

India Wilds Newsletter

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The Wrath of Rudra

I have been visiting various parts of India to document leopards living in close proximity of people in peace as well as in conflict situations for my film "Leopards: The Last Stand". I had planned to cover the Garhwal Himalaya part of Uttarakhand and retrace the steps the legendary hunter, conservationist Jim Corbett had taken to shoot the Man eating leopard of Rudraprayag. I also covered some remote corners as well as tourist/pilgrim hotspots in Rudraprayag and Chamoli districts. What I saw shook me up to the core. I realised that disaster was waiting to happen.



Maneater of Rudraprayag was shot here

After the initial couple of days of rains when the first landslides started, I realised that not even my 4 wheel drive Safari can negotiate the mud, rocks and force of landslides and I returned to Rudraprayag and then back to Delhi. However, I hadn't realised that nature will take the "Rudra" or violent form of Lord Shiva so soon.

Population Explosion in the Hills:

The number of people living in these hills has increased exponentially over the years.

Inside this issue:

The Wrath of Rudra	1
Gohna Lake dam burst: Learning From British Era	4
Impact of our actions as per Hindu Mythology	5
Electrocution of Wildlife: Need for underground cabling of power	7
Conservation News	9
Natural History	13
Image of the Month	15
Wildlife Photography	16



A decade and half back, the hamlets were smaller and at greater distances from each other. Today the population explosion has turned the hamlets into towns.

While tracing the heart-breaking story of a kid lifted by a leopard from when the kid was playing close to the mother and grandmother, I realised that there is **no concept of birth control**. The daily labourer – whose grandson was taken away by leopard – had six children. The increase in the family size had led him to expand his house. Similarly, I found every house in the hills was being expanded. Small kids are engaged in constructing their own houses.



Unrestrained construction in Rudraprayag

While speaking to the labourers and the people of the area one gets to know the ground realities. Increasing population of the villages is resulting in those becoming municipalities. And the municipalities now insist on tender process even for small work. What was supposed to enhance transparency has been exploited by a few, as the tenders are being cornered by contractors from other states as well as from Nepal. These contractors bring in migrant labour from other states – who are hard working but can't find work in their native villages – and these migrant labourers further increase the local population and build their own shanties/houses in the hills placing tremendous pressure on this fragile ecosystem.

To make matters worse, India and China are in a race to be the first to dam all our rivers so that later on they can claim that the other had reduced the flow in the river and can go for international arbitration. There are many small and big dams in the Ganga as well as her tributaries Alaknanda, Mandakini etc. Construction of these dams lead to large contracts being awarded. The contractors bring in labourers from other states who soon settle in these hills.

Lack of Vegetation:

The hills have been completely denuded. There are very few large trees in the hills which can bind the soil. There is hardly any canopy cover to break the force of the rain and absorb it. So even the slightest of rain creates large gullies of gushing water within minutes and washes away mud and rocks downwards increasingly intensifying its power by meeting other such rivulets of water and mud torrents to become a raging landslide.



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Increased construction in the hills to cater to the burgeoning population, migrants, as well as restaurants and hotels for the tourists is fracturing the rocks further and when there are rains, landslide becomes a common event. The climate of the hills has changed. These towns have become all concrete without any trees. It is so hot that majority of the hotels has either air-conditioned rooms or have made provision for air coolers. The demand for creature comforts of tourists ensures that there is lot of demand for power. The total power demand in Uttarakhand has gone up by more than thousand Mega Watt every year in the years 2006-2007, 2007-2008, 2008-2009.

Himalaya unlike other mountains:

Our planners seem to have forgotten that Himalaya is not like other mountain ranges. Himalaya is Holy. Himalaya is the epitome of man's quest for spirituality.

According to Hindu Mythology, the Pandava's had prayed in these mountains. Arjuna had done penance at Tunganath and had obtained Pasupata Astra, the fabled divyastras. I was humbled to be in such holy mountains. However, looking at the plastics and other garbage dumped at 12000 feet, I realised that the pilgrims don't think twice in desecrating these holy mountains. Nature has taken the "rudra rupa" or violent form and destroyed much of these towns.

Himalaya is also a comparatively younger mountain range unlike the table top mountains in South Africa. According to geologists Himalaya is even younger than some of the rivers like Bhagirathi, Alaknanda, Bramhaputra etc. Hence these rivers cut across deep channels which developed hand-in-hand with the growth of the Himalaya. The Himalaya has risen about 5000 feet or more since the middle Pleistocene. Himalaya hasn't yet reached its so-called maturity and some of the mountains in the Himalaya are still growing. We need to understand this and realise that these holy mountains are also structurally as well as ecologically fragile. So blasting apart these mountains to construct dams, tunnels, buildings etc is going to create large faults and weaken it structurally. In layman's terms, it is akin to placing too much of workload on a young pace bowler which is definitely going to result in a breakdown.

The Government has to also understand that dams are not the solution because with the hills denuded, the amount of silt and mud in the rivers and rivulets is mindboggling. With such silting, the efficiency of the dams will drastically reduce. It is another matter that now most of the power generating stations in the dams at Dhauli ganga, Vishnuprayag, Srinagar etc are heavily silted and power generation operations have stopped, most likely for a few months.

The dams also restrict the flow of the rivers and this has resulted in people getting a false sense of belief that the river waters will not come up and hence they move on to colonise the flood plains. These dams store water by reducing the flow in summer and release water during heavy rains further increasing the flow. It acts like a double whammy.

I found virtually bumper to bumper traffic in the entire stretch from Rishikesh, Biyasi, Kaudiyala, Devprayag, Rudraprayag, Chamoli, Joshimath, Badrinath Route. Similar traffic was found in the Rudraprayag, Kedarnath and Tunganath route. Himalaya has no respite from the thousands of vehicles pounding on it every minute. It needs some respite. No wonder, we faced this wrath of Rudra, this massive man-induced natural calamity. When any school student can tell about Newtons law about every action has got an equal and opposite reaction, it is foolishness to expect there will be no negative impact on us due to our mindless actions.

Gohna Lake dam burst: Learning From British Era:

Since Himalaya is a comparatively younger mountain range, in the past there have been huge landslides leading to devastating impact. In September 1893 there was a massive landslide resulting in the blockade of the entire bed of the Birehiganga river forming a natural lake. This incident was well tracked by in August 1894 it was predicted that the natural dam of this lake will burst.

"By this time this lake burst it was 11000 feet wide at the base, 2000 feet wide at the summit, and 900 feet high, and when it burst, ten billion cubic feet of water were released in the short space of six hours. So well was the bursting of the dam timed that, though the flood devastated the valley of the Ganges right down to Haridwar and swept away every bridge, only one family was lost, the members of which had returned to the danger-zone after having been forcibly removed from it" (excerpt within quotes from The Man eating Leopard of Rudraprayag by Jim Corbett, page 3).

Writing about the disaster preparedness by the British for this Gohna Lake dam, F. W. Champion writes "Great apprehension was felt lest the dam should suddenly give way, resulting in a devastating flood down the Alaknanda and Ganges valleys. Elaborate precautions were taken to alleviate such a possible catastrophe. An engineer was posted to watch the rise of the water and a light telegraph line was erected to enable warning to be given of an approaching flood. The danger limits of the expected flood were demarcated, the local inhabitants in the danger zone were warned to retreat, and the bridges over the river were dismantled" (Tripwire for a Tiger – Selected works of F. W. Champion, page 159).

It is interesting to note the huge amount of silting in the Gohna lake in 11 months so that one can understand how the carrying capacity of dams goes down over a period of time "It was found next day that the level of the lake had fallen 390 feet, leaving a stretch of water 3,900 yards long with an average breadth of 400 yards. The depth near the dam was 300 feet, and the bed had already silted up about 85 feet. Immediately below the dam the flood rose 280 feet, but its height rapidly decreased as the channels of the rivers which carried it off widened. At Rudraprayag, 51 miles away, the rise was 140 feet; at Beasghat, 99 miles, 88 feet; and at Hardwar, 149 miles, only II or 12 feet." (Imperial Gazetteer of India Vol. 12, page 37)

The Gohna lake dam had burst about 119 years ago in 1894. Today the communication technology is much better with mobile phones, satellite phones, internet etc. We also have remote sensing satellites with very high resolution cameras attached. Our weather scientists have many sophisticated models to predict. The difference lies in the quality of management and discipline. History has an uncanny way of repeating itself, often with disastrous consequences when the learnings like the Gohna dam burst incidents are forgotten.

Triad of Natural Calamities:

In terms of natural calamity, the Super Cyclone that devastated Odisha in 1999 was the first warning about climate change, which was ignored by us. The massive flooding of Mumbai during rains in 2005 was the second mega disaster which hit India's financial capital and still it got ignored. The present Himalayan disaster in 2013 form the three iconic events in the last 14 years and can be interpreted as the tip of the angry Shiva's trident. We should see this as the portents of the violent future that we are going to face due to climate change and try hard in reversing some of the impact. Else, there can be no tomorrow.

Impact of our actions as per Hindu Mythology:

We are increasing the load on mother earth. According to hindu mythology, Earth Goddess couldn't tolerate the torture by King Vena and ran away by taking the form of a cow and cried before the sages. The sages killed King Vena. Prithu the son of King Vena then begged the Earth Goddess that without her, his subjects will die. The earth goddess had replied that her udders have been squeezed till they got sore and her back broken by the ambition of the people. This led to Prithu creating a Code of conduct for all humans based on empathy rather than **exploitation** for the survival of all humanity. This code of conduct was given the name "Dharma" by Prithu. By this code, the earth became a cow while kings became the earth's cowherds ensuring there was always enough milk for humans as well as the cow's calves.

For more details: http://www.indiawilds.com/diary/indiawilds-newsletter-vol-3-issue-xii/

So what is the way forward?

Tree Plantation in the hill slopes

It appears that pilgrimage to most of these places is likely to stop for atleast a year or two. Within that time the Government has to employ the locals to plant native vegetation in the mountains. This project needs to have wildlife biologists and botanists who can provide the right guidance. This will help the local villagers to find work and also help in strengthening the hills. And if controlled pilgrimage is started after a break of atleast three years, then there would be less chance of landslides.

Road Construction: Learning from Malaysia

Countries like Malaysia too have similar landscape like us with ancient mountains and rich natural heritage. To stop landslides they have planted trees and tied wire mesh on the hill slopes to support it. To hide the ugly wire mesh they have pasted exotic lawn grass patches to beautify the landscape. They also have cut channels for flow of water from the hills which directs the water and saves the road from being washed away.



Landslide at Rudraprayag

Our road builders in the hills, need to ensure that they don't cut the mountain vertically. Rather creating a gentle slope will ensure that the mountain facing the road gets sunshine for the growth of grass and weeds to bind the soil. Also a gentle slope will ensure that the water doesn't fall suddenly on the road from a height like a waterfall, thereby reducing the force. The roads then will not bear the brunt of the full force of the water and landslides.

Population Control

With a population of 1.2 billion and climbing up at a rapid rate, we have to put the brakes. Else there will be civil unrest.

We cannot create atrocities like Sanjay Gandhi did in trying to forcibly operate people. However, we can provide positive motivation to people to limit themselves to a one child family. It is time Government needs to link up PDS, direct cash transfers and other benefits to families that have maximum of two children and families having one children should be given extra benefits like assured jobs. Unless the people, NGOs, women self-help groups and Government raise awareness on this aspect and work hand in hand, we are moving towards disaster.

Stop Migration of Population: Set up Workers' Cooperatives

Migration of people from and to the hills needs to be stopped. If the NREGA projects are implemented properly and people can get minimum of 100 days plus work in their villages and if the money is directly given to them without being siphoned off, then a lot of people may not migrate out of their villages.

We are a free country and anyone can work anywhere, however, people should not be force to leave their homes just because they don't have work close to home. In Uttarakhand and Himachal Pradesh which faced this disaster, the need of the hour is to create cooperatives for the local working class people. These cooperatives can then bid for local projects and if they win they can then employ the local labourers and working class. The Hill folk of Uttarakhand are hard working and should be able to do well provided they get a bit of help from the NGOs. This co-operative will also help in their training and skill building. One needs to see that these co-operatives have an enhanced vision unlike the traditional trade unions. This will help more of local people getting gainful employment close to their villages and will discourage employment of migrant labour from outside.

Stop Damning of Rivers

Mindless constructions of dams on rivers have to stop. At present, dams have been constructed on the same river within few kilometres of each other. The Government has to work on power generation through alternate routes. The cost of solar power has drastically come down, so there is no excuse not to pursue it. It further doesn't have the deleterious impact of our hydel power or thermal power units.

Power supply to the villages

Drawing power lines and connecting them to the grid is again a time consuming and tough affair. The Government should take this as an opportunity and install solar power grids for individual villages which are off the main power grid making the villages self sufficient.

Construction Guidelines: Enforce River Regulation Zones

Since the construction of dams have reduced the flow of the rivers in many places, people have moved in and have constructed houses in the otherwise flood planes and high flood areas. When the flow of water increased the dams also added to the woes by releasing water and a lot of the houses and hotels were washed away. The State Governments have to implement the River Regulation Zones without diluting those. After facing such disaster, I hope for once the Chief Minister as well as his political opponents will not cave into the real estate mafia and will strictly ensure enforcement of River Regulation Zones.

The MoEF should also take note of the rampant constructions of hotels, restaurants etc for pilgrims in the Kedarnath Musk Deer Sanctuary and other forest lands without any permissions. NGOs should also protest these constructions without fear or religious bias.

The army, airforce, navy, ITBP and other paramilitary forces have done a heroic job in rescuing people. People who are old, unfit, small children and even pregnant women with advanced stage of pregnancy had visited the holy shrines and were rescued. We need to think if all the tourists should have been in those places?

According to Hindu religion, Badrinath is part of the revered Char Dham yatra. The Char Dhams or four important shrines are Puri, Rameshwaram, Dwarka and Badrinath. According to the traditions, pilgrims who undertake the char dham yatra have to start in Puri, then go to Rameshwaram and then Dwarka and finally end in Badrinath. In earlier days when the road transport was not good, a major part of the yatra to Badrinath was by foot. Since Badrinath is supposed to be the place where the pandavas left for the heavenly abode, people used to believe that they may perish while attempting the char dham yatra. People who couldn't attempt the Char dham yatra, as it means travelling the length and breadth of this massive country, used to contain themselves visiting Badrinath, Kedarnath, Gangotri and Yamunotri as they are located in Uttrakhand. It used to be known as Chota Char dham yatra. However, in this age of false branding, the chota char dham is being branded as Char Dham and any pilgrims to Badrinath are also suggested to go to Kedarnath, Gangotri and Yamunotri. This may be good business for the local tour operators; however, it places more pressure on the infrastructure of the state.

Limit Tourist Flow

Walking the last 17 kilometer stretch to Kedarnath is no child's play. Even though mules as well as porters are there to carry people this is increasing the potential for disaster. The Government should limit the number of pilgrims to these places as today the numbers far exceed the carrying capacity of these ecologically fragile places. The visit of pilgrims to these sites should also be regulated as is done for the Amarnath vatra.

We are becoming a huge burden on mother earth and hence have to mend our ways; else the Pralay/Armageddon/Apocalypse is not far away.

Electrocution of Wildlife: Need for underground cabling of power lines

Many times we find wildlife as large as elephants and tigers getting electrocuted by low hanging electric wires. Given this scenario, many completely ignore the birds that get electrocuted when their wings touch two wires as perhaps most of the times we see crows, despite being intelligent birds, getting electrocuted. In a series of gruesome images documented by IndiaWilds Moderator Roopak Gangadharan, the plight of bats have come to the fore.



Electrocuted flying fox - Roopak Gangadharan

In this country death of wildlife especially of the winged variety through electrocution, be it birds or bats, goes unnoticed and unreported. The forest department often shrug off the incident saying that it is the responsibility of the Electricity department.

In States like Odisha, due to lack of maintenance the power lines hang low and elephants routinely get electrocuted. Now the power distribution companies have refused to maintain the power lines, expressing their inability to maintain due to lack of finances. There was demand for the CAMPA funds to be diverted for this purpose, which was rightly opposed. Now the Odisha State Government has agreed to fund the maintenance of power lines to prevent further electrocution of elephants.

However, till now we haven't examined the root cause of the issue. Electrocution of wildlife happens from the overhead power lines. This can be easily resolved if the Government/State Electricity Boards and the power companies agree to place underground power cables instead of the present system of stringing wires overhead. Normally the Utilities in India don't like the idea of underground cables as historically we have always stringed power lines overhead and also because the cost of underground cabling is higher due to the requirement of digging. However, there are many pros and cons for underground cabling.

At present the power companies have to maintain a clear area of about 30 – 40 feet wide under the power lines and spend time, energy and money in maintaining this. In the Forest/National Park areas, it becomes a big challenge, as they have to continually clear the undergrowth. Underground cabling doesn't require so much of clearance as the cables are bunched together. This will also help in saving a lot of money, manpower and time and it will save a lot of trees as well. In this era of climate change, this move will be really welcome.

The overhead power lines often come in contact with trees and this results in transmission loss. In India, the transmission and distribution losses are around 30% or higher. Industries, especially MNCs with factories in various countries often produce evidence that the quality of power in India is much lower than that available in other countries. It harms our industries as well as appliances in households where surge and spikes are the norm rather than exception. Underground cabling will help in not only reducing the loss of power, but also result in improving the quality of power.

During lightning, storm and cyclones this situation becomes acute and power outages happen. Underground cabling can definitely help here.

In India there is a mafia who steal the power cables and run this as a legitimate business. Underground cabling will stop this practice.

This will also tremendously enhance the aesthetics of the city and countryside.

Conservation News -

Pesticides in Indian birds Sun Feb 10 2013, 20:51 hrs

Earlier this month, when thousands of migratory harriers arrived at the Narmada, scores of ornithologists, conservationists, water management experts, forest officials, and organic farming lobbyists went into a huddle in Ahmedabad, India. Worried about changes in farming practices in regions surrounding the world's largest roosting site for harriers in Gujarat's Bhavnagar district, where an estimated 3000 birds of prey roost for six months post-monsoon, experts tried to chalk out a plan of action to prevent a decimation of this annual congregation due to pesticide levels.

Carnivorous avian species may be the worst-hit non-target organisms if India's massive use of pesticides is not curbed or controlled, warns a recently published paper titled Status of Pesticide Contamination in Birds in India. India is currently the third largest consumer of pesticides in the world, consuming almost 44,000 metric tonnes in 2009.

In an examination of more than 534 dead birds of 56 species, 300 eggs of 37 species and 140 blood plasma samples of 16 species that lasted eight years, a team led by S Muralidharan of the Salim Ali Centre for Ornithology and Natural History, Coimbatore, detected varying levels of chemical pesticides.

The highest levels showed concentrations of DDE that touched 7,114 parts per billion, but others such as variants of HCH (hexachlorocyclohexane), endosulfan, dieldrin and DDT were also found.

Further, the 10 threatened birds included in the study showed contamination as well—a Nilgiri Wood Pigeon, which is considered vulnerable to extinction, for example showed 6,006 ppb of HCH and a 722 ppb concentration of endosulfan. "Detectable levels of total endosulfan were found in 75 per cent of the samples tested," the study notes.

The blood plasma of a Sarus Crane, another vulnerable species, showed 286 ppb of HCH. The Nilgiri Pipit, a near threatened species, showed 142 ppb of DDT, while the blood plasma of another near threatened species, Painted Stork, showed DDT concentrations of 147 ppb.

The eggs of a critically endangered White-Rumped Vulture had concentrations of 6,160 ppb of the DDT, a major cause for concern after Diclofenac, used in veterinary treatment of cattle, nearly wiped out vulture populations across India.

"As recently as 1985 the species was described as 'possibly the most abundant large bird of prey in the world'," notes an IUCN assessment from 2012, and concludes there may be no more than 15,000 individuals now.

"When all the birds were grouped based on their food habits (frugivorous, granivorous, insectivorous, carnivorous, omnivorous and piscivorous) significantly higher load of pesticide residue was recorded in carnivorous birds," notes the study.

3 tigers found dead in Corbett in 6 days; forest officials on tenterhooks

3 June 2013 Dehradun

The Jim Corbett Tiger Reserve in Uttarakhand is facing a crisis with three tiger deaths reported in past six days and nine tiger deaths this year. In the latest incident, the body of a two-and-half-year-old male tiger was found in a decomposed state in the western part of the reserve, close to a water body, on Saturday.

The forest officials are on tenterhooks. Corbett Field Director Samir Sinha said that poaching cannot be ruled out. The forest department has taken four Gujjars into custody for further interrogation.

The bodies of the big cats in all the three instances suggest they died days before being found, raising doubts over the way patrolling is being carried out in the tiger landscape of Kumaon's tarai region, experts said.

The tiger population in India is estimated to be 1,706 with close to 200 big cats in the Corbett Tiger Reserve.

Ziro Valley losing rare wildlife due to hunting: Survey Press Trust of India | Kolkata June 23, 2013 Last Updated at 17:55 IST

A number of threatened and rare wildlife species, including leopards, are vanishing from Arunachal Pradesh's Ziro Valley as a result of rampant hunting by the indigenous Apatani tribe, a survey has revealed.

A team of researchers from the Wildlife Institute of India recently surveyed the hunting practices by the Apatanis and found that they were threatening the survival of several rare and threatened species in the picturesque valley in Lower Subansiri district.

"The species which are hunted include common leopard, clouded leopard, marbled cat, leopard cat, spotted linsang, otter, yellow-throated marten, orange-bellied squirrel, Malayan giant squirrel, sambar, barking deer, wild pig and birds," a WII report, published in the Current Science journal, said.

In Arunachal, hunting is a widespread cultural practice that has probably led to low wildlife existence.

The International Union for Conservation of Nature (IUCN) has classified Sambar, marbled cat, black bear and clouded leopard as being vulnerable while common leopard and Malayan giant squirrel are described as near threatened.

Of the 85 households surveyed, about 54 per cent reported hunting for subsistence, 25 per cent for commercial trade (often sold in markets), 10 per cent for medicinal purposes and 4.7 per cent reported hunting for pleasure.

The major species hunted are mostly those protected by law, said WII scientist Gopi Govindan Veeraswami in the report.

Large-bodied animals were mainly hunted for subsistence and Asiatic black bear hunting was reported for ethno-zoo therapeutic purposes.

Point Calimere wildlife sanctuary in Chennai gets bigger Jun 5, 2013, 02.40AM IST

The Tamil Nadu government has added 12,407.27 hectares of the Great Vedaranyam swamp in Tiruvarur, Nagapattinam and Thanjavur districts to the Point Calimere Wildlife Sanctuary.

The gazette notification of the environment and forests department last week is aimed at restoring the ecologically sensitive

wetland, which attracts several thousand migratory birds from the Arctic region and central Asia.

A wildlife sanctuary was set up on 17.26 sqkm of swamp in Point Calimere in 1967 for the conservation of Blackbuck, an endangered and endemic species. "The addition will bring the entire area under the protection of the forest department. So far, the revenue wing held the vast tracts of swamp areas and very little could be done for the migratory birds. Now, habitat improvement will be the priority," said a senior government official. Geographically, the sanctuary is a site of mudflats, mangroves, backwaters, grasslands and tropical dry evergreen forest.

Given the need to protect and develop flora and fauna in the region, the state has brought the reserved forests of Muthupet, Thuraikadu, Vadakadu, Maravakadu, Thamarankottai, Palanjur in Pattukottai and Thiruthuraipoondi taluks and Kodiakadu of Vedaranyam taluk, under the new wildlife sanctuary.

"It is a bird paradise. Point Calimere wetland complex is the only one in south India given Ramsar site status in 2002 because of the significant role it plays in attracting thousands of migratory birds from even Siberia, especially Greater Flamingos," said KVRK Thirunaranan of Nature Trust.

Ornithologists say the site has registered the largest congregation of migratory birds, exceeding four lakh. As many as 236 species were spotted after the onset of the north-east monsoon. Species like painted stork, spoonbill, spoonbill sandpiper, spot-billed pelican, black-necked stork, spotted greenshank, white ibis and Asian dowitcher can be spotted here. "The manmade disturbances, including poaching and degradation of the site, resulted in a decline in number of flamingoes to 10,000 last season," said S Balachandran of Bombay Natural History Society.

A Kumaraguru, a consultant with Biodiversity Conservation Foundation, said the government should look into restoration of salt pans run by industries near the sanctuary. The government lease agreements with these units should not be renewed and the lands should be brought under the ambit of the sanctuary, he said. Large-scale conversion of mudflats into salt pans is a cause of concern.

Ghariyal population rising in Chambal June 2013

LUCKNOW: The new ghariyal hatchlings at the national chambal sanctuary give a boost to ghariyal conservation. After more than 100 ghariyals died in Chambal between December 2007 and March 2008, their number has increased to 785, at present, from 300-odd ghariyals three years back. One of the major reasons why ghariyal population is going down is the destruction of the habitat. Illegal sand mining and illegal fishing along the banks of Chambal river destroy the habitat of ghariyals.

"These are the two direct threats to ghariyals," said DFO, Chambal national sanctuary, Sujoy Banerjee. The illegal sand mining on the banks of the river destroys the habitat of ghariyals and disturbs their basking area. More than that, since ghariyals lay their eggs under sand beds, illegal sand mining destroys their nests.

Similarly, illegal fishing in the sanctuary area also threatens their existence. Ghariyals get caught in the nets and die due to drowning or, at times, fishermen break their snouts to free them from the nets. "We have been trying to control the illegal activities and the results are showing," said the official. The census 2012-13 counted 785 ghariyals in the chambal sanctuary this year in Uttar Pradesh.

The forest department has also located nesting sites like Barenda village where 24 nests have been identified. "At least 14 of these tests have been protected by the department," said the official. The forest department has protected about 42 nests at several locations like Bamrauli, Gudha, Mau Imli Khar, Chiknipura ghat, Udaipur Khurd, Gohra top and Kyori. Each nest houses 35-40 eggs. This is done by fixing a wire mesh and securing the nests on four sides with long iron staves. This is to protect the eggs from jackals, dogs and other animals who dig up the nests to eat the eggs.

If the eggs hatch safely, more than 2,500 to 3,000 hatchlings will find their way to Chambal river. Since some of these areas are communal nesting sites of ghariyals, there would be more nests than the number counted. The official said that the survival of hatchlings depends more on the intensity of flooding in the river. The width of the river which is not even 50 meters at the time of hatching is more than a kilometer wide with swift flowing water during rainy season. "Many of the hatchlings eventually do not survive beyond the rainy season," he said.

The population of ghariyals, despite all odds, has registered a remarkable increase in the sanctuary. There were 307 ghariyals in 2008-09, the number rose to 674 in 2011-12. Similarly, the mugger population in the Chambal sanctuary, UP has also gone up from 74 in 2008-09 to 122 in 2011-12 to 181 in 2012-13.

Natural History -

COUNTRY NOTEBOOK: Acts of God: M.Krishnan The Sunday Statesman 2 June 2013 (by Saktipada Panigrahi)

"I was far from the recent earthquake that rocked eastern India, but a correspondent has asked me for opinion on appoint." Several people to whom I have spoken mentioned that just before the earthquake the other day birds in their respective localities were unusually active and restless," he says, and asks if there is anything in this or if I think the observations of his informants is suspect. He adds, "After all, birds are usually active here by 5 o' clock at this time of the year. Dawn is about to break. The earthquake took place at 5:13."



A truly interesting point, but I must confess that I have no experience of earthquakes. However, I think I know the answer to this query. No, I do not think there is any point in suspecting the observation of a number of independent witnesses. And why should these people ascribe the excitement of the birds that they noticed to an apprehension on the oncoming shock rather than to the everyday dawn? That is the question, really, and it provides its own answer.

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Tumbled out of bed at a too early hour, a number of people noticed an avian activity that they usually miss, or else half hear without seeing, through drowsy curtains- naturally, in the confusion of their rude awakening and shock following it, they subconsciously exchange the priority of avian excitement and the earthquake which they presumed was the cause. This seems a reasonable explanation to me, because my faith in humanity does not permit me to believe that a number of people in different localities (unrelated even by membership of some faddist cult) were all up and about at 5 am on 22nd March, solely out of deplorable habit.

However, it could be that the birds did really apprehend the earthquake. In spite of the vast experimental work and the voluminous theories on the instinctive behaviour of animals (especially birds) that feature recent science, we are not very sure of the scope and directions of their perceptions.

In his detailed and authoritative note (in the Journal of the Bombay Natural History Society, Vol. 50, No.3) on the Great

Assam earthquake of 1950, EP Gee has only this brief observation to make on bird life, "It is difficult to estimate the destruction caused among birds. Occurring as it did under nightfall, when birds would be roosting, the earthquake must have paralysed some of them in fear and swept them with the forest to their doom." The possibility of birds having advance intimation of seismic disturbances does not arise in this case. Mr.Gee estimates the loss of terrestrial wildlife must have been staggeringly heavy.

We know that birds are sensitive to atmospheric conditions like heat and humidity and to light. They are usually reliable harbingers of seasonal changes. In many parts of India, the arrival of Pied Crested Cuckoo foretells rainy weather, and each year I date the official commencement of summer by the stern ring of purpose in the noontide voice of Coppersmith. Cannot birds also foretell, by a few minutes at least, a heavily brooding earthquake?

That brings us back to starting point, and again I am acutely conscious of my ignorance. It seems to me that here there is an unforced occasion for the technique that was my standby through so many university examinations, when no inkling of the answer to the question inspired me. I know nothing about earthquakes, but so what? I KNOW ABOUT FOREST FIRES. Let me tell you about forest fires.

Many of the forest fires I studied were major conflagrations that swept across entire hillsides devastating thousands of tons of desiccated fodder grass and even valuable timber. There were no firelines in those hill-jungles.

Following painfully in the wake of some of these fires, looking for the animal victims, I found only one dead snake. It was very dead and it seemed likely that it had died of burns and nothing else, for it was in a patch of scorched grass. Heat is one thing that can kill a snake at once and all along its length.

The other animals have seemed to have escaped, in spite of the pace of the wind-sped fires. The literature I have read about forest fires (largely fictional) suggests that in the face of blazing common danger mutual animosities are forgotten (a thing that is not at all unlikely, for the confusion of large beat, predator and prey sometime emerge side by side) and if there is any water nearby, the animals make for it. It was during a comparatively minor scrub fire, far from water, that I had the good fortune to witness the way animals react to sudden and swift danger.

I was with a party of guns having the bush-dotted cover beaten for pig. The scrub was level and clad only in ankle-high grass in the more open places, but clumps of bushes and rock dotted flatness and along the dry, sandy stream beds there was heavy cover (mostly belts of wild date palm). There were pig in the beats, but somehow they sensed where the guns lay in wait and avoided them, a few affording shots that were ingloriously missed. As we drove to the scene of the last beat it was long past lunchtime, everyone was tired and hungry, and tempers were frayed.

One of the beaters noticed the fire first. It was advancing towards us on a wide front, coming very fast and low. There was a patch of fairly open cover between us and the fire, and this ran past the road on which our cars were halted, some half-amile downwards- by retreating rapidly the guns could get to the end of the patch and be ready for the fire-beaten animals.

To me (who does not shoot) that seemed a mean thing to do, and I told my companions so.I also referred to the truce between wild beasts that is said to prevail during fires and floods, and drew obvious inferences. They left me behind in a lorry, with only its massive driver for company(a man whose rugged bulk lent the three-ton chassis a certain slimness), and departed in haste to their evil assignation.

Our lorry was safe, in an open plot of sand, but I have an old-fashioned dislike of being blown to pieces, and so laboriously climbed a tree some 30 yards away. The driver whose mass and philosophy discouraged simulation, sat in his seat with stoic resignation.

The fire was approaching at a great pace and was now quite near. It was a hasty, light-footed fire that hurried low over the crackling grass, leaving bushes in the patch unscathed, but the smoke rendered visibility confused. I watched narrowly for

escaping wildlife, but saw nothing. Then the fire passed us, jumped across the road and soon racing away from us. It was then I noticed something scudding through the unburnt grass towards the line of fire and smoke. A hare leaped effortlessly over the flaming grass and bounded away through the burnt stubble towards a green bush- a minute later I saw another hare repeat the move.

Then a small leopard (it was known that the beat might hold a leopard) came streaking through the line of fire and crossed the burnt grass into the green cover in a grey flash- one of the guns told me later that he had also seen it, and both the driver and I had a clear view.

Nothing else came our way, but what we had seen was remarkable enough. The beast seeking escape from the flames actually ran into it and past the line of fire, so gained the safety of burnt grass and green bush cover. It was much the sensible thing to do in the circumstances- perhaps animal react differently when the fire is slower and deadlier, as in forest fires I cannot say whether intelligence or instinct guided their escape, but doubt if I would have had the sense to do what they did had I been caught up in that fire. I may have realised the safety of rapidly burnt grass only after the fire had pursued and overtaken me."

- M.Krishnan

This was first published on 4 April 1954 in The Sunday Statesman

Image of the Month -

The honour for the image of the Month 2013 goes to Kaleeswara Srikanth for his image of 'The Black-chinned Laughingthrush'

I liked the details in the flowers giving us an idea about the habits and habitat of this endemic bird. Congratulations Srikanth!

Cheers,

Sabyasachi

Original text:

The Black-chinned Laughingthrush

The Black-chinned Laughingthrush (Trochalopteron cachinnans) is a species of Laughingthrush endemic to the high elevation areas of the Nilgiris and adjoining hill ranges in Peninsular India.

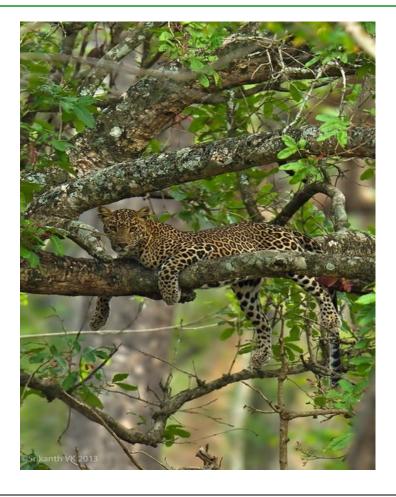
Exif : Canon 7d + 400 2.8 ISL, F:8, 1/320, -2/3 Stop, ISO 500, Eval Metering, Held by Benro GH2 head + Manfroto 681B Monopod.



Elephants at Kaziranga by Mrudul Godbole



Leopard at Kabini by Kaleeswara Srikanth



Malabar Giant Squirrel by Sucheth Lingachar



Malabar Trogon by Divyang Dave



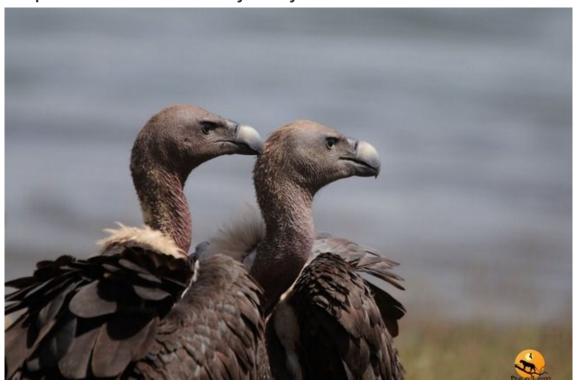
Spotted Owlets by Anand Madabhushi



Brown Hawk Owl by Bibhav Behera



White rumped vultures from Pench by Pralay Lahiri



Greater Flamingo by Jitendra Katre



Tussar Silk moth by Kaling Dai



Hover fly by Jitendra Katre



Owl Moth by Abhirup Dutta Gupta





I look forward to your inputs and support in preserving the last tracts of wilderness and wildlife left in our beautiful country. For other interesting articles and images check - http://www.indiawilds.com/forums/

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If you are already a member of IndiaWilds and have forgotten you user id and/or password you can mail to administrator@indiawilds.com

Regards,

Sabyasachi Patra

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