

Leopards *And* People

By Vidya Athreya

The evening sun made its descent, draping the vast stretch of sugarcane fields with its radiance. The idyllic scene was, however, disrupted by a series of growls as two leopards wrestled amidst the tall grass. The farmers watched for a while eventually returning to fill their gunny bags with vegetables, seemingly oblivious of the heated battle. It was only us, the outsiders, who were transfixed by this surreal scene. Sugaon Budruk is a little village nestled in the northern part of the Pravara river, a major tributary of the Godavari in western Maharashtra, home to leopards as well as humans in bustling villages.

The next day we revisited the site and the four square kilometres area was criss-crossed with leopard tracks – some large, some small. Leopard families leading their lives... in close proximity to humans.

In the sugarcane fields on either side of the gentle waters of the Pravara river, there is no record of humans being killed by leopards. The animals roam the landscape, leaving their pugmarks, scrapes and signs within metres of houses and the dusty paths. When a boy was attacked by a leopard as he cycled to get groceries, villagers called it an 'accident'. The leopard, crouching among the weeds growing at the edge of the path, took a swipe at the boy's leg as he cycled by. However, narrow escapes such as this one are few and far between and to me it seems as if the conflict potential should be tremendous. Children sitting outside their houses at dusk, walking alone to school on paths covered by sugarcane on both sides, women squatting, half hidden in the fields cutting fodder, seem to be vulnerable targets but surprisingly, are not.

ON THE KILLER'S TRAIL

In August 2007, at the tri-junction of Akole, Sangamner and Sinnar *talukas* in Maharashtra, a boy played with his elder sisters on the *bund* of a cauliflower field. His parents working in the field 50 m. away, were suddenly alerted by the girls' screams. Following the trail of blood through a maize field, they found the body. The distraught mother, probably as young as 30, said she had never given the leopards any thought before but after this incident wanted all leopards dead and would like to kill them with her bare hands. As I heard her, I did not know who I should be angry with... humans for not understanding, the media for its insensitivity, the leopards for not staying away...

Immediately after the boy's death, six adult leopards were trapped within five kilometres of the site, all within three weeks. Four of the leopards were, in fact, trapped at the exact

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same spot with only the trap door facing different directions. How could anyone ascertain which individual was the killer unless an actual kill was witnessed? As in human societies, animals too share the space with each other – females and their cubs, males whose home ranges overlap those of females, sub-adults seeking to establish territories. The female leopard trapped nearest to the spot where the boy was killed delivered a cub immediately after in captivity. But was she the killer? She would have been at least three years old to be a mother – why had she suddenly killed a human? Was she a hungry pregnant mother who was exhausted after being shooed away from her many kills as is the common practice across India? To obtain government compensation and to "prove" that the leopard had indeed killed the livestock, the farmers rescue the dead goat, which makes the hungry carnivores kill again – and again and again until it successfully manages to get one to take away. Was this the root of the conflict? A hungry pregnant leopard in search of food?

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"I had, by then, become quite familiar with the man-eater's pug-marks and could with little difficulty have distinguished them from the pug-marks of any hundred leopards. A lot can be learnt from the pug-marks of carnivore, as for instance the sex, age and size of the animal. I had examined the pug-marks of the man-eater very carefully the first time I had seen them, and I knew he was an out-sized male leopard, long past his prime."

"It may be asked what the Government was doing all the years the Rudraprayag man-eater menaced the people of Garhwal. I hold no grief for the Government, but after having spent ten weeks on the ground, during which time I walked many hundreds of miles and visited most of the

villages in the affected area, I assert that the Government did everything in its power to remove the menace. Rewards were offered: the local population believed they amounted to ten thousand rupees in cash and the gift of two villages, sufficient inducement to make each one of the four thousand licensed gun-holders of Garhwal a prospective slayer of the man-eater. Picked shikaris were employed on liberal wages and were promised special rewards if their efforts were successful. More than three hundred special gun licenses over and above the four thousand in force were granted for the specific purpose of shooting the man-eater. Men of the Garhwal Regiments stationed in Landsdowne were permitted to take their rifles with them when going home on leave, or were provided with sporting arms by their officers. Appeals were made through the press to sportsmen all over India to assist in the destruction of the leopard. Scores of traps of the drop-door type, with goats as bait, were erected on approaches to villages and on



This half-eaten carcass (above) indicates a probable territorial dispute between a transient sub-adult animal and a territorial male. Such disputes help regulate carnivore populations naturally. Indiscriminate trapping disturbs these natural processes by opening up spaces for younger animals, thereby causing an upsurge in the population when an adult animal is artificially removed. Poorly-designed holding facilities induce severe stress and injury in captured wild leopards (facing page). Such injuries can cause permanent disabilities, which in turn may reduce the animal's hunting success, further aggravating human-animal conflict post-relocation and release.



VIDYATHREYA



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Camera trapping in the author's study area (satellite image below), unexpectedly, revealed a healthy population of the rusty spotted cat *Prionailurus rubiginosus* (above left), previously believed to avoid human-dominated landscapes. The small cat seems to have benefited from the abnormally large density of rats in man-made environments. The female leopard (above right) was equally at ease in urban areas and was photo-captured in three different locations. She roamed fearlessly at night through the entire town of Akole, often crossing the national highway, in the vicinity of hundreds of homes.

roads frequented by the man-eater. Patwaris and other Government officials were supplied with poison for the purpose of poisoning human kills, and, last but not the least, Government servants, often at great personal risk, spent all the time they could spare from their official duties in pursuit of the man-eater."

Corbett goes on to write that more than 20 leopards were trapped and killed in drop-door traps.

On January 3, 2008, a leopard was found dead in a sugarcane field about four kilometres from Akole. Judging from her dentition, she was a young adult, and had been dead for a couple of days. The next day, within 50 m. of her, we found the half-eaten body of a similar-aged male leopard. The entire area was covered with scrape marks and scats, which had the remains of leopard hair. Had a dominant male killed the younger animals? About the same time, a farmer living in the vicinity had to shoo away a leopard as it attempted to approach his goats. Across the river the same night, a goat was killed by a leopard. At least four leopards had been using an area less than five square kilometres. If an attack were to take place, who would be identified as the culprit – the first animal that came to the kill or the animal that I as an 'expert' would identify as the killer?

In the event of an attack, there are only two ways of identifying the perpetrator. If it is shot while making the kill, or by successfully obtaining its DNA (see *Sanctuary* Vol. XXV No. 4, August 2005, Interview with Dr. Lalji Singh) from the bite wound. Obtaining saliva from the carcass is not proof enough as other animals may also have fed on

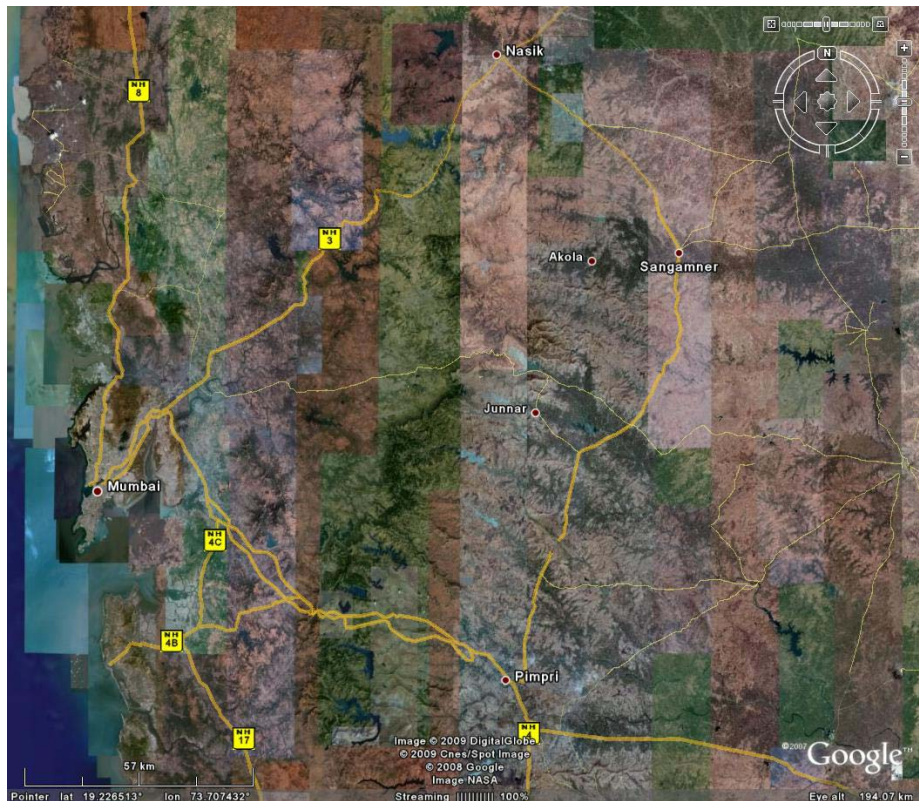
it. A recent example best illustrates the complexities – DNA analysis of saliva from bite wounds from sheep identified the 'criminal' as a domestic dog and not the wolf as people believed.

SHARING SPACE

In Vaijapur, Aurangabad, a leopard escaped from a leg trap, which it dragged about for five days till it was finally rescued from a *lantana* thicket at the edge of a cotton field. While watching the mangled leg of the leopard, I was thankful that no attacks on people had occurred, a serious possibility when an animal is hurt and in pain.

It is only in India that high densities of people share space with potentially dangerous animals like leopards, hyenas, wolves and venomous snakes. It is imperative that we understand how they live near humans without causing the extent of harm they are capable of. It is only then that we can understand the reasons for the aberrations and deal with them and work towards minimising conflict.

Corbett attributed the man-eating behaviour of the individual leopard of Rudraprayag to the influenza epidemic,





which raged through India between 1918 and 1920. He suggested that the leopard had found an assured food source in the growing number of abandoned corpses. After the epidemic, given its developed penchant for human flesh and the lack of wild prey in the forests, it continued to hunt humans, he explained. Having watched leopards living in the farmlands of Maharashtra, I believe the explanation given is not really rooted in fact. Why, for instance, had other leopards not turned into man-eaters? And how was Corbett able to zero in on that particular leopard so unerringly? After all, people died all over the Central Provinces and the Bombay Presidency during the influenza epidemic and leopards occurred almost everywhere. Yet it was only the man-eater of Rudraprayag that braved guns, “thrived on, stimulated by poison he absorbed via human kills” and continued feeding on people for eight long years. Fact or gripping fiction?

Animals like leopards, wolves and hyenas *will* live near humans as long as they are assured a suitable habitat and food source. Therefore, sugarcane fields, tea-gardens, degraded forests interspersed with human habitation and domesticated animals – goats, dogs and pigs are ideal for leopards. Any long-term solution to control leopard presence in and around human habitations has to target controlling the food resource of these carnivores.

Cleaner surroundings, responsible pet ownership, and absence of feral animals in the Indian countryside are a societal responsibility that we have to assume collectively.

But perhaps this is impossible in this land of a billion people, especially given our attitude to public hygiene.

DIFFICULT CHOICES

So what do we do with wild animals like leopards when they live in and around human societies? It’s a rhetorical question for which answers are difficult to provide. While a man is vociferously arguing that the leopards are a threat to his school-going children, his neighbour tells him that as long as he leaves the leopard alone, the animal will not harm them. On the one hand is a family paralysed by fear, on the other, a family content to live and let live. Who should we listen to? Unfortunately, unless many aspects of conflict are not collectively dealt with by society, policy makers, managers, conservationists, and the media, we will see more intolerance and the disintegration of our ancient culture where other life forms have always been provided space and respect. 🐾

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MOYATHREYA

Fields of sugarcane and other tall crops crisscross settlements in much of Maharashtra, creating a unique habitat that supports a high density of humans *and* leopards. In much of rural India, there are no fences and walls around houses, exposing small children (above) to wild animals, especially at dawn and dusk. The absence of attacks on people in the author’s study area reiterates the fact that wild animals, for the most part, try to avoid human beings.

LEOPARDS IN HUMAN LANDSCAPES

The basic thrust of my research work has been to record how leopards survive in human-dominated landscapes in Maharashtra without causing the expected level of harm. The Maharashtra Forest Department, Centre for Wildlife Studies and Wildlife Conservation Society – India Program, Bangalore, Panthera and Asian Nature Conservation Foundation, Bangalore have assisted me in my studies. With the help of Drs. Ullas Karanth, Jagdish Krishnaswamy, R. Sukumar, John Linnell and Morten Odden, I have been able to corroborate with photographic evidence that large number of leopards exist in highly human-dominated landscapes causing little or no harm. We placed traps near people’s houses and recorded leopards – mother and cubs and even large males – walking those paths in the night – while the house owners slept blissfully! The scats also indicated that mostly domestic animals are part of their diet. The next phase of my work will focus on assessing the current policies so that conflict is minimised, and to use GPS collars on leopards to understand how close they come to humans in this human-dominated landscape. The leopard is undoubtedly an extremely adaptable animal that is capable of living in close proximity to humans. The question is, are humans ready to accept this and provide them that space?

