STATUS OF SNOW LEOPARD IN INDIA

2023
The Snow Leopard Population Assessment in India (SPAi) exercise led to the first ever rigorous examination of snow leopard populations in India, employing advanced methods such as occupancy modeling and camera trapping. The findings not only contribute significantly to our understanding of snow leopard ecology but also emphasize the ecological importance of the high-altitude environments they inhabit. The state/UT-level assessments, spanning from Ladakh to Arunachal Pradesh, offer valuable insights crucial for targeted conservation efforts. Overall, the SPAi provides a strong foundation for ongoing monitoring, conservation strategies, and collaborative initiatives coordinated through the proposed Snow Leopard cell essential for ensuring conservation of snow leopards in the Indian Himalaya.
**POTENTIAL SNOW LEOPARD RANGE IN INDIA**

107,594 Km²

- **38,718 Km²**
  - **LADAKH**
- **12,000 Km²**
  - **JAMMU & KASHMIR**
- **26,112 Km²**
  - **HIMACHAL PRADESH**
- **12,764 Km²**
  - **UTTARAKHAND**
- **3,000 Km²**
  - **SIKKIM**
- **15,000 Km²**
  - **ARUNACHAL PRADESH**

**CONSERVATION STEPS**

- **3 GSLEP Landscapes**
  - 46,630 Km²
- **3 Biosphere Reserves**
  - 21,300 Km²
- **57 PAs covering**
  - 34% of Snow Leopard Range

- **13,450 Km Trail** surveyed to record Snow Leopard signs
- **Cameras deployed at 1971 locations, for 1,80,000 trap nights**
- **Around 43,545 Km² of effective area sampled for Snow Leopard occupancy, prey and habitat**
- **20.2 Lakh camera trap photographs, representing 196 species of birds and mammals**
- **Snow Leopard occupancy recorded in 93,392 Km² and estimated presence in 100,841 Km²**
- **241 unique Snow Leopard photographed. Population estimated to be 718 in entire occupied habitat of 93,392 Km²**
Snow leopard estimates for each State and Union Territory.

<table>
<thead>
<tr>
<th>Area</th>
<th>Camera Traps locations</th>
<th>No. of Unique Individuals</th>
<th>Density Estimates (#/100 Km²)</th>
<th>Estimated numbers</th>
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</thead>
<tbody>
<tr>
<td>Ladakh</td>
<td>956</td>
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<td>Arunachal</td>
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<td>0.26</td>
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<td>Total</td>
<td>1971</td>
<td>241</td>
<td>-</td>
<td>718</td>
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</table>
LADAKH

- **Photographic Records**: 126
- **Unique Individuals**: 477
- **SE range ±51**
- **6,600 Km Trail surveyed to record Snow Leopard signs**
- **Cameras deployed at 956 locations, for 97,313 trap nights**
- **Around 8,604 km² of effective area sampled for Snow Leopard occupancy, prey and habitat**
- **4.5 lakh camera trap photographs, representing 97 species of birds and mammals**
- **Snow Leopard occupancy recorded in 25,303 km² and estimated presence in 47,572 km²**
JAMMU AND KASHMIR

09 PHOTOGRAPHIC RECORDS
09 UNIQUE INDIVIDUALS
SE range 7-14

350 Km Trail surveyed to record Snow Leopard signs

Cameras deployed at 135 locations, for 20,207 trap nights

Around 2,825 Km² of effective area sampled for Snow Leopard occupancy, prey and habitat

3 Lakh camera trap photographs, representing 21 species of birds and mammals

Snow Leopard occupancy recorded in 425 Km² and estimated presence in 949 Km²
HIMACHAL PRADESH

- 44 Unique Individuals
- 51 SE range 29 - 73

1,500 Km Trail surveyed to record Snow Leopard signs

Cameras deployed at 284 locations, for 17,040 trap nights

Around 5,000 Km² of effective area sampled for Snow Leopard occupancy, prey and habitat

3 lakh camera trap photographs, representing 25 species of birds and mammals

Snow Leopard occupancy recorded in 25,000 Km² and estimated presence in 25,000 Km²
UTTARAKHAND

- 40 Unique individuals
- 124 SE range 103 - 145
- 1,200 Km Trail surveyed to record Snow Leopard signs
- Cameras deployed at 382 locations, for 26,773 trap nights
- Around 3,438 Km² of effective area sampled for Snow Leopard occupancy, prey and habitat
- 3.5 Lakh camera trap photographs, representing 28 species of birds and mammals
- Snow Leopard occupancy recorded in 12,764 Km² and estimated presence in 12,764 Km²
14 Unique Individuals

21 SE range >3

1,400 Km Trail surveyed to record Snow Leopard signs

Cameras deployed at 99 locations, for 9900 trap nights

Around 4,000 Km² of effective area sampled for Snow Leopard occupancy, prey and habitat

6.2 Lakh camera trap photographs, representing 12 species of mammals

Snow Leopard occupancy recorded in 400 Km² and estimated presence in 400 Km²
Arunachal Pradesh

- 8 photographic records of 08 unique individuals
- 36 camera locations with SE range ±15
- 2,400 km trail surveyed to record Snow Leopard signs
- Cameras deployed at 115 locations for 8,775 trap nights
- Around 22,616 km² of effective area sampled for Snow Leopard occupancy, prey and habitat
- 6.8 lakh camera trap photographs, representing 13 species of mammals
- Snow Leopard occupancy recorded in 29,500 km² and estimated presence in 14,156 km²