

## Message By Field Director





#### Subharanjan Sen

We have strived since then to further strengthen our protection measures and its monitoring by adopting the MSTrIPES protocol. In the past year reserve staff and officers have patrolled over 170,000 Kms of the reserve on foot.

I am glad we are presenting this issue of 'Pench Stripes' on the occasion of the wildlife week. In the last year we at Pench have continued to try and do our primary duty of safeguarding our forests and wildlife as well as working for better opportunities for the villagers in the buffer and also promoting Pench as a nature destination.

The efforts in implementing MSTrIPES, scholarships for staff wards, graziers meetings, skill development trainings and the redoing of the interpretation centre are all parts of this effort. The past year has been an eventful one for the reserve with several tiger deaths including a case of poisoning of water on the park boundary that led to the death of a tigress and two of her cubs. We have strived since then to further strengthen our protection measures and its monitoring by adopting the MSTrIPES protocol. In the past year reserve staff and officers have patrolled over 170,000 Kms of the reserve on

foot. What has also helped is the fact that we have been able to fill up a major part of our vacancies, especially at the critical forest guard level. The results have been encouraging with both last year's assessment report by SFRI and this year's phase IV results showing positive trends in the population of the major species including tigers.

Of late we have with the cooperation of the officials and staff of Maharashtra Pench and the district administration and forest staff of Seoni and Chhindwara had encouraging success in the effective control of the long standing illegal fishing problem in the Totladoh reservoir.

Finally I would like to put on record my continued appreciation of the hard work put in by our staff especially the forest guards and watchers whose steadfast efforts in face of often trying circumstances continue to protect the treasure that is Pench.



## Message By Joint Director

#### K.K. Gurwani

"Pench Stripes" will help as a medium for disseminating information and thoughts, so that successful interventions can be repeated at other places with required modifications.



Pench Tiger Reserve is a place of national importance and is amongst the most vital in the Central Indian Landscape with high population densities of typical Fauna and Flora that are found in the Satpura Range. "Pench Stripes" is an effort to express best management practices being carried out in the Pench Tiger Reserve. This is a nice compilation of Ecodevelopment practices, Protection measures, Rural Ivelihood generation Eco-tourism activities and General awareness

programs conducted in the Tiger Reserve.

"Pench Stripes" will help as a medium for disseminating information and thoughts, so that successful interventions can be repeated at other places with required modifications. "Pench Stripes" is to serve as platform to invite innovative ideas for best wildlife management practices.



#### Bhaiyalal and the Sapat tigress

© Suhas Kumar

Summer in Seoni is like a sponge that sucks all the juice from your body; sweat flows out from every pore leaving you limp and lifeless unless you are in the habit of drinking several litres of fluid every day. The trick is to drink water frequently and never come out without covering your head and face. I have braved five scorching summers in this district from 1985 to 1990 while I served as the director of Pench National Park.

When I joined Pench in June 1985, my predecessor Mr. Parihar - an officer from the old school admired for his skills as a wildlife manger and a popular bridge player among the local mandarins - had done some critical ground work. He had got the territorial forest land and staff transferred to the national park and set up several patrolling outposts at strategic locations for it was going to be the core protection

strategy of the park to redeem the habitats from the relentless resource use pressures from the thirty villages that were heavily dependent on the forests for grazing cattle, wood and other forest produce. When I took charge my foremost concern was to restore the degraded habitats and instills some respect for the newborn national park in the minds of the locals as well as the dwellers. While it was not so easy to convince the city-dwelling picnic-minded visitors that included a class of reckless mandarins who loved to enter the park at any godforsaken hour with powerful searchlights to watch wild animals, I was able to dissuade this practise by using a mixed strategy of persuasion and threat. But it was an arduous uphill task with the locals who saw the national park as a huge threat to their livelihood; with them I gradually developed a love - hate

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relationship. And one of the hateful acts, which they enjoyed the most and I hated the most, was starting a fire in tinder dry forest.

Summer, besides its life-sucking heat also brings in its wake forest fires – for it leaves grasses parched and fire prone. In those initial years the problem of fire got compounded further as after the national park came into being collection of forest produce - that the local people have been gathering for generations and cattle grazing- were banned making local people hostile. The park and its staff became their enemy number one. Many of them where so disgruntled that they were too happy to cause trouble in the park and keep my staff and me on our toes - one of their favourite pastime was to toss a live bidi (country cigarette) butt on the grasses along forest roads, give a hearty laugh and move on leaving a raging conflagration behind that took several hours of hard labour to contain. These fires were disastrous for wild animals, forests and us. There were certain days on which we had to deal with not one but several scattered fires.

This story that involves my able driver Bhaiyalal is set in the backdrop of a firefighting operation that took place some 30 years ago. It was a very hot summer night; the fan above my head was spitting gusts of hot air and I was turning and tossing in my bed desperately trying to sleep. Suddenly the call bell gave a rattling shriek and I was up on my feet in a jiffy. At the door the orderly of my friend Mr. Gupta was staring at me- his anxious face displayed the urgency of the news he had brought. The range officer, Karmajhiri had called Mr. Gupta's residence- as in those days the new born park office and my residence were bereft of the modern means of communication – and he had requested Mr. Gupta to inform me of the forest fire that was raging in the park near Alikatta. Whenever such news arrived my duty was

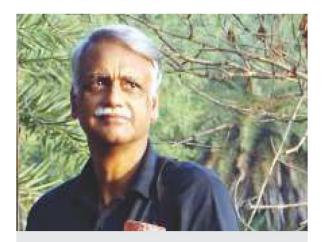
to respond quickly. I sent for my driver Bhaiyalal who came cycling down within 20 minutes but the lady luck was not on our side for when we were seated in the jeep and Bhaiyalal turned on the ignition the engine coughed once and then went dead, the battery was without juice. Ultimately with the help of my orderly the diesel jeep was pushed uphill to the main road and rolled down the slope - this worked as it always does with all trusted decrepit diesel jeeps - and we were off to the park via Badalpar dirt road as it was to save us half an hour. We reached Alikatta in an hour and a half. My staff and villagers from Alikatta were fighting the blaze using traditional means that consists of beating the flames with leafy twigs. Grabbing one such leafy twig - which is hard to find in summer in a usually leafless forest - I joined the fire warriors. It took almost forty minutes to contain the fire and by that time I was about to collapse from severe dehydration. I ran down the high bank to find a pool of water in the river bed for the Pench river is not perennial and during summer water remains confined in small pools - doh or kasa as the local people call them – I found one soon and gulped the turbid yellowish water scooping it with my cupped hands; it was as if I were drinking the elixir of life for those few scoops of water brought me around and I was up on my feet and scampered towards my team. Reaching them I ordered my team to inspect the perimeter of the burnt area to track down burning stumps and shimmering ambers and douse them with water, for a little negligence could start a new fire. After accomplishing this task I instructed one of the fire watchers to climb a tree and scan the horizon to find out if any other fire was blazing in the park. Soon we learnt that a small fire razed along the river near the abandoned village of Sapat. The fire we detected was not very far from us. My team- six fire watchers, the range officer,

range assistant, the local guard and I crammed into the beleaguered jeep and proceeded towards the likely location of the fire. To reach the spot we had to leave the forest road to Sapat and turn into a disused haulage road - that was in operation when transportation of felled timber from the submergence area of Totaladoh dam was on till a year ago. After about 200 metres Bhaiyalal suddenly stopped the vehicle as the road was in disrepair and the jeep couldn't move further. I asked him to wait in the jeep and rest of us proceeded towards the fire that was still about a mile away. As I along with my team entered the dense jungle in the pitch dark night – the radium on my watch showed it was I A.M. - with only a torch to show us the path. I had this nagging premonition that all was not well. We had walked only a furlong when the frantic shrieks of Bhaiyalal reached us - "sahib, sahib, sahib". Shouting back in high pitch I turned and ran full speed tipping over a fallen branch which tore my trousers and gave my shin a bad bruise - following me were nine others, also shouting in chorus. We reached, where the jeep was, to find Bhaiyalal shaking and shivering as though he was in the grip of malaria.

The account of his nightmare that Bhaiyalal gave us goes like this — "Sir, you saved my life. As soon as you people left a tiger came and stood just by my side. I hopelessly tried to start the vehicle but couldn't, I tried to blow the horn and put on the lights nothing happened as the battery was bust. Then I shouted to you and after hearing the uproar that you all were making the tiger moved away, sir."

I got worried about the safety of my team members. I hoped that the fire which was spreading along the river bank would, in all likelihood, die naturally after reaching the moist river bank. Thinking this, I ordered my team to leave me at Alikatta inspection hut and proceed to Chchindimatta camp. stay there overnight and come back to me early next morning. Chchindimatta is a tall hillock from where a sizable part of the park can be seen therefore I had asked the team to rest there for the night. From there any fire could be detected easily and they could have come back to me in time to embark on another fire fighting expedition. This plan was executed. The night went off peacefully and at 5 O'clock in the morning I heard them coming. When they alighted from the jeep I could see that all of them were flustered, when I asked them what was the cause of their bewilderment they narrated an interesting tale - while coming back, at the spot from where we had taken the turn into the haulage road, they came face to face with a tigress with two cubs by her side. I was happy to hear this as sighting of cubs was good news for the nascent park but I told Bhaiyalal how lucky he was to have escaped unhurt yester night - for a tigress with cubs is unpredictable and had Bhaiyalal attempted to get down from the jeep and run he would not have been, in person, reporting to me the sighting of the mother tigress and her cubs that morning.

That escape from the tigress got deeply etched in the psyche of Bhaiyalal and later culminated in another interesting tale that I would recount later.



Dr. Suhas Kumar
Retired Principal Chief Conservator of Forest

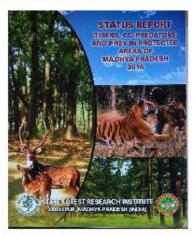
### Status report on tigers, co-predators and prey in the Protected Areas of Madhya Pradesh

Wildlife management in Protected areas is indeed a challenging job for all its protectors. Strong backing of scientific researches and monitoring provides great support to decision makers. As wildlife monitoring is an Important activity in any protected area, State Forest Research Institute (SFRI), MP has published a status report. on tigers, co-predators and prey in the Protected Areas of Madhya Pradesh .The protocols prescribed by Wildlife Institute of India. Dehradun and National Tiger Conservation Authority (NTCA) were followed for monitoring. The data and analysis will further be used for the better wildlife management practices in the State.

The number of unique tigers captured in the protected areas of Madhya Pradesh is estimated to be 251. The maximum unique tigers

were recorded in Kanha Tiger Reserve which is 83, followed by Bandhavgarh Tiger Reserve (61) and Pench Tiger Reserve (50). The overall population size of Tigers is estimated to be 259 ranging from 252 to 331. The maximum tiger density was found in Pench Tiger Reserve which is 3.8 ± 0.5 per 100 km followed by Bandhavgarh and Kanhatiger reserve.

Tiger population estimation (year 2016) of six tiger reserves of Madhya Pradesh if compared with earlier tiger population estimation of 2014 shows an increasing trend, though the gap period is too small to draw any condusive inference. Tiger estimation, 2014(WII)unique tiger capture in MP was 222 with population range of 237 (208-267). showing 44 unique captures in Pench (population range 43 (36-49) has increased to



50, population range 53(51-63). It is vital to monitor these source population of tigers of Madhya Pradesh, using advanced techniques to comprehend the population dynamics of tigers over a period. In Pench Tiger Reserve, total prey density per sq km is |62 (±22.8). High abundance of prey and predators has been observed in most of the protected areas which illustrate the vitality of the faunal assemblage of the state.

S. No.	Name of Protected Area	Tiger estimation 2014 (By Wildlife Institute of India, Dehradun)		Tiger estimation 2016 (By state Forest Research Institute, Jabelpur)	
		Unique Tiger Captured	Population Size (Range)	Unique Tiger Captured	Population Size (Range)
1	Bandhavgarh Tiger Reserve	60	63 (55-71)	61	61.4 (61-85)
2	Kanha Tiger Reserve	74	80 (71-90)	63	63.4 (83-104)
3	Panna Tiger Reserve	24	17 (17-17)	21	23 (21-23)
4	Pench Tiger Reserve	44	43 (36-49)	50	53 (51-63)
5	Sanjay Tiger Reserve	06	8 (7-10)	06	6 (6-11)
6	Satpura Tiger Reserve	14	26 (22-30)	20	20 (20-27)
	Sub Total	222	237 (208-267)	241	247 (242-313)
7	Kuno-palpur Wildlife Sanctuary	-	-	01	i(I-I)
8	Ratapani Wildlife Sanctuary	-	-	09	11.05 (9-17)
	TOTAL	222	-	251	259 (252-331)

#### Karmajhiri: A village in transition



Karmajhiri villagera meeting Shri R.P. Singh APCCF (WL) for relocation

On the way towards Pench National Park in the central Indian state of Madhya Pradesh, traversing through teak dominant woods and crossing nakas of forest department, we arrive at the striking forest village of Karmaihiri.

Karmajhiri is a "Van Gram" - a forest village - a special arrangement established by the Government in forest areas to assist the forest department with their tasks. The village has a mutually dependent liaison with the Forest Department as well as with the forests. The villagers cannot recall how many generations have come and gone on this land. They have been depending on forests and agriculture for livelihood since as long as they can remember. They harvest forest produce like Mahua, Mahua Gulli, Amla, Chironji and indigenous medicinal herbs from the Jungle. In totality, the community has lived in harmony with the surrounding forests and its wild denizens.

Exhibiting an ethnic lifestyle of Indian village, houses with their roomy Aangans, Baadis and whittled wooden doors amidst the lush green forests, the village is a picturesque habitat, an absolute delight for the city-dwellers. Children playing in these houses and women fetching water from the hand pumps could be subjects of appreciation for any photography buff. The residents of Karmajhiri are now exploring the option of moving out of the protected area despite their age old attachment with the forest and the village. The residents have univocally proposed to move out of the National Tiger Conservation Authority. The plan gives residents of villages in tiger reserves an option to move out and resettle at different location whilst being covered under an economic rehabilitation

support package provided by the Government. The decision has been instigated due to many issues villagers faced over last three decades.

In the year 1982, the village found itself on the periphery of a Protected Area, when Pench was declared a National Park. It had a direct impact on the rights of people over the forests. While once they were free to extract resources from the park area and graze their cattle, the new rules now prohibited them from any resource extraction. What had been a way of life suddenly became a punishable offence under the Wildlife Protection Act, 1972. Although they have peripheral area at their disposal for exercising their Nistaar rights, the inside of the National Park was completely out of bounds. The paramount commotion and distress these events created can either be imagined or seen in the eyes of a handful of the villagers and the Forest Department staff members who were witness to these events.

The community eventually resorted to newer ways of survival and livelihood under the direction of the Forest department leading to prosperity and satisfaction amongst the villagers. Today, 35 years since the birth of Pench National Park, a clean, welcoming village with its network of pukka roads, tractors, motor bikes and productive agricultural fields are quite a sight to witness during monsoons.

Effective wildlife conservation and incredible management practices in the park have all led to Pench been regarded as one of the best managed parks in entire nation in terms of wildlife management. On the periphery of the eerily silent village of Karmajhiri an owl hoots, a nightjar calls, and a sharp alarm call of a chital rings through the air. The jungle stirs.

As Pench National Park became well protected over the years, the number of wild animals increased drastically, a direct result of hard work and dedication of the conservation reforms. In addition to the conservation of wildlife, the people living on the fringes of Pench national park have benefitted from these conservation practices in more ways

than one. Increased tourism has significantly contributed to the economic prosperity of the villagers as one person from almost every household is associated with the park and is earning a livelihood from the various avenues that the tourism in the National Park created. Many people work as tourist guides, chowkdaar or labourers in the park. Some own Gypsies for tourist safaris as well.

Beyond the spurt in economic growth of the village, there lies another side of the coin. While the increasing number of herbivores in the park is a reason for celebration, it is also a matter of concern for the villagers. As sun goes down, the village is shrouded in silence. During the farming season, most farmers go back to the fields to protect their crop from the raiding wild animals. The difficulties increase many folds after the sun goes down. Wild animals like wild pig, Chital, and Sambar, come down from the forests to forage on the farmers' crops. Pench has the highest density of Chital (Axis axis) among all National Parks in the country, which also means that the problem of crop depredation is proportionally large. A woman shared that in the past, vegetables like Serni, Tamatar, Baigan, Mirchi were also grown in the backyard, but herbivores have found a way to eat them as well. Villagers are required to stay alert the entire night, guarding the fields from raiding herbivores. At times the herds are so large that it takes a whole group of people to drive them away. One elderly man expressed his concern saying that their generation somehow managed to save some crop for survival, but younger generation won't be able to do this.

Encounters with Carnivores are also not unknown. One chowkldar of the park shared his story that while returning late night from his duty, he has seen Tigers a few times on the road. Yet no major accident has happened in many decades between man and wild predators. The reason behind this could well be the huge number of prey base that predators have to choose from.

Another dimension to living close to a National Park is to deal with the death of a wild animal. Villagers often express concern when any wild animal is found dead in the vicinity of their village. In case of forest related offences,

forest department has the discretionary power which includes power to arrest and seize property that is illegally collected from forest. The villagers claimed to have faced certain false charges on the basis of suspicion, which were proved wrong eventually and accused were released. Fear of false allegations and bad name in the community is also a major concern among the people of Karmajhiri. The villagers are all ready for moving out of Karmajhiri. All families have submitted their applications and are now awaiting for the Government to begin the legal relocation process. In the past, many villages were relocated from the core zone. Shanta Bal, a village leader, says that people from nearby villages of Alikatta and Chedia which were relocated earlier are now living very happy life, and the people of her village would also like to lead similar lives. Relocation will come with its own set of challenges, but the decision of people of Karmajhiri is firm. While leaving a place which has been their home for many generations may not be easy, yet as per the laws and need of Tiger conservation, such is the need of the hour. There is however, no doubt that apart from the odd incident, the village of Karmajhiri and its people are a fine example of living in harmony with wild animals.

This is one example of how the onus of conservation eventually falls on the shoulders of local communities, and highlights the importance of their involvement. Hopefully with the continuous effort and support of the Government, both residents of forest villages and wild life will manage to co-exist as they have been doing so in the past such as this village which is now in a continuous form of change.



Pragati Mandioi Livelihood Specialist, BCRLIP

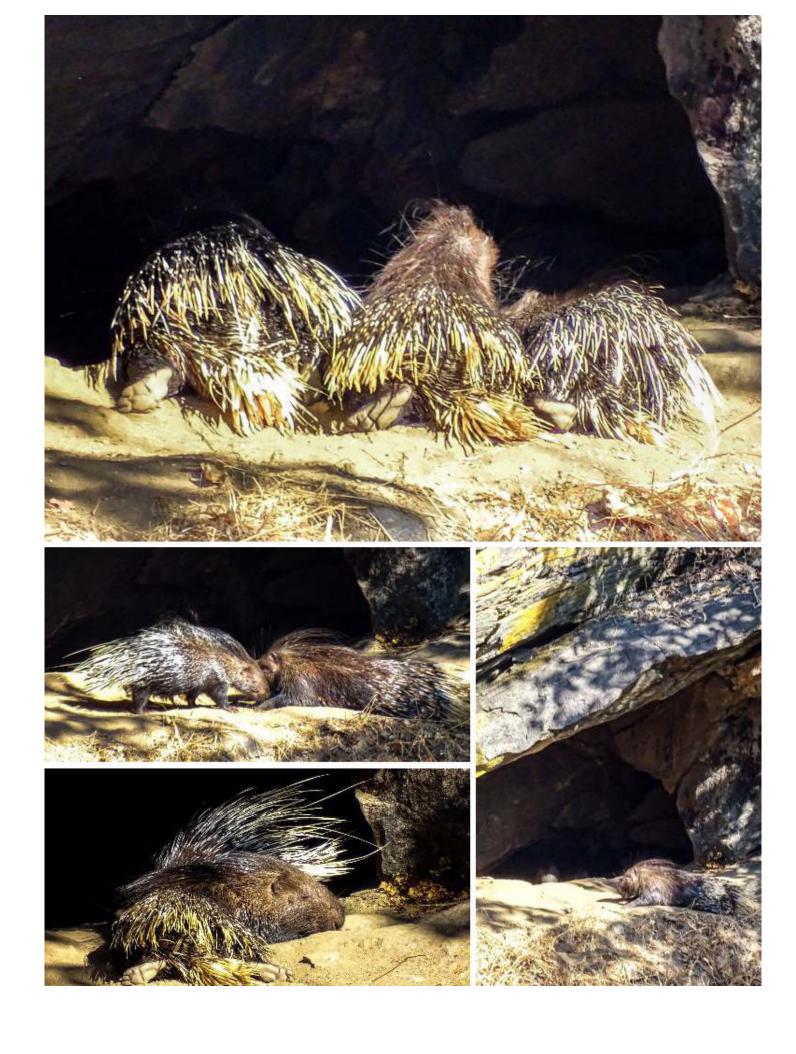
## Photo Feature PORCUPINE'S LAIR

Photos: Goutam Soni, Deputy Ranger

Porcupines are nocturnal creatures and therefore rarely encountered during the day. Their evidences however are found frequently in the form of their typical droppings, feeding signs on tree barks, footprints which often have the marks made by their trailing quills and the occasional dropped quill. There are found especially near rocky outcrops with caves, cracks and crevices which forms their usual dwelling places.

Gautam Soni has been one of the most dedicated foresters in Pench. Over time he has got to know the forests and its denizens well and his love and enthusiasm for the forests and wildlife is unflagging and contagious even after 33 years of distinguished service. Recently he used his fine-tuned fieldcraft skills to locate and keep under watch a porcupine lair in a rocky outcrop in the Pench sanctuary. One day he was rewarded with a rare sighting of the Porcupine family in the mouth of the cave in bright daylight. His record is one of the few we have of Porcupines in their natural elements in the daytime!

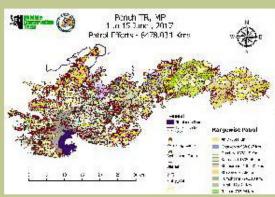




### **MSTrIPES**

and temporal coverage.

MSTrIPES stands for Monitoring core and couple of months later in System for Tigers- Intensive the buffer ranges. MSTrIPES is being Protection and Ecological Status. implemented with the patrolling Launched in a select Few Tiger party recording the patrol track on Reserves in India by the NTCA GPS and physically recording the (National Tiger Conservation associated data in forms. The Authority) in 2010. The aim is to information and data in the forms is ensure effective and efficient then entered in the software at the patrolling and its monitoring in nodal office at Khawasa. The GPS order to ensure protection of the track is also downloaded into the wildlife in Tiger Reserves. The software. The NGO WCT (Wildlife system allows field managers asses Conservation Trust) has been the efficacy of the patrolling in helping in the entry and terms of intensity as well as spatial interpretation of the data. The original four sets of forms of the After the tiger poaching incidence MSTrIPES protocol has been in March 2016, the need for more condensed into a single form here intensive monitoring of the foot at Pench and all patrolling from the patrolling efforts was acutely felt. Forest Guards to the Field Director. and as a consequence MSTrIPES is maintained and analysed was introduced in May 2016 in the fortnightly in the MSTrIPES format.





## Village Youth for Conservation: "PenchMitra"

Crop damage around our protected areas is a major problem, more so in Pench with its high herbivore densities. Herbivores straying out of the park and into the crop fields not only do huge damage to the crops but the animals themselves including the carnivores that follow them are under threat from poaching, village dogs, accidents etc. An NGO, the Saving Tiger Society has been working in the Pench landscape on various aspects and last year they decided to try and rope in the village youth as an attempt at solving this problem. After a series of meetings that included the local forest staff, it was decided to form "animal squads" to patrol the crop fields adjoining the forest to reduce incidences of crop damage as well as prevent poaching of the animals especially from electrocution and snares. Youth from six villages were organised into teams of a dozen each and each of the teams were provided with a kit consisting of T-shirt, caps, shoes, search lights, torches, crackers and a drum by the NGO. There was no monetary remuneration to the members and although six teams started the patrolling, teams from only two villages, Parraspani and Tikadi carried out the daily patrols diligently and effectively since then. They in fact also apprehended a poacher who was in the



process of setting up wires for electrocution. These two teams were infact instrumental in motivating other villagers as well and now there are two additional teams in Karmajhiri and Barelipar villages that have formed their own squads and are patrolling the forest edges at night. As a recognition of their efforts the two squads of "PenchMitra" (Friends of Pench) are being given a monthly honorarium. Helping these youth in their endeavours is the experimental introduction of "Foxilights". These are solar powered lights with coloured LEDs that blink randomly at night. A few

of these have been donated by the Saving Tiger Society and fixed along the forest-crop field boundary with encouraging results. Efforts are on to use these on a larger scale.







#### Pench gests its Dog squad

Pench Tiger Reserve with an area of about 1179 km spans over two districts-Seoni and Chhindwara. The core is about 411 km2 and a buffer of 768 km2 ..The rich wildlife needs constant monitoring. Protection and preventions of wildlife crime in the main objective of the management. As a force multiplier in the protection on strategy we have recently Inducted two dog squads. The squads are for prevention and investigation of wildlife crime in the reserve and in the Seoni. and Chhindwara forest circles.

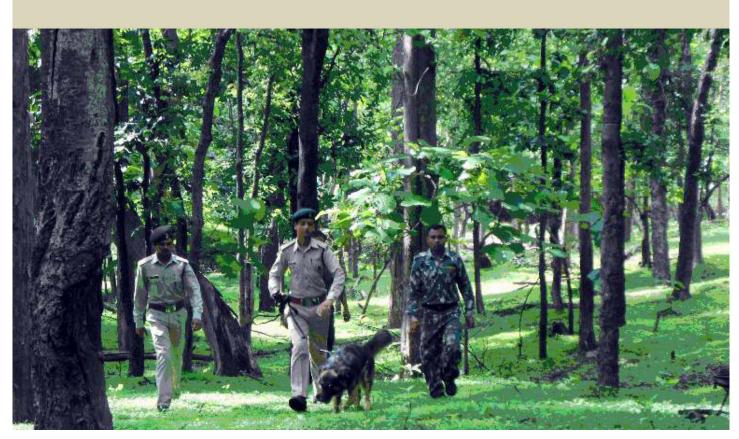
'Shera' the German

Shepard and 'Sundar' the Belgian Malinois have been pressed into service in our dog squads with their dedicated handlers and assistant handlers.

These dogs and their handlers were trained for nine months in the Police academy. Shera and Sundar are trained in field of ground search, luggage search, body search, vehicle search, building search and tracking by scent amongst other things. Stationed at Kurai and Jamtara, the dog squad is equipped with mobile forensic unit van and staff. These handsome dogs are always on alert.







## Investing in the Future: The Adit Jain Foundation

One of the major concerns of the frontline staff in a tiger reserveis the future of their wards. The neverending working hours, remote postings and long absence from their homes mean some unavoidable compromises with things like children's education etc. Measures like the provision of family quarters wherein families can be accommodated in places with educational facilities have been tried out here in Pench and elsewhere but this remains the major source of concern for the staff and addressing this issue is a must for staff

morale and efficiency.

The Adit Jain Foundation after starting their good work on Kanha have taken up Pench as well and they have extended financial support for the education of children of the entire temporary and permanent field staff here. The foundation has been providing scholarships, tuition fees, and other material support to the children through the Pench Worker's Society. Then foundation provided scholarships of Rs. 2500 for all students securing over 75% andRs. 1500 for all students securing more

than 60% marks in classes 6th to 12th. Scholarships were provided to 132 such students. Students securing lower than 60% were provided tution fees. 171 young boys and girls in classes 1st to 5th were with Items like school bags, water bottles and lunch boxes. The foundation will also support students pursuing professional courses.



## WCT's health Check-up camp at Pench

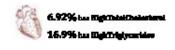
The frontline staff play the most vital role in the day to day protection of our natural treasures. Deployment in remote areas and extreme work conditions puts immense strain on their physical and mental health. In general there is a lack of awareness about health amongst them. This along with the limited access to healthcare facilities and high costs results in negligence towards regular health screening and checkups. Addressing this issue is vital for the efficient management of our nature reserves.

The NGO Wildlife Conservation Trust (WCT) is known to constantly work towards securing ecosystems and wildlife through its multifarious activities. In one of its efforts to secure the health of our frontline heroes, WCT organized a series of medical camps in two phases in Pench in the month of December 2016 under their "Caring for Conservators" Programme,

The first phase on 10th and 11th December was the Comprehensive Preventive Blood Testing Camp while the diagnostic and clinical check-up camp was undertaken in the second phase on 17th and 18th December with the test reports from the first phase camp. Overall 549 staff including watchers were screened and advised in these camps. The organization analyzed the health data and gave recommendations for further improving the health and safety of the forest staff. The Key findings are summarized here-



#### KeyFindings



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18.8% has High Mandilros Mirages 11.3% has Law Calchesterale



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27.23% Make in Providence







The submergence area created by the Totladoh dam on the Pench river is extensive with about 55 sq kms of the park under submergence. As the water receeds after the rains in winter and summer, about 29 Sq. Kms of this gets exposed as the draw-down area during the summers. Much of this gets covered with suitable palatable grasses like Cynadon dactylon. However as this submergence area is by and large flat, the water recedes several kilometers from the forest edge at most places. The water in the submergence is not available to many animals like sambar that are reluctant to undertake the long trek in the exposed drawdown area. The creation of dykes in the submergence was done as an innovative solution to this problem. These dykes get flooded when the dam is full in the monsoon but impounds the water when the water recedes during the dry season. Started in 2003, now there are 12 dykes in the draw down areas providing water close to the forest edge in peak summer. The construction of the very first dykes at Alikatta is our topic in this recollection form the past.

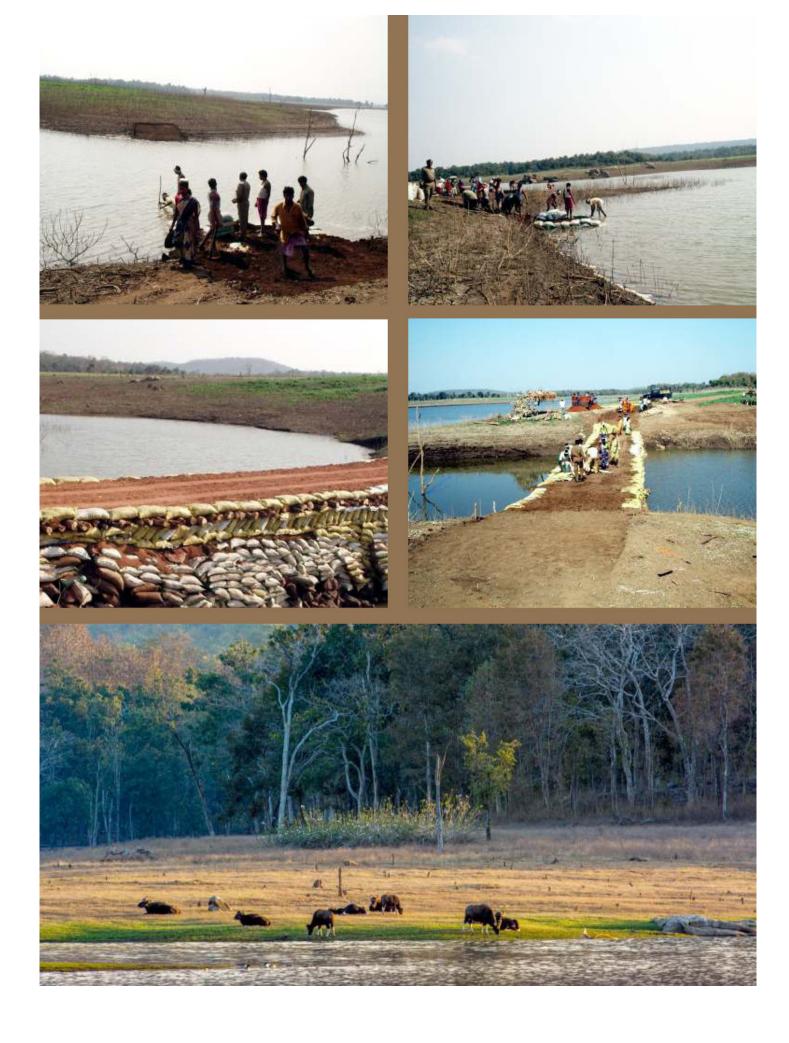
Recollection and Reminiscences:

#### Dykes in Pench: Making water available in the drawdown area









#### Photo Feature:

## CAMERA TRAP PHOTOS







As part of the Phase IV exercise in tiger reserves, the annual camera trapping operations was carried out in Pench Tiger Reserve. The entire area comprising of the core and the buffer was divided in to 2km by 2km grids and a pair of camera traps was placed in each grid. The operation was done departmentally in the core and with the help of the Wildlife Conservation Trust (WCT) in the buffer. A total of about 280 camera pairs were deployed in the area. The minimum number of individual tigers photographed was 53. Last year 50 unique individuals were camera trapped and the population of tigers In Pench Tiger Reserve was estimated to be between 51 and 63 by SFRI. This is as against the 44 individuals photographed and an estimated population of 36-49 in the All India estimate in 2014, in addition to tigers numerous other animals were photographed in these camera. traps and the more notable ones are presented here.







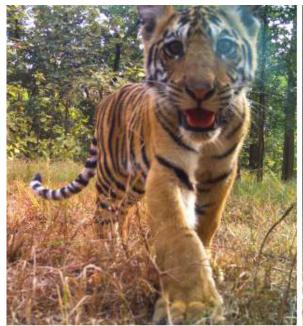


















## KNOW OUR PEOPLE

Pench Tiger Reserve has a brigade of field staff that has served the Tiger reserve for around three decades.

Pench Management would like to appreciate the work, dedication and persistence shown by these soldiers in the service of of wildlife and nature.

Indeed, they are the strongest soldiers who fought hardest battles in their lifetime



#### V. M. Thomas - A lifetime for wildlife!

A highly motivated forester, who joined the service in 1978 at Kanha Tiger Reserve. His entire tenure revolved around wildlife in Kanha and Pench Tiger Reserves till his retirement as Deputy Ranger in November 2016.

He was awarded by the Mandia District Collector and Forest Department for his work in arresting offenders who used to collect antiersillegally from the Kanha forests.

Thomas worked diligently and with passion acquiring priceless experience of all facets of wildlife management and great skills in field craft. He led field patrols effectively and is one of the unsung heroes involved in transforming the Chhindwara part of the park into a veritable wildlife paradise with prey and predator densities as good as any where else in the park

A soft spoken man, he worked ceaselessly in antipoaching operations, reducing illegal grazing and vaccinating the cattle and facilitating ecodevelopment and maintaining fruitful dialogue with the villages around the tiger reserve.

Thomas is an 'All Rounder' who enthusiastically completed all duties assigned to him with a smile on his face. After 25 years of dedicated service in Pench and 39 long years of overall service, he retired and relocated to his native Kerala. He will be missed.



#### **Elephant Rejuvenation camp**

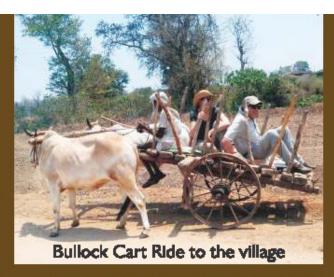
Elephants are one of the most mesmerizing creatures of Indian forests. They are considered one of the most Intelligent and sensitive mammals. In the times past, elephants were part of the forest ecosystem in central India. However they have long since disappeared from most of central India. Pench has five of these cultural and ecological icons, two males- Jang Bahadur and Ganesha, and three females- Saharun, Damini and Saraswati. A special rejuvenation camp was organized for these captive elephants in the first week of August 2016. Special diet, bath and massage was given to all elephants along with a through medical health check-up and upkeep of nails, tusks etc. A small training on taking care of elephant was also given to Mahawats and Characutters.



# "Tiger Tribes" Initiative at Pench: Tourism by locals

One of the major drawbacks of the tourism prevalent in most of our wildlife parks and reserves is the fact that little of the benefits go to the locals directly. Most of the tourism benefits that do go to the communities are usually indirect and inadequate. These benefits are usually from ancillary activities that the tourism encourages like employment as guides, cleaning staff, vehicle drivers etc. That many of these people have been adversely affected by the National Park or Sanctuary in their neighbourhood in terms of lost grazing grounds, reduced/restricted collection of forest produce etc. only serves to reinforce the feeling of handicap and alienation they feel on account of the creation of the reserve.





In order to promote a form of tourism that the locals can establish and run on their own and get benefitted from directly, an attempt is being made in Pench Tiger Reserve, Madhya Pradesh. This project seeks to take advantage of the fact that most tourists that visit our tiger reserves have a strong urban upbringing and are mostly unaware of the lifestyles that the villagers lead. Many have grossly wrong preconceived notions of "village life" especially when a majority of the villagers are tribals.

The project seeks to utilize the several hours of "off time" in between the morning and evening usual park vehicle safaris to provide the tourists a feel of the village life.

This is an initiative of the NGOs Conservation Wildlands Trust along with Grassroutes Journeys and the Madhya Pradesh Forest Department through the Pench Tiger Reserve. The objective of this initiative is to provide communities with an opportunity to showcase their life and tradition to the outside world. At the same time, it will provide tourists with a chance to experience lifestyle of the Gond community, which has been living in harmony with the nature and wilderness.

The initiative is being undertaken in the villages of Ambadi, Khamrreth, Khamba and Satosha which are on the National Park boundary and close to the main tourist centre of Turia and Awarghani. Currently 12 families from Khamba and Khamrreth are involved in this. By next season Ambadi will also be involved. Members of this village are



currently being trained.

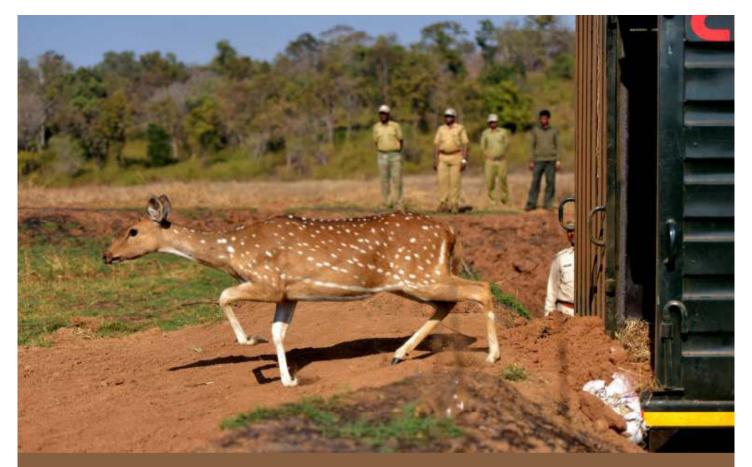
The soft launch of this initiative happened in December 2015 and the official launch happened in March 2016.

There are currently 12 families involved from the two villages of Khamba and Khamrreth. 50 Individuals have so far been trained for various skills like hospitality, village tour guide, transportation and entrepreneurial skills. Since Dec around 190 tourists have visited these villages for the tours and Rs. 17000/- have been earned by the community in this period.

In this initiative visitors are met with a welcome party of the villagers on the village periphery wherein they are taken by bullock carts to the house of the beneficiary family. There after a traditional welcome, they are introduced by the family to their house, daily chores, kitchen garden, crop field, domestic animals and poultry etc. The men and women of the house demonstrate their daily chores including fetching water, cleaning, grinding grains and pulses, cooking etc. The guests are encouraged to try their hands at all the activities. They are taken to their kitchen gardens and encouraged to pluck produce and fruits if available. A tour of their crop fields including the irrigation facilities if available, and crop protection measures including machans wherein they have to camp overnight to keep the crops safe are demonstrated. They are also served a light refreshment and the various artifacts and souvenirs made by the villagers are kept on display. Finally, before the guests leave, they are given miniature sacks of grain as souvenirs of their visit.

Tiger Tribes is a unique livelihood initiative which provides a win-win situation for both, the communities as well as the wild animals. The tours are managed and executed by the local community.





#### Chital Translocation

Over the years the Chital (Spotted Deer) population in Pench has seen a boom and there are now over 65,000 chital in Pench at present even by conservative estimates. Most of these are in and around the submergence area and the relocated villages of Alikatta and Chhedia. The overabundance of chital in these areas is not desirable and it was decided that it would be prudent to shift some from these areas to other areas with good habitat but low populations of chital. Accordingly, the department has decided to shift some chitalto Satpura Tiger Reserve where over 35 villages and settlements have been relocated recently and the relocated sites afford fine areas for the augmented chital population to increase rapidly.

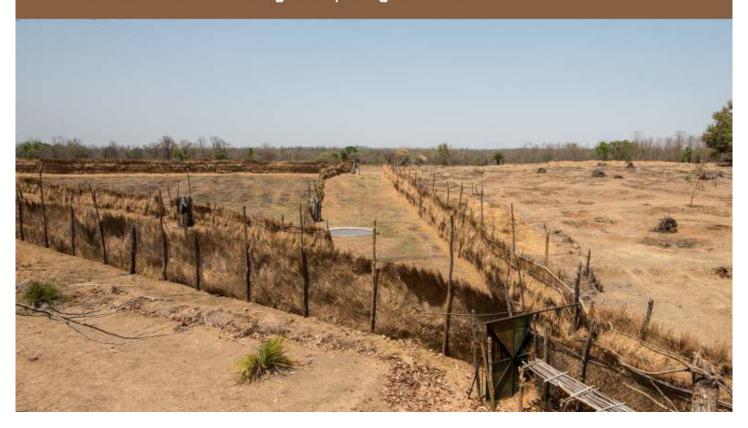
In order to translocate chital, the Boma technique is being used wherein the animals are driven into a funnel made of a cloth or chain-link fence at the narrow end of which a loading ramp leads directly into the transportation truck. In this method, the animals are not chemically immobilised nor physically handled. This induces the least amount of stress on the animals and there are virtually no casualties in these operations. The only casualties so far have been on account of males with antiers goring other chital inside the







trucks. One of the boma capture operations therefore has been to avoid capturing males with antiers and isolate these males that are captured in a separate partition in the transport vehicle. Two Bomas, one at Chhedia and the other at Mahadevghat were constructed and the operations started in the end of February 2017. So far, a total of 244 chital have been translocated from Pench. 21 of these have been released in Omkareshwar area while the rest, totalling 223 was released in several relocated villages of Satpura Tiger Reserve.



### PENCH NEWS

### Interpretation Centre: Refurbished Attraction

Interpretation centre at the Turia gate was originally established in

2003-04 as a part of the World bank aided India Ecodevelopment project. It was established with the collaboration of the Centre for Environment, Ahmadabad (CEE). Over time both the displays as well as the building itself had developed problems. The lighting system which was based on halogen ballast lamps was outdated and inefficient in addition to being increasingly difficult to repair or replace. Many of the information panels had dated information that needed to be updated. The building floor had subsided in places and there was white ant damage as well as water seepages. In addition, the Plexiglass sheets used to protect the models from the tourists were visually undesirable and prevented the day to day maintenance of the exhibits. Further. as the building was not initially meant or designed to be an interpretation centre, the

The Park exhibits were congested.

The entire building was renovated and some structural changes including the dismantling of a wall done to facilitate visitor flow and increase the space inside. The entire exhibits except the life size models of the wild denizens of Pench and the habitat diorama were redone and updated. Instead of a glass or plastic barrier, visitor and maintenance friendly steel railings were installed. A more interactive bird call panel and a video display panel added. Finally, the entire lighting system was replaced with more modern LED lights.



#### Alikatta Reconstructed Toilets



Alikatta is used by tourists as a breakfast and resting spot during the safari. The Alikatta toilets have reconstructed for use by tourists.

Pench team has been working hard to keep maintain the park as a 'NO LITTER ZONE' by providing garbage bags for gypsies and the tourists are encouraged to not to throw any trash in the toilets as well! We would appreciate if everyone in Pench keeps the park and the public amenities clean and use it wisely!

#### The Walk With Nature! World Environment Day

Isn't it wonderful to spend some time between the nature and beautiful majestic trees, or to experience some serenity away from the city life? We found an opportunity to connect the people and nature on the occasion of World Environment Day on 5th June. As this year's theme was "connecting with nature", we organized a Nature Trail in the Rukhad forests of Pench Tiger Reserve.

The aim of the nature trail was to make a change in societies perception about the forest. When we conserve the tiger and its habitat, we conserve the entire ecosystyem including minute flora and fauna within the park.

The attention of the average tourist is mostly concentrated on the big cats, and hence they

miss all the other interesting and vital biodiversity present. This nature trail was organized to introduce the participants to the myriad other elements of the world around us.

The participants were a group of about 35 people from all walks of life, young to old, and our forest officers accompanied them along the nature trail. For most participants it was as unique exposure, where they could see some minute and intricate details of the forest. From the minute fig-fly that ripens the fruit of the mighty Banyan to the antiers shed by the deer, feeding signs of animals on bark and vegetation, importance of unique rock habitats, the termite hills, ant nests, birds and spiders.



#### A Day With Youngsters On Biodiversity Day



On the occasion of International biodiversity day, we decided to re-emphasise on our young minds various aspects of forests and the forest biodiversity. Students from nearby areas of Turia and Khawasa were brought to the Khawasa Interpretation center. We conducted a photovisual introduction on Biodiversity, a wildlife quiz, a drawing competition for the youngest participants and had an interactive question answer round. We were amazed to see the enthusiasm of these children. A few of them won prizes in drawing and other competitions and some won goodles and chocolates in the quiz competition, but what everyone took home was reinforced knowledge of the biodiversity around them.



#### **Tiger Dispersals**

Pench continues to be a source population for tigers. In October 2016, one of the sub-adult males from Alikatta in the center of Pench turned up in a camera trap images in the Matkull range in Satpura Tiger Reserve.

This is the first photographic evidence of the viability of the highly neglected Pench-Satpura corridor. This corridor passes through mostly degraded forests and is threatened in a portion by coal mines, roads and other Issues. In February of 2016 another sub-adult from Pench was found in a crop



field adjacent to the corridor just south of Chhindwara. The male was captured and released in the Satpura buffer.

Another male dispersed through the buffer to the east and started operating in the area north of the corridor in a small, Isolated block of

forest. As he became accustomed to killing cattle from Inside villages and had numerous close encounters with the villagers, it was decided to translocate him to Sanjay Tiger Reserve. Sadly however he died about a month after he was released in an enclosure in Sanjay.





#### Tiger Deaths

2016 was a bad year in terms of tiger deaths. The deaths till March 2016 have already been reported in our last issue. On 28th of March 2016 the well known Baghinnala tigress was found dead along with two of her four cubs. As it turned out, they were poisoned just outside the park boundary. Two of her cubs were captured and sent to the Ghorella tiger rearing facility in Kanha. Only one of the cubs survived. We also had two other subadult tigers killed by other tigers in July and August and a cub was found abandoned and sick in September that subsequently died.

#### **IIFMits: Interning their way!!**

As a part of their internship, a short study on "Human-wildlife conflict due to crop raiding in the areas enclosing Pench Tiger Reserve and suggesting mitigation measures" was conducted by Rajshekhar Singh Thakur & Pankaj Kumar Mahobiya, students of IIFM Bhopal. The study was conducted in 21 villages and 300 households picked from the most affected clusters namely Jamtara, Atarwani, Ghatkohka and Gandatola villages.

Crop loss due to crop raiding by wild animals, is one of the major problem faced by the people. The extent of crop damage was found to vary from 13% to 24% and monetarily from 9,500 /- to



17,000/- per household. The students developed a "temporal graph", which illustrates the raiding patterns of several animals at different stages of crops. Interviews with Forest Departments and Revenue Departments was also conducted in order to study the shortcomings of the crop damage compensation policy.



#### Biodiversity Conservation and Rural Livelihoods Improvement Project

Better conservation is possible only by involving the local community and is not just a single person or a single department's job. A new approach to biodiversity conser-vation is adopted by the Forest Department, it is approach of collaboration, approach of convergence, approach of landscape level development. Getting all stakeholders together and working for common goal is now a fresh new way of working in the Government system.

Biodiversity Conservation and Rural

Livelihoods Improvement Project, better known as BCRLI Project is one of the progressive projects under Implemntation in Central Indian landscape which aims at developing sustainable models of conservation at the landscape scale through enhanced capacity and institution building for mainstreaming biodiversity conser-vation outcomes. The project is funded by World Bank. This one of a kind project is creating impact by the means of innovation in approach. The project has collaborated with various stakeholders across Pench-



Satpuda tiger corridor to ensure sustainable development of landscape and safe habitat for our tigers. Various NGOs are working in the corridor with forest department with freedom to come up with innovative proposals. The approach of convergence is working wonders as various departments and NGOs of the landscape have been provided a common platform to share their Ideas and collaborate to Implement developmental activities in villages. Currently, the project is focused on total twenty five villages of Pench- Satpuda corridor, including four villages of Pench buffer zone - Kahmarpani, Thuepani, Kanhergaon and Devri.

Pench Tiger Reserve is working towards ensuring sustainable livelihoods via means of various skill development trainings and by supporting self help groups to start enterprises in its buffer zone. Various habitat management activities like five hectare plantation, twenty hectare grassland development, and development and development, and development and deepening of water sources have been done in the villages of buffer area for the better wellbeing of villagers and their cattle. The

management is giving special attention to cattle by vaccinating them against diseases like FMD, running de-worming camps and promoting cattle insurance. Special vaccination and de-worming camps were organized in all four villages under the project. Energy management has been an another focus of the project, hence Prime Minister's Ujjwala Yojana was specially promoted and implemented in the area to provide LPG connections to the villagers, smokeless chulhas were also promoted to reduce fuel wood pressure on the adjoining forest areas and to reduce harmful effects of fuel wood smoke on women of the area. So far 54 households were provided LPG connections by the collective effort of Pench Management and local NGO Indian Grameen Services.



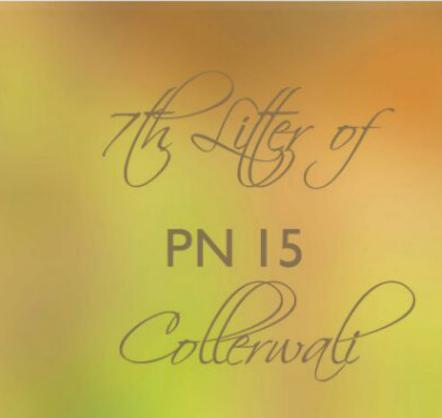
#### On Foot in Pench: Nature Trails and





The buffer forests in Pench, especially the Rukhad- Sakata area are some of the finest. forests in Central India, Exploring them on foot is an experience that should not be missed by any nature lover. To encourage activities like walking and trekking in the forests we at Pench have put together six nature trails and several trekking options that the visitors can choose from. While the guided nature trails are short trails with easy walks of 2 to 5 kilometres, the treks are designed for one to three day excursions in the forest with the option of camping at suitable places. The treks are much tougher and involve several moderate to difficult climbs and rocky or stream-bed passages. Both however are fantastic ways to experience the forest in its myriad forms. While the vehicle safaris within the park are an experience to savour, these walking options provide the real feel of the forests and an opportunity to get up close to the wonderful bird life and other fauna. Recently a group from TCS went on a one day camping and trekking in the Kuraigarh area of Rukhad. These options will soon be available for booking online and it is hoped that the discerning visitor will take advantage of these facilities in order to appreciate nature in the most intimate and the best way possible.









#### **HELP SAVE TIGERS**



Tigers are threatened by habitat loss and poaching, and today, they inhabit merely 796 of their historical range. Madhya Pradesh is home to 25% of India's tigers and nearly 10% of the world's tiger population. The Madhya Pradesh Tiger Foundation Society is a not-for-profit organisation working towards conservation of wildlife (with a special emphasis on tigers). All its income is tax free under section 12 of the Income Tax Act. Donations entitle the donor to claim income tax exemption under section 80 (g) of the Income Tax Act.

SUPPORT TIGER CONSERVATION EFFORTS IN THE STATE BY DONATING TO THE MADHYA PRADESH TIGER FOUNDATION SOCIETY

www.mptigerfoundation.org