

India's First Snow Leopard SPAI Survey

Prelims: Current events of national and international importance | Environment | Species

Why in news?

According to the country's first Snow Leopard Population Assessment in India (SPAI), India has recorded an estimated 718 snow leopards across the Indian Himalayas, including 477 in Ladakh.

- **Conducted by** - The SPAI survey was carried out between 2019 and 2023 by the Wildlife Institute of India (WII) in collaboration with State Forest Departments, WWF-India, and the Nature Conservation Foundation.
- **Survey Methodology** - Covered roughly 120,000 km² of trans-Himalayan habitat (spanning over 70% of the potential range), utilising 1,971 camera-trap locations across 180,000 trap-nights and 13,450 km of walked trail surveys.
- **Individual Identification** - Physically photographed and identified 241 individual snow leopards.
- **Region-Wise Breakdown**
 - Ladakh - 477, alone accounts for nearly two-thirds of India's estimated snow leopard population.
 - Uttarakhand - 124
 - Himachal Pradesh - 51
 - Arunachal Pradesh - 36
 - Sikkim - 21
 - Jammu & Kashmir - 9.
- **SPAI 2.0 (Snow Leopard Population Assessment in India 2.0)** - It serves as the second phase of Project Snow Leopard, officially launched by the Ministry of Environment, Forest and Climate Change (MoEFCC) during Wildlife Week 2025.

Snow Leopard

- **Scientific name** - *Panthera uncia*
- Popularly known as the "Ghost of the Mountains" due to its elusive nature and camouflage.
- **Distribution** - It is a large, vulnerable big cat species native to the harsh, high-altitude mountain ranges of Central and South Asia.
- **Habitat** - It inhabits alpine and subalpine zones across 12 countries—including India, Nepal, Bhutan, China, and Mongolia.
- **Features** - It has a thick whitish to grey fur with black spots on the head and neck,

with larger rosettes on the back, flanks and bushy tail.

- Males are larger than the females, and both sexes have long canine teeth.
- Its small rounded ears, broad paws, and thick tail are adaptations for living in cold, mountainous environments.



- **Diet** - It is a carnivores, primarily hunt wild mountain ungulates like blue sheep (bharal), Himalayan ibex, and argali wild sheep.
- **Conservation Status**
 - IUCN Red List - Vulnerable.
 - WPA, 1972 - Schedule I.
- **Threats** - Poaching, habitat destruction, prey depletion, human-animal conflict, etc.

Reference

[DD News | India's First Snow Leopard Survey Records 718 Across Himalayas](#)