

DUSTY Trails



By Meena Venkataraman

It was the summer of 2002, and I was taking my very first ride into the Gir forest. The dry, dusty open jungle was vastly different to the lush green Western Ghats habitat, with which I was more familiar. Having waited for over three years to study the Asiatic lion, I was impatient to see it in the wild for the first time. Our four-wheel drive Gypsy pulled up where three forest department trackers were leaning on their *kuladis* (axes) intently staring into the thicket ahead. As we joined them, one of the trackers signalled for us to remain very silent, as we all took a few cautious steps forward. As I peered expectantly into the *Carissa congesta* thicket, a low growl stopped me in my tracks and I froze. I had just seen my very first Asiatic lions. Lionesses actually, and there were three of them. I knew that lionesses were fiercely

protective of their cubs, and I wondered if my first sight of the great cats would also be my last because one of the lionesses, still growling, moved straight towards us. The trackers stood their ground, unfazed, waving and beating their *kuladis* on the ground. I had instinctively taken a step back and was watching this tense drama over my field assistant's shoulder.

The lioness halted, seemingly uncertain for a few seconds... but then the second female charged and then slowed down just 15 m. from us. Then the third got into the act, rushing aggressively towards us. Was I scared? I don't know, but I was transfixed for sure and not a muscle moved. Through all this, I caught sight of the confused scuttle of cubs, one tumbling over the other in the background.

Having made their point, the females, now reasonably pacified, settled down and the humans around them were ignored. With discretion being the better part of valour, we cautiously moved away from the pride to add distance to their comfort zone. The trackers now sat down on the forest floor, lit their *bidis* and with local banter, laughed at the incident as they asked me: "Lion *dekha* madam (saw the lions madam)?"

This dramatic welcome by the Gir lions remained with me as a sort of warning to never take them casually through the rest of my field days in Gir. Since then, I have, of course, followed the lions on several occasions with next to no similar 'encounters'. In the process of my field work, I have literally walked, run and tumbled

to keep up with the kings of the jungle, who would, in keeping with their image, go about their routines unmindful of my presence. Often a dominant male would throw me an over-the-shoulder look of pure disdain, as though tolerating my presence, but not the least bit impressed by me, as he continued to patrol and mark his territory. Sometimes, if I got just a touch too close, a male might stop, turn around, display sharp canines, raise and flick his tail and growl a warning before moving on. On our part, my field assistants and I would halt in our tracks and wait. Taj, one of my more exuberant assistants, thrived on sensation and would go into a chuckling tizzy when lion excitement was in the air. A second elderly field assistant, Guga *bhai*, would break into excited Gujarati with

almost every lion sighting, commenting freely on the most obvious spectacles before us: "Look he is standing!" "He is walking!" "Oh, he is turning around," till I had to impatiently stamp my feet on the ground and demand he stay quiet! With each significant sighting record, we would walk on, leaving Bhiku, my third assistant, to jot down the location from the GPS that he had named *Man mauji* (erratic) because of its unpredictable functioning.

Our day would begin in the cold dark hours of dawn, when we would wait intently by a small fire, for the roar of male lions to come across the forest. When we heard a roar, we would scramble into the Gypsy and head in that direction and scout around till we spotted our quarry. Sometimes, we would be able to pick up pugmark trails and track down the lions, and at other times, chital and sambar alarms would betray their presence. A combination of such clues helped us track my subjects easily enough, though we used other means as well, including quizzing the resident cattle grazers of the forest, mainly the famous *Maldharis* of Gir.

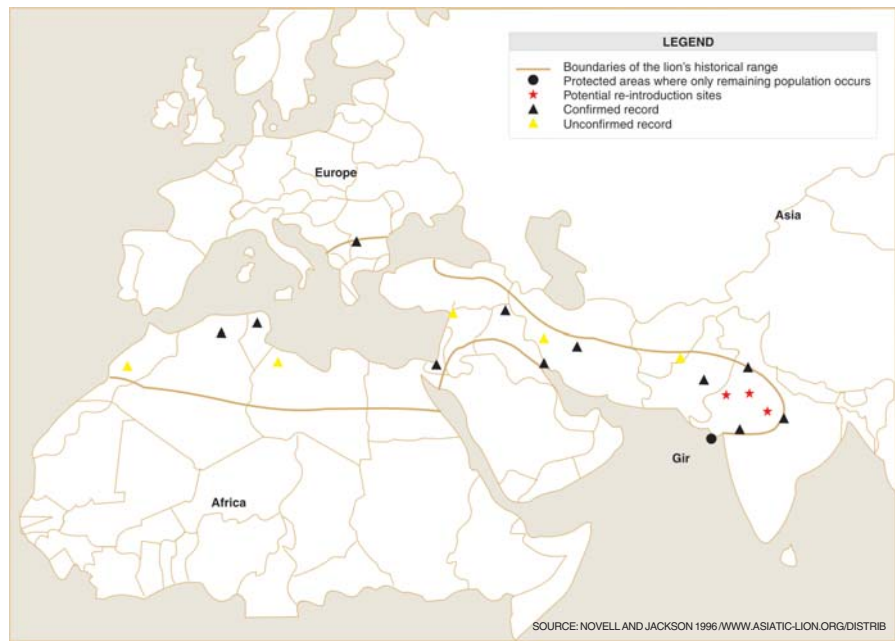
Not particularly communicative until they get to know a person well, typical *Maldhari* men carry their *kuladis* held across the shoulder, presenting a confident, somewhat aloof

demeanor. When asked by me if there were lions in the area, the normal response would be a prolonged contemplative silence followed by a shake of the head that could mean anything from yes to no. This might be followed by a statement in a flat, unexcited tone: "*Aam ooktha ta*" (it was roaring there), "*Bhesul/pahu ne marail che*" (has made a buffalo/mammal kill), "*Aa chela ma padya*" (there it is resting in the dry streambed)... or "*haalo cha-pani peeva*" (come have tea). This last communication would be accompanied by a gesture holding up an imaginary saucer. Our response would not be quite so delayed, for, in the next instance, we would be enjoying their warm hospitality in a *ness*, noisily drinking tea from a saucer or "*deesbi*".

Unlike African lions, *Panthera leo persica* is far less gregarious and forms smaller groups comprising mostly one to two adult males, three to five females and cubs of varying ages. This is possibly an adaptation to the lower prey density and denser vegetation in Gir. Uniquely, all adult females from a pride share the duty of defending and caring for the young. Even male lions are far more family oriented compared to other species of cats and are known to defend their young and share their kills with them. Spray-marking (top right) is an important aspect of the lion communication system. Both sexes, males more than females, announce their presence by spraying vegetation with urine and by scuff-marking.

PAST AND PRESENT DISTRIBUTION OF THE ASIATIC LION

The evolutionary history of *Panthera leo* began in Pliocene East Africa following the expansion of open habitats at the turn of the Cenozoic. From here, lions spread out to most parts of Eurasia and North America. In the present day, however, the lion exists as two distinct sub-species, one confined to sub-Saharan Africa and the other in Gir, India. Populations of the African lion *Panthera leo leo* occur both as a widespread population in East and South Africa as well as fragmented populations in West and Central Africa. These free ranging populations of Africa account for over 20,000 justifying their IUCN red list categorisation as 'Vulnerable'. However, their counterpart, the Asiatic lion *Panthera leo persica* is not quite so lucky, as it exists as a single population in the Gir forest and is protected as a critically 'Endangered' species. Ironically, one of the earliest conservation initiatives of the country started with the Asiatic lion with the timely efforts of the Nawab of Junagadh and later continued by subsequent governments of Independent India under Jawaharlal Nehru and Indira Gandhi. The lions have shown resilience and have responded positively to these conservation efforts. Their numbers have risen from an alarmingly low number of less than 50 in the 1890s to over 300 today. The cats seem more than able to survive... if we let them.



Tongue-tied and self-conscious in my dusty camouflages, I would mumble my thanks to the bejewelled and dazzling *Maldhari* women while they would, in turn, accept the awkwardness of 'Madam *ben*' with good humour. The business of tracking lions would then continue with renewed enthusiasm.

Everyone should be as lucky as I was to work in such wonderful circumstances.

Following lions can be very easy or very difficult. On difficult days, the lions would tire us out, walking continuously for two to

three hours in the scorching heat before allowing us to make a single observation. When they settled, we would note down the characteristic body markings and patterns of whisker spots. This is a standard method for identification of lions, and recently, it has been standardised for the Asiatic lion by the Wildlife Institute of India (WII). Over four and a half years, through these individual identifications, I maintained profiles of a large percentage of Gir lions and was able to put together data on their movement, behaviour,

feeding patterns and demography; all part of my study on the social life of the Asiatic lion.

During our walks, we would occasionally come across some of Gir's other predators. The national park today is home to a high-density predator assemblage that includes a healthy population of over 250 leopards *Panthera pardus* and a lesser-known population of the striped hyena *Hyaena hyaena* that co-exist with the lions. However, interestingly, this predator complex is not locked in direct competition as seen in many African populations, and the relationships seem to operate at a more subtle scale.

In the context of competition and food chain complexes, the drastic decline of vultures in Gir in recent times is worth a mention. Apart from the large carnivores, there is a diverse small carnivore community, represented by two cat species (rusty spotted cat *Prionailurus rubiginosus* and jungle cat *Felis chaus*), two civets (small Indian civet *Viverricula indica* and common palm civet *Paradoxurus hermaphroditus*), two species of mongoose (common Indian or grey mongoose *Herpestes edwardsii* and ruddy mongoose *Herpestes smithi*), two species of canids (jackal *Canis aureus* and Indian fox *Vulpes bengalensis*) and the ratel or honey badger *Mellivora capensis*.

Lions are thought to have evolved 'group living' before they spread out of Africa and even today they continue their cooperative social lifestyle. However, the nature of group living

and resource sharing systems fluctuates widely across all populations based on prevalent ecological conditions of their environment. In the case of Gir, there has been a fluctuation in prey composition compounded by a rapid change in the vegetation from an 'open' to a relatively more 'closed' jungle over the past few decades. The lions have adapted their habits, diet and mechanisms of group living accordingly. Today, the Asiatic lions I study seem to form smaller groups than they used to a decade back, and are adapting to space requirements by moving out and establishing territories *outside* the Gir Protected Area. Two lions were even spotted as far as the coastal town of Pingleswar in Bhavnagar district.

With both the population and the home of the Asiatic lion expanding, conservationists are tense about the future of the lions and await clearance for translocating them to an alternate habitat. As anxiety and debate abound regarding the future of the species and the direction of human intervention, the Asiatic lion majestically marches on, reclaiming lost ranges and empires.

Post the Sariska debacle in 2004-2005, when people would ask me "Are lions poached?" I would immediately answer with an emphatic "No!" and I would be sure to add that although lions and leopards were constantly in conflict with people, there were few occasions when resentment translated into the killing of lions. Yes, there were a few cases of carcass poisoning that were worrying and perhaps, this indicated a gradual shift in attitude of the local people. However, each of these deaths seemed to have been well investigated by the department and reported by the local media, albeit often biased and severely critical of the management. Being present there and well aware that lions are after all not immortal, I would weigh the facts against the exaggeration, always reassuring myself that the bone of contention is not the lions' deaths, but the ever-increasing and dispersing populations impacting the surrounding areas with its heavy human population.

With this clear picture in my mind, four and a half years later, in mid-2006, with great satisfaction that I knew the lions well, I moved out of Gir back to my institute to write a thesis of my own intensively-collected data. My picture of Gir was of friendly people, a peaceful environment and the majestic and tolerant lions.

In the latter half of 2006 and in 2007, however, to my horror, poaching incidents began to escalate. Even more horrifying was the fact that some of the incidents were right under the nose of the now vigilant and agitated forest



Fortunately for conservationists, lions (above) are prolific breeders. If adequate food and protection are awarded, a lioness can add a litter of three to four cubs every two years. Lately, reports of lions migrating out of Gir, as far as the coasts of southern Gujarat have increased in frequency. These animals almost immediately suffer a backlash from people unwilling to share their domain with the big cat that often feasts on their livestock. The best way of mitigating the conflict is to make the people around Gir joint stakeholders, capable of earning from well-planned tourism programmes (top), thereby transforming them from outright foes into ardent lion defenders.

department and investigating agencies. Was that audacity or sheer desperation on the part of the poachers? One of the lions killed in November 2006 was found dead in Kamaleshwar dam with its legs tied by a wire. In October 2007, two lionesses and three cubs were found electrocuted and buried in a private farm in Amreli district. The danger to the Asiatic lion from market demands was gaining in strength. And with it, the realisation that if there is a market value for our lions, our animals are not safe in any part of the country.

More than 25 years ago, *Sanctuary* magazine (Vol. II No. 4, October-November 1982) reported the pressures on the Gir National

Park and even today, the concerns have not diminished. More have, in fact, been added. The administrators of the Girnar temple that attracts thousands of pilgrims who do not spare a thought for the lion, are asking for more land. In the past, a number of animals have also fallen victim to the vehicles that ply through the roads traversing Gir. A railway track still cuts across Gir. For every lion saved and rescued from deep wells, maggot-infested wounds and natural ailments, six are dying in the outside areas in conflict situations and mysterious conditions. Lions can adapt to living in closed forests, coastal belts and undulating mountainous areas but not to heartless human killers.



A tranquillised lion is radiocollared by the author's team along with the Gujarat Forest Department staff. For over four and a half years, the author maintained profiles of a large percentage of Gir lions and was able to put together data on their movement, behaviour, feeding patterns and demography; all part of her study on the social life of the Asiatic lion.