnamon Bittern (*Ixobrychus cinnamomeus*)- Dudhwa
6. Changeable Hawk-eagle (*Nisaetus cirrhatus*)- Dudhwa
7. Egyptian Vulture (*Neophron percnopterus*)- Katarniaghat
8. Common Kingfisher (*Alcedo atthis*)-Dudhwa,

9. Emerald Dove (*Chalcophaps indica*)- Katarniaghat,
10. Grey Treepie (*Dendrocitta formosae*)- Dudhwa,
11. Indian Peafowl (*Pavo cristatus*) - Dudhwa, Katarniaghat,
12. Indian White-rumped Vulture (*Gyps bengalensis*)-Katarniaghat,
13. Jungle Crow (*Corvus macrorhynchos*)- Katarniaghat,
14. Little Cormorant (*Microcarbo niger*)- Dudhwa, Katarniaghat,
15. Little Egret (*Egretta garzetta*)- Dudhwa,
16. Mountain Hawk-eagle (*Nisaetus nipalensis*)- Dudhwa,
17. Osprey (*Pandion haliaetus*)- Katarniaghat,
18. Pied Kingfisher (*Ceryle rudis*)-Dudhwa,
19. Red-crested Pochard (*Netta rufina*)-Katarniaghat
20. Red-naped Ibis, *Pseudibis papillosa*-Katarniaghat,
21. Red Junglefowl (*Gallus gallus*)- Dudhwa, Katarniaghat,
22. Red-wattled Lapwing (*Vanellus indicus*)-Dudhwa, Kattarniaghat,
23. River Lapwing, (*Vanellus duvaucelii*)- Dudhwa,
24. Rose-ringed Parakeet (*Psittacula krameri*)- Dudhwa,
25. Ruddy Shelduck, (*Tadorna ferruginea*),- Katarniaghat
26. Sarus Crane (*Grus antigone*)- Dudhwa,
27. Spotted Dove (*Spilopelia chinensis*)-Dudhwa,
28. Stork-billed Kingfisher (*Pelargopsis capensis*)- Dudhwa,
29. Tufted Duck (*Aythya fuligula*)- Katarniaghat,
30. White-browed Wagtail (*Motacilla maderaspatensis*)- Katarniaghat,
31. White-throated Kingfisher (*Halcyon smyrnensis*)- Dudhwa,
32. White Wagtail (*Motacilla alba*)-Dudhwa

Reptile checklist:

1. Gharial (*Gavialis gangeticus*)- Katarniaghat
2. Mugger crocodile (*Crocodylus palustris*)- Katarniaghat,
3. Indian Python- (*Python molurus*)- Katarniaghat
4. Indian roofed turtle (*Kachuga tecta*)-Dudhwa.