SARISKA TIGER RESERVE

Sariska represents a tiger habitat spread over the world's oldest mountain range- the Aravallis. It is a resilient ecosystem with a high prey density, and has the unique distinction of successfully reintroducing the tiger after its local extinction.

Area of the tiger reserve

Core/critical tiger habitat : 881.11 sq.km. Buffer/peripheral area : 322.23 sq.km.

Total : 1203.34 sq.km.

Location

Latitudes : $27^{0}05'41"$ N to 27^{0} 38'55" N Longitudes : $76^{0}14'30"$ E to $76^{0}32'31"$ E

Habitat Attributes

Flora

The vegetation of Sariska corresponds to (1) Northern tropical dry deciduous forests (subgroups 5B; 5/E1 and 5/E2) and Northern Tropical Thorn forest (subgroup 6B) (Champion and Seth 1886). *Anogeissus pendula* is the dominant tree species covering over 40 per cent area of the forest. *Boswellia serreta* and *Lannea coromandelica* grow at rocky patches. *Acacia catechu* and bamboo are common in the valleys. Some valleys support *Butea monosperma* and *Zizyphus mauritiana*. *Dendrocalamus strictus* is extremely limited in distribution and is found along well-drained reaches of the streams and moist and cooler parts of the hills. *Albizia lebbeck*, *Diospyros melanoxylon*, *Holoptelia integrifolia* and *Ficus sp.* are found in moist localities.

Fauna

The Sariska Tiger reserve holds a good diversity of wild mammals. As the name indicates, the principal predator is the Tiger. Besides there are a number of large carnivores including leopard (*Panthera pardus*) and Hyena (*Hyena hyaena*). Smaller carnivores include Caracal (*Caracal*

caracal), Jungle cat (Felis chaus), Ratel (Mellivora capensis) etc.

The principal herbivores of the park are Nilgai (Boselephous tragocamelus), Sambar deer (Cervus unicolor), Spotted deer (Axis axis), Four-horned antelope (Tetraceros quadricorns) and Wild pig (Sus scrofa). The density of nilgai and sambar deer is very high in the entire Sariska Tiger Reserve. Nilgai is commonly seen in open type of habitat near human habitation and sambar deer prefers plateaus to woodland and grassland. Spotted deer is most often seen in large herds, feeding on fallen Zizyphus fruits in association with common langur (Presbytis entellus). Which is most common primate followed by the Rhesus macaque (Macaca mulatta). Both of them are present in large groups near the temple complexes inside the park. The other smaller mammals are Small Indian civet (Viverricula indica), Rufous tailed hare (Lepus nigricollis), Common Mongoose (Herpestes edwardsii), Ruddy Mongoose (Herpestes smithi), Palm Civet (Paradoxurus hermaphroditus), Pangolin (Manis crassicaudata), Porcupine (Hystrix indica) etc.

Sariska also holds a variety of bird species including some winter migrants. It has a very high density of peafowl as well as grey francolin. There are some unique birds in Sariska like white-rumped vulture, painted spurfowl, Aravalli red spurfowl, Indian Cuckoo, common sand grouse, Indian pitta, great horned owl etc. 211 bird species have been recorded in Sariska (Sankar *et al* 1993) of which 120 are resident, 73 are migrant and 18 are considered to be vagrants.

Sariska is a host of few species of fish as well. Though there is no perennial river or water stream (Ajith kumar and Sankar 1993) but there are a number of ephemeral streams and pools. Except for a few natural springs, water in these locations dries up in summer (Dang 2005). The common species found in water bodies in this park are *Noemachilus botia*, *Labio boggut*, *Puntius sarana*, *Garra gotyla* and *Rasbora daniconius*.

Tiger Status

Sariska was one of the most popular Tiger Reserves in the country owing to its proximity to the National Capital. However, due to poaching and other factors tigers got locally extinct in the recent past. Sariska is now on the path of recovery. Wild tigers from Ranthambhore have been translocated to repopulate Sariska. This effort is a first of its kind in the world. The tiger reintroduction is based on a scientific recovery plan formulated in collaboration with the National Tiger Conservation Authority and the Wildlife Institute of India. The progress is as below:

| | Date | Sex of animal | Code name |
|---|------------|---------------|-----------|
| 1 | 28-06-2008 | Male | ST 1 |
| 2 | 04-07-2008 | Female | ST 2 |
| 3 | 25-02-2009 | Female | ST 3 |
| 4 | 20-07-2010 | Male | ST 4 |
| 5 | 28-07-2010 | Female | ST 5 |
| 6 | 23-02-2011 | Male | ST 6 |
| 7 | Aug. 2012 | Cub | ST 7 |

| 8 | Aug. 2012 | Cub | ST 8 |
|----|------------|--------|-------|
| 9 | 23-01-2013 | Female | ST 9 |
| 10 | 24-01-2013 | Female | ST 10 |

Since then, one of the reintroduced tigresses has successfully littered.

Core

The CTH/ Core area is administratively divided into the following zones:

- A) Strict Natural Zone
- B) Habitat Restoration Zone-Overlapping area
- C) Tourism Zone- overlapping area
- D) Administrative Zone overlapping area

The zones are overlapping and the above segregation has been described only for management purposes. The CTH/ Core area has already been notified by the Government of Rajasthan as per the provisions of Sec 38 V of the WildLife (Protection) Act, 1972 amended upto 2006.

The Habitat restoration zone shall include the area of the relocated villages and will require management interventions for improving the habitat, with special emphasis on maintaining these areas as grasslands and to foster the prey base which will support predator population within the carrying capacity of the habitat.

The Tourism Zone in CTH/Core area is area permitted for tourism as per guidelines of NTCA. The administrative zone includes the official buildings and campus with staff quarters.

Buffer

The Core Area of Sariska Tiger Reserve is surrounded mostly by revenue land and villages with some contiguous forest patches of territorial Forest Division-Alwar and the Jamua Ramgarh Sanctuary. An area of 245.74 sq km, including forest blocks of Alwar Forest Division covering a forest area of 180.14 sq. km, and 60.58 sq.km of Jamuwaramgarh Wildlife Sanctuary, have been included in the buffer area so that the contiguous areas could form important conduits for prey and predators'. Low protection level and high biotic pressure have also caused degradation of these areas and hence, inclusion in the buffer shall accord better level of protection with habitat improvement. The forest buffer area has been divided in three blocks which are contiguous to Critical tiger Habitat area of Sariska Tiger Reserve.

Managerial Issues

The ongoing M-STrIPES and Phase-IV monitoring in Sariska needs to be mainstreamed in the adjoining divisions with creation of camera trap tiger ID data and with periodic tallying. The other important issues are intelligence based enforcement, anti-poaching operations, relocation of

villages, special monitoring of tigers, regulation of tourism as per the guidelines issued by the National Tiger Conservation Authority, eco development in buffer areas to enlist local public support, while reducing resource dependency, prompt payment of ex-gratia / compensation for depredation due to wild animals, safeguards on roads and areas having electrical transmission lines and coordination with the adjoining State of Rajasthan and forest divisions within the State for keeping track of moving tigers.

Good Practices

- 1. 24x7 monitoring of tigers by dedicated teams.
- 2. Payment of cattle kill compensation within 24 hours
- 3. Daily night patrolling.
- 4. Regulation of traffic passing through the road within the tiger reserve.