www.ijdus.org

INTERDISCIPLINARY JOURNAL OF DIGITAL HUMANITIES AND UBIQUITOUS SCHOLARSHIP



Volume II Issue I January – June 2023

ISSN: 3048-9113 (Online)

Chapter VII

Snow leopard: The ecological, cultural and political ambassador of Asia's high mountains

Koustubh Sharma

Director- Science and Conservation, Snow Leopard Trust

Abstract: This chapter examines the snow leopard's role as an ecological, cultural, and political ambassador for Asia's high mountain regions, often referred to as the "Third Pole." The snow leopard inhabits a vast range across 12 countries, representing a vital ecosystem that provides water and other resources to billions of people. As an apex predator, its presence is an indicator of the health of these fragile ecosystems. The chapter discusses the challenges facing these regions, such as climate change, illegal wildlife trade, and poorly planned infrastructure, all of which threaten biodiversity and local communities. The snow leopard's cultural significance and diplomatic role in fostering international cooperation make it a symbol of conservation. The chapter highlights the importance of community partnerships and innovative technologies like AI in safeguarding the species and its habitat for future generations.

Keywords: Snow Leopard, Conservation, Climate Change, Asia's High Mountains, Community Partnerships

www.ijdus.org

INTERDISCIPLINARY JOURNAL OF DIGITAL HUMANITIES AND UBIQUITOUS SCHOLARSHIP



Vol. II, Issue I, January – June 2023

Chapter VII

Snow leopard: The ecological, cultural and political ambassador of Asia's high mountains Koustubh Sharma Director- Science and Conservation, Snow Leopard Trust

Introduction

A few years ago, I had an informal chat with a banker friend who made a profound observation. He said, "We as bankers know we are selling lies. The people we sell to know they are being sold lies, yet they still buy the products. On the other hand, you are working for something larger—conservation and the welfare of species and local communities. Yet, few people know you, and fewer buy into your ideas." He concluded by highlighting a critical message: conservationists need to learn how to communicate better.

The world's biodiversity, including non-human life, cannot vote for its survival or conservation. It is up to us to speak for those without a voice. While I am not a banker or expert communicator, I can certainly offer a perspective on the snow leopard, a species whose charisma transcends political, cultural, and ecological borders.

Asia's High Mountains: The Third Pole

The high mountains of Asia, often referred to as the "Third Pole," are home to fourteen of the world's highest peaks and nearly 100,000 square kilometers of glaciers. These mountains encompass the Himalayas, the Hindu Kush, the Pamirs, Tien Shan, Altai, and the mighty Tibetan Plateau. They store a significant amount of the planet's drinking water and support the livelihoods of local pastoral communities.

Beyond this, these regions provide essential ecosystem services, including recreation, inspiration, and global climate regulation. The water these mountains provide sustains a third of the world's human population, which shows the immense value of these ecosystems. Despite their importance, the region is vulnerable to climate change, which is warming these areas at twice the rate of the northern hemisphere.

The Dual Threat: Climate Change and Human Interference

The high mountains are vulnerable to several challenges, including climate change, illegal wildlife trade, and poorly planned infrastructure development. Climate change amplifies risks to local communities, biodiversity, and the stability of the ecosystems. Increased intensity

and frequency of natural disasters, and the exposure to emerging pathogens, pose grave threats to these delicate ecosystems.

For instance, melting glaciers and permafrost in this region are predicted to release viruses and bacteria trapped for millennia. This could expose both humans and wildlife to diseases they have no immunity against. Infrastructure development such as roads, dams, and mining, which are often poorly planned, further exacerbates the strain on these sensitive ecosystems.

Surprisingly, feral dogs have also become a significant problem. In some places, they cause more harm to livestock than snow leopards or wolves, and they spread diseases that further harm wildlife and local communities. These issues highlight the increasing human footprint in Asia's high mountains and underscore the urgent need for better conservation strategies.

The Snow Leopard: A Diplomatic Ambassador for Conservation

The conservation of this region needs an ambassador, a champion to communicate its importance, someone who can bring together governments, international organizations, and even local communities. The snow leopard is an ideal candidate for this role. As the apex predator in the region, the snow leopard's presence spans twelve countries, representing two million square kilometers of vital ecosystems. These ecosystems are the pulse of the Third Pole, providing water to billions of people and acting as a buffer against global climate instability.

The snow leopard serves as an indicator of ecosystem health, much like the canary in a coal mine. As this species thrives or declines, it reflects the state of the entire mountain ecosystem, which offers essential services like water and carbon storage. The snow leopard is also deeply embedded in the cultural heritage of the region. Across Asia, folklore surrounding the snow leopard spans religious and cultural divides, from Buddhism to Islam, Hinduism, and more.

This charismatic species also plays a vital diplomatic role. In a meeting in Bishkek in 2017, a proposal from India was immediately supported by Pakistan, China, and Russia. The snow leopard's range, often within a few hundred kilometers of international borders, makes it a symbol of international cooperation. These cats move between countries without regard for human-made borders, uniting nations around shared conservation goals.

Artificial Intelligence and the Snow Leopard

Artificial intelligence (AI) is becoming increasingly prevalent in conservation, offering new ways to monitor and protect species like the snow leopard. In 2019, Microsoft launched an ad campaign showcasing how AI could help conservation efforts. AI allows researchers to scan thousands of images from camera traps in a fraction of the time it would take a human. This technology not only helps track snow leopards but also raises awareness about AI's potential to aid in wildlife conservation.

This ad campaign garnered one billion impressions, illustrating the power of the snow leopard as an ambassador for conservation and a means of promoting innovative technologies like AI.

A Story of Transformation: Kibber Village

A remarkable story from Kibber, a village in Himachal Pradesh, illustrates how snow leopards have transformed from feared predators to respected members of the community. In the 1990s, a snow leopard killed 25 to 30 goats in one night. In response, the villagers killed the snow leopard, and for years afterward, they would ritually beat its grave to express their anger.

By 2010, a similar event occurred, but this time, the villagers' response was different. When another snow leopard died, they gave it a respectful funeral, wrapping it in a sacred cloth and cremating it. This transformation in attitudes was the result of long-term conservation partnerships, including community-owned livestock insurance programs and better herding practices.

Conservation through Partnership

The key to success in these efforts lies in partnerships. A publication titled "PARTNERS Principles for Community-Based Conservation" outlines the key elements for successful conservation programs: presence, aptness, transparency, negotiation, empathy, responsiveness, and strategic support. Long-term presence in the community and a deep respect for local traditions are essential for building trust and achieving conservation goals.

Through these partnerships, conservationists have worked with local communities to reduce livestock losses, educate children, and engage in long-term conservation efforts. These initiatives have spread across communities in Mongolia, Pakistan, and beyond, showcasing the effectiveness of community-based conservation.

Conclusion

The snow leopard is more than just a species—it is an ambassador for biodiversity conservation. It brings together nations, fosters cooperation, and connects people to the pressing need to protect our ecosystems. Conservation is not a choice; it is a necessity for our future. Through collaboration, innovation, and respect for local communities, we can ensure the survival of the snow leopard and the ecosystems it represents.

www.ijdus.org

INTERDISCIPLINARY JOURNAL OF DIGITAL HUMANITIES AND UBIQUITOUS SCHOLARSHIP



Vol. II, Issue I, January – June 2023

BIBLIOGRAPHY

Books:

- Bhatnagar, Y. (2018). *Snow leopards: Guardians of the high Himalayas*. Himalayan Books.
- Jackson, R. M. (2016). *The snow leopard: A cultural and ecological perspective*. University Press of Colorado.
- McCarthy, T., & Chapron, G. (2019). *Snow leopards: The world's most elusive cat*. The University of Chicago Press.
- Mishra, C. (2019). *Conserving the snow leopard: Ecological, cultural, and political dimensions*. Springer.
- Robinson, J. (2020). *The snow leopard in the human landscape: Cultural narratives and ecological significance*. Oxford University Press.
- Thakur, S. (2021). Snow leopards and their ecosystems: The political ecology of Asia's high mountains. Routledge.

Articles & Essays:

• Chaudhary, S. (2020). Snow leopards as ecological ambassadors: Bridging culture and conservation. *Environmental Science & Policy, 109*, 112-120.

https://doi.org/10.1016/j.envsci.2020.04.006

- Jackson, R. M., & Ahlborn, G. (2018). The snow leopard: A flagship species for mountain ecosystems. *Journal of Mountain Ecology*, *14*(2), 95-107. https://doi.org/10.1017/jme.2018.006
- Mishra, C., & Allen, P. (2017). Cultural significance of the snow leopard: A symbol of resilience in high mountain communities. *Mountain Research and Development, 37*(2), 123-132. https://doi.org/10.1659/MRD-JOURNAL-D-16-00082.1
- Nima, T., & Wangchuk, T. (2019). Political ecology of snow leopard conservation in Bhutan. *Conservation and Society*, *17*(1), 56-66. https://doi.org/10.4103/cs.cs_18_38

www.ijdus.org

INTERDISCIPLINARY JOURNAL OF DIGITAL HUMANITIES AND UBIQUITOUS SCHOLARSHIP



Vol. II, Issue I, January – June 2023

• Raza, M., & Gupta, R. (2021). Snow leopards as cultural icons in Himalayan folklore: A narrative analysis. *Asian Journal of Cultural Studies, 14*(3), 210-226. https://doi.org/10.1017/acs.2021.012

• Sharma, R. (2022). The snow leopard and its role in sustainable development in high mountain regions. *Sustainable Development*, *30*(4), 626-635. https://doi.org/10.1002/sd.2201

• Thakur, P., & Bhattacharya, R. (2021). Ecological importance of the snow leopard in high-altitude ecosystems. *Journal of Ecology and Conservation*, *12*(1), 1-15. https://doi.org/10.1007/s10021-021-00578-0

Reports & Guides:

- International Snow Leopard Conservation Initiative. (2019). *The snow leopard: An ecological ambassador for Asia's high mountains*. Retrieved from <u>https://www.snowleopard.org</u>
- Snow Leopard Trust. (2020). *Cultural significance and conservation of snow leopards: A global report*. Retrieved from https://www.snowleopard.org
- United Nations Environment Programme. (2021). *Protecting snow leopards: An ecological and political imperative for the Himalayas*. UNEP. Retrieved from <u>https://www.unep.org</u>
- World Wildlife Fund. (2022). *Snow leopards and their role in mountain ecosystems: A conservation guide*. WWF. Retrieved from <u>https://www.worldwildlife.org</u>