THE TIGER IN GUJARAT ---- A STATUS REPORT (M.A.Rashid, I.F.S.Retd.)

The present State of Gujarat was carved out in 1960 from the erstwhile composite State of Bombay which was bifurcated into the States of Gujarat and Maharashtra. It is situated along the west coast of the Indian mainland between 21° to 24° N latitude and 69° to 75° E longitude and has a common frontier with Pakistan in the north and with the States of Rajasthan, Madhya Pradesh and Maharashtra along the eastern border.

The overall forest area of the State is a little under 20000 sq.km., representing a bare 10% of its total geographical area. However, if only the productive forests are taken into reckoning, this percentage would fall below 5%. Gujarat is thus one of the forestdeficient States of the country. Its per capita forest area works out to barely 0.06 ha as compared with the national average of 0.13 ha and the world average of 1.84 ha. In fact the State forests are capable of producing hardly 1/4 of its timber and 1/16 of its firewood consumption, the deficits being made good by imports from neighbouring States.

Conforming to the general pattern of rainfall which progressively decreases from south to north, the density and quality of the forests also falls along the same gradient. The best timberyielding forests containing good quality teak are situated southm of the Narbada river which separates Bharuch and Vadodara districts. The medium rainfall zone of Central Gujarat carries lower quality teak pole forest of the tropical dry deciduous type confined to pockets in the districts of Vadaodara, Panchmahals and Sabarkantha. The remaining areas of North Gujarat, Saurashtra and Kutch contain mostly miscellaneous thorny scrub. The Saurashtra and Kutch peninsula is more or less devoid of woodlands, with the sole exception of the Gir forest of about 1400 sq.km. in Junagadh district which is the only compact block of forest bearing poor quality stunted teak growth in this region. This forest is the last stronghold of a remnant popution of just under 300 Asiatic lions. In fact, this is the only remaining natural habitat of wild lions outside the Africal continent.

Due to the tremendous pressure on the land for meeting the ever-increasing demands of agriculture and grazing of domestic livestock, the forests of the State have now almost disappeared from the plains and are mostly confined to the remote and hilly areas located along its eastern border adjoining the three States referred to

2

However, despite the paucity of forests, Gujarat is fortunate enough to possess quite a rich wealth and variety of wild fauna comprising about 40 species of mammals and over 425 species of birds, which compares favourably with the 500 species of mammals and about 3000 species of birds occurring in the country as a whole. Moreover, some of the species found in Gujarat, such as the Asiatic lion and the Indian wild ass, are indeed unique in that they do not occur elsewhere in the country. Another noteworthy feature of Gujarat's wildlife is that in the recent past, it possessed four of our larger felids, viz. the lion, tiger, panther and hunting cheetah (now extinct).

Unfortunately, the forest and wildlife scenario in this region has deteriorated alarmingly during the course of the present century, particularly after the attainment of independence in 1947 and the merger of princely states and the abolition of private forests which followed soon thereafter. The reckless destruction of forests through over-exploitation not only caused severe ecological degradation but also deprived the wildlife of its natural habitat which was usurped by numerous other competing forms of land use which were given precedence on purely economic grounds under the garb of industrial progress and development without paying any heed to ecological considerations.

The major factors contributing to the rapid decline of forests and wildlife in the State may be briefly summarized as under:-

(1) Meeting the ever-increasing timber and fuel requirements of the local urban and rural population as well as of the mushrooming forest-based industries for which the available meagre resources were not at all adequate.

(2) Heavy over-exploitation of forests during the forties for meeting defence demands resulting from the two world warg.

(3) Widesptead extension of agriculture by clearing More and more forest areas to increase food production necessitated by the population explosion during the current century.

(4) Permitting free and unregulated grazing by excessive domestic livestock in all Government forests far in excess of their carrying capacity and without adopting such basic ameliorative measures as rotational grazing, stall feeding, etc.

(5) Indiscriminate issue of so-called 'crop protection' gun licences to villagers resijding in and around the forests as a matter of political expediency. All such arms were invariably misused for the commercialised poaching of game animals and birds, particularly over waterholes during the hot summer months when there were actually no standing crops to protect. (6) Diversion of large chunks of even good quality forests to other compatitive forms of land use, such as hydel projects, rehabilitation of people displaced by such projects, mining, establishmentx of townships and industrial complexes, laying out of roads and transmission lines, etc.

(7) Large scale regularisation of unauthorized cultivations in forest areas by successive State Governments from time to time to the tune of about 80,000 ha, \langle again as a metter of political expediency. This misguided policy has placed a premium on further wilful encroachments on Government forests and resulted in the honeycombing of compact blocks of forests, thereby jeopardising their very survival.

(8) Failure to exercise effective control on illegal trapping and hunting of game animals and birds for want of adequate and properly equipped staff, particularly in areas falling outside the notified sanctuaries and national parks where wildlife was protected on paper only.

(9) Last, though by no means the least, is the general public apathy, if not antipathy, towards wildlife, particularly amongst the agriculturists who look upon wild creatures as a nuisance and a menace to their crops and livestock. There is thus no effective lobby to champion the cause of wildlife and to cry a halt to its decimation.

Coming specifically to the status of the tiger in Gujarat, there is a woeful lack of any authentic records or reliable data on the subject. Whatever old records are available prior to 1960 pertain to the erstwhile Bombay State of which Gujarat was almost an insignificant part for which no separate statistics were maintained. However from my own personal observation and knowledge of the State's forests and wildlife from 1951 onwards (the year of my first posting in the Gujarat region), I can confidently say that tigers were fairly abundant almost all over the Gujarat mainland , right upto Banaskantha and Sabarkantha districts in the north, but excluding the Saurashtra and Kutch regions where tigers have been never known to exist within living memory. Although no attempt in at censusing the tiger population in the State was made until 1972, my rough occular estimate is that there were not less than 50 tigers in Gujarat when the State came into existence in 1960. Prior to 1960, tigers were actually sighted in Vijaynagar forest of Sabarkantha district and in the Danta and Borian forests of Banaskantha district during 1951-52. A notorious man-eating tiger was shot by Shri Kasimkhan J. Khan of Rajpipla in the Dediapada area also around 1952 or thereabouts. The erstwhile princely states of Danta, Rajpipla and Baroda (Satkashi

Jeluding any forest

forest) were regarded as favoured tiger hunting grounds of distinguished guests of the royalty.

The Annual Wildlife Administration Reports of the State Forest Dept. for the first 3 years show that 3 tigers were shot during 1960-61 and 2 during 1962-63. The tiger was declared as a protected species in Gujarat vide Agriculture & Cooperation Dept. Notification No.WLP/2863/21232-P dated 29-10-63. However, sporadic cases of tiger poaching continued despite this ban, with at least two confirmed cases on official record from the Waghai area of Dangs district ---- the first in 1969 and the other even as late as in 1983!

The first systematic attempt to estimate the tiger population in Gujarat was the pre-Project Tiger census of tigers carried out in 1972 which indicated the presence of only 8 tigers in the entire State (all of them in the Dangs forest of South Gujarat). The next regular tiger census in the State was carried out under my personal supervision from 15th to 21st April, 1979, a brief account of which is given below:-

Initially, the following potential tiger areas were proposed to be included in the census:

Name of Forest Division	Name of Range/Block
1. Dangs(North)	Entire forest area
2. Dangs(South)	
3. Valsad	Bansda(including national park area), Pangarbari, Fatepur.
4. Vyara	Vajpur(Satkashi forest)
5. Rajpipla(West)	Mandvi(North & South)
6. Rajpipla(East)	Dediapada, Fulsar, Piplod, Rajpipla, Sagbara.
7. Banaskantha	Danta and Ambaji.

Detailed cyclostyled instructions in the vernacular on the census methodology were supplied to each beat guard, the beat being selected as the territorial unit for the census. The period from 3rd to 5th April was earmarked for collecting preliminary census information for determining the areas where tigers or their signs had been reported during the last 12 months. On the basis of this preliminary information, the final census was confined only to the Dangs(North & South) Divisions, Bansda Range of Valsad Division, Rajpipla Range of Rajpipla(East) Division, and Ambaji Range of Banaskantha Division. Throughout the census week, each beat guard within the

-4--

selected census area did intensive patrolling within his jurisdiction, with the help of hired trackers where necessary, specifically for the purpose of **determining** detecting signs of tiger movement in the area (such as actual sighting, pugnarks, scats, kills,etc). Any positive reports received from them were immediately verified on the spot by a responsible officer of the rank of RFO, Asst. of Dy.CF. Pugmarks where found were recorded on **aki** a tiger tracer, indicating the precise location and time. A blueprint showing the actual size samples of tiger pugmarks (male , female and cub) had been supplied to each beat guard for his guidance in the field to ensure correct identification and to eliminate the possibility of confusion with panther pugmarks.

In all, 11 cases of direct or indirect tiger sightings were reported by the end of the census period from Dangs(North), Dangs(South) and Rajpipla(East) Divisions, out of which only 7 (4 males and 3 females) were finally accepted as detailed below:-

Dangs(North)	والتر بريد منه ويد	3 males and 2 females
Dangs(South)		1 female
Rajpipla(East)		1 male

Advantage of this tiger census was also taken to estimate the population of panthers in the entire Dangs forest. The same was put at approximately 70 which could be considered to be a fairly substantial number. Five knowledgable sportsmen of repute were associated with the census as non-official observers.

Subseptquent tiger censuses carried out in the State in 1984 and 1989 indicated the presence of 9 tigers in each case, all confined to the Dangs forest only.

The above census figures clearly indicate that the present status of the tiger in Gujarat is extremely precarious and it virtually stands on the threshold of extinction. The tigers detected during the censuses are obviously stragglers from the adjoining forests of Maharashtra visiting their old haunts, only to find that these are now no longer congenial for their permanent residence due to absence of natural prey and the constant human disturbance being caused by the intensive exploitation of the Dangs forest for the extraction of timber and fuel both departmentally and through forest labourers' cooperative societies, the supply of bamboos and grass to the paper mills and strawboard factory and the extraction of other minor forest produce through the State Forest Development Corporation. The setting up of the departmental Integrated Wood-Working Unit on the road to Waghai has further accelerated the pace

of ar forest exploitation and increased the intensity of management. The State Forest Department is obviously not prepared to forego the high forest revenue from Dangs merely to save the tiger from extinction. The deliberate denotification of the Purna Sanctuary in this very area in the seventies and the persistent official refusal to renotify the same with a view to providing a disturbance-free Making habitat for rehabilitating the tiger is a glaring example of the low priority given to ecological concerns. Such a pernicious and distorted line of thinking at the top policy-making level ean only result in driving the last nail in the coffin of the tiger in Gujarat and it is now only a matter of time before this once-thriving magnificent phantom of the forest meets its inevitable doom and passes into oblivion. The sole hope for its future survival lies in the undertaking of a determined reintroduction and breeding programme in or around the Dangs forest. But it is very doubtful if the requisite will and finances for this purpose would be forthcoming.

It is interesting to draw a comparison between the habitats, habits and other characteristics of the tiger and lion which would also give an insight into the influence which these factors have had on the relative survival prospects of these two major predators found in the forests of Gujarat:

TIGER

- 1. Original home in the icy wastes of Siberia & Manchuria.
- 2. Migrated into India from the north-east.
- 3. Prefers a woodland habitat.
- 4. Shy and secretive by nature and intolerant of human presence.
- 5. Prefers solitary living.
- 6. Highly prized as a trophy but is an elusive quarry.
- 7. Has to contend with tribals who are hunters and meat-eaters encroaching on its natural prey base of wild ungulates.
- 8. The tiger in Gujarat has received no special protection under any specific project.

LION

- 1. Griginal home in Central Europe.
- 2. Migrated into India from the north-west.
- 3. Prefers a savanna habitat.
- 4. Comparatively bold and more tolerant of human presence.
- 5. Moves and feeds in large family group**x**(pride); hence vulnerable to mortality by poisoning of its kills.
- 6. Easy to hunt but not much fancied as a trophy.
- 7. Has to contend with maldharis' (professional graziers) who are vegetarians and whose cattle are a welcome supplement to its natural prey base.
- 8. The lion in Gujarat was fortunate enoyugh to be saved from extinction in the nick of time by the Gir Lion Sanctuary Project launched in 1972 which saved the entire Gir forest ecosystem.

It will thus be seen that while the tiger fared much better in the struggle for survival at the national level, thanks to the timely help and protection it received from Project Tiger, in Gujarat it was the lion which has managed to survive through special protection afforded to it under the Gir Lion Sanctuary Project, while the unfortunate tiger has been left to fend for itself and virtually exterminated as a consequence.

I would like to end my presentation with the following extract from the Journal of the Bombay Natural History Society (XXXIII-4, 1929) for the occurrence of tigers on the Islands of Bombay and Salsette which should **EXAMPLATE** to the present day Bombayite:-

"In a miscellaneous note, occurrence of tigers on Salsette Island as early as 1761 is documented.

A few tigers used to straggle on the Bombay Island from the mainland by swimming the Thana creek. Some instances are quoted to prove their presence on Bombay Island. In 1806, 2 tigers were seen near a bungalow at Kurla. In February, 4992, a tiger came down from Malabar Hill and quenched his thirst at Gowalia Tank. There is also a record of the appearance of a tiger at Mazgaon in 1829 and at Mahim around 1863. The shooting of/stiger near Vihar Lake in January, 1929, is a more recent record of the tiger's presence on these Islands!

alas Today's Bombay is a huge asphalt jungle and the only tigers it can boast of are of the political variety:

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