



ILLEGAL POACHING OF WILD CATS IN INDIA: A REVIEW OF MAHARASHTRA STATE

Anil Khole

Department of Zoology, B. Raghunath ACS College (Affiliated to Swami Ramanand Teerth Marathwada University), Parbhani, Maharashtra, India

Cite This Article: Anil Khole, "Illegal Poaching of Wild Cats in India: A Review of Maharashtra State", International Journal of Current Research and Modern Education, Volume 11, Issue 1, January - June, Page Number 101-106, 2026.

Copy Right: © Crystal Pen Publication, 2026 (All Rights Reserved). This is an Open Access Article distributed under the Creative Commons Attribution License, which permits unrestricted use, distribution, and reproduction in any medium, provided the original work is properly cited.

Type of Review: Peer Reviewed as per [C|O|P|E] Guidance.

Disclaimer: The scholarly papers reviewed and published by Crystal Pen Publication, India, reflect the views and opinions of their respective authors and do not necessarily represent the views or opinions of Crystal Pen Publication. The publisher disclaims any responsibility for any harm, loss, or damage resulting from the use of the published content by any party.

DOI: <https://doi.org/10.5281/zenodo.20416433>

Abstract:

Forests are major ecosystems that maintain biodiversity, influence climate, purify water, and sustain human livelihoods. The faunal diversity, along with big cats as apex predators, plays a vital role in maintaining ecological balance by controlling herbivore populations and ecological sustainability. However, illegal poaching of wild cats remains a major conservation challenge in India. Despite provisions under the Wildlife Protection Act (1972), faunal species such as the tiger (*Panthera tigris*), leopard (*Panthera pardus*), and smaller wild cats face serious menaces from planned hunting and illegal trade. The State of Maharashtra (India), home to reserves like Tadoba, Andhari, Pench, and Melghat, has reported frightening poaching episodes in recent years, with dozens of tigers and leopards killed during the years 2021 and 2025. The decline of these predators disturbs the ecosystem, intensifies human-wildlife conflict, and weakens forest resilience. This review research paper highlights key drivers of poaching, habitat destruction, human enforcement, and socio-economic stress and examines links to illegal trafficking groups. Strengthening law enforcement, upgrading scientific monitoring, and engaging society through eco-tourism and alternative livelihoods are essential strategies. Conservation of big cats is crucial not only for their survival but also for wildlife conservation.

Key Words: Poaching, Wild Cats, Conservation, Forests, National Parks

Introduction:

India is known around the world for its amazing variety of faunal diversity, including some of the richest groups of wild big cats like the Bengal tiger (*Panthera tigris*), Asiatic lion (*Panthera Leo persica*) and leopard (*Panthera pardus*). According to the (2022) All-India Tiger Census, the country supports approximately 3,682 tigers, representing over 70 percent of the worldwide population. Within this distribution, Maharashtra State itself sustains 444 individuals (WII, 2022). As apex predators, these species are essential to maintaining ecological balance through trophic regulation and biodiversity balance. Illegal poaching, primarily fuelled by international demand for skins, bones, and claws, increasingly threatens their survival. Despite the existence of strong legal laws such as the Wildlife Protection Act (1972), poaching persists, particularly throughout the Western Ghats and Vidarbha landscapes. Specifically, reserves such as Tadoba, Andhari and Melghat have reported repeated experiences of wildlife crime.

Recent scientific studies of big cat (tiger) derivatives are most common in Maharashtra, Karnataka, Tamil Nadu, and Assam states, with unlawful trade networks optimizing routes through the border countries like Nepal, Bhutan, Assam, the Brahmaputra Riverine corridor, and Mumbai port (George et al., 2022). Historical data exhibits that the Maharashtra State Department required scientific verification of seized derivatives as early as 1981 (Pradhan, 1997), emphasizing the permanent

Recent studies indicate that abductions of tiger derivatives are most frequent in Maharashtra, Karnataka, Tamil Nadu, and Assam, with illegal trafficking networks exploiting routes through Nepal, Bhutan, Assam, the Brahmaputra River corridor, and Mumbai port (George et al., 2022). Historical evidence indicates that Maharashtra's Forest Department required scientific verification of seized skins as early as 1981 (Pradhan, 1997), underscoring enduring operational challenges. This review integrates patterns, operators, and ecological impacts of poaching, with an emphasis on Maharashtra, aiming to inform strengthened conservation strategies, enhanced community participation, and the disruption of illegal trade networks.

The emergency is amplified by the broader global biodiversity crisis, wherein man-made pressures such as habitat destruction, climate change, pollution, and degradation of species are accelerating declines (Johnson et al., 2017). India's conservation journey offers valuable lessons. The Prime Minister's Office (PMO) reveals that tiger reserves have expanded from 9 to 53, and the population doubled between 2010 and 2018, achieving the 2022 target four years ahead of schedule. Considerably, the role of local and tribal communities in protecting tiger habitats remains outstanding, showing that community-impelled conservation models are imperative for success across biodiversity hotspots worldwide. Figure 1 Map shows the locations of tiger reserves in India.

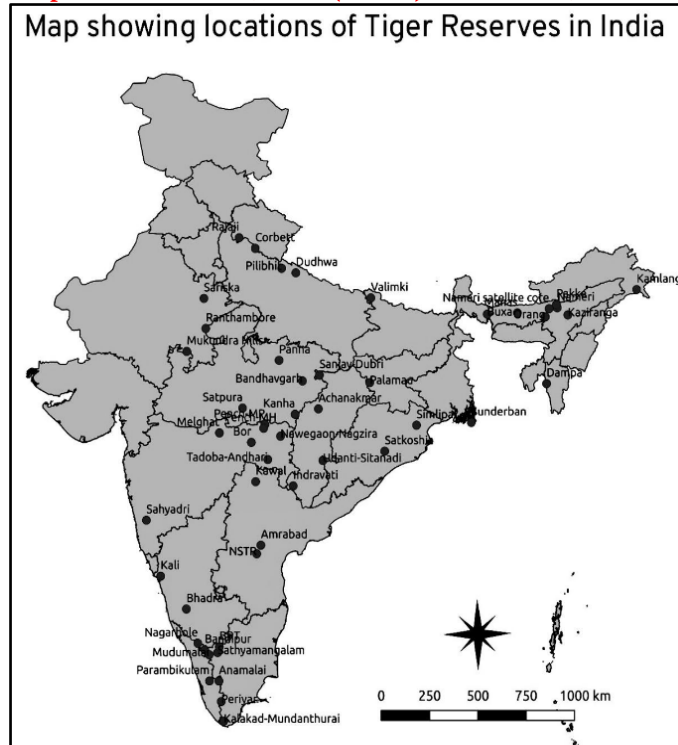


Figure 1: Map showing location of tiger reserves in India

Methodology:

This study adopts a systematic review approach, integrating research literature, government publications, and newspaper coverage on wildcat poaching in India, with a focus on Maharashtra, using both qualitative and quantitative data sources to provide broad awareness of the issue; however, it relies on secondary data, which may undervalue unreported incidents, and regional trends toward Maharashtra despite the inclusion of national context. Research referenced peer reviewed journals, conference proceedings, and dissertations on wildlife crime, conservation biology, and biodiversity.

Results and Discussions:

In the country of destination, over 75 percent of the global wild tiger population is an effort to save the only subspecies present, the Bengal tiger (*Panthera tigris tigris*) through 58 tigers zoned for Project Tiger, operated by the NTCA. Maharashtra is a leading conservation state, sheltering its tiger population in six reserves western India region, the Western Ghats, the Sundarbans, and the Himalayan foothills. In Maharashtra, the exclusively tiger subspecies found is the Bengal tiger (*Panthera tigris tigris*), which is protected through six major reserves. Tadoba Andhari, Melghat, Pench (Maharashtra side), Nagzira-Navegaon, Bor, and Sahyadri. Maharashtra State, with India's fourth-highest tiger count at 444, lost 53 tigers and leopards to poaching between the period of January 2021 and August 2024 (TOI, 2024). These reserves cover dissimilar landscapes, from the Satpura ranges and Gondia-Bhandara districts to the Western Ghats. Tiger attacks on individuals in Maharashtra have risen, the Chandrapur district being severely affected, reporting 22 deaths in the year 2025 alone, including 11 victims in the month May 2025. Recent cases in Bhandara and Gadchiroli districts also emphasize the growing human-tiger clash. Tiger compensation funds were often accompanied with Maharashtra State funds. The highest compensation was paid by the state of Maharashtra at one million INR for a human death (Jhala & Sharma, 1997). NTCA's red alert exposes a nationwide poaching network, with Maharashtra's deprivation of 41 tigers and 55 leopards in five years (TOI). NTCA's AI warning system is active in 20 Maharashtra villages. Loudspeakers announce tiger movement. Villagers are strictly warned to avoid forests between 7 pm and 7 am. Forest officials patrol sensitive areas, and response teams of villagers and officials are being formed. In affected areas, farmers living near forests have been provided with masks and bamboo sticks for protection.

1. Wild Big Cats in India:

In India the wild cats are non domesticated members of the cat family (Felidae), including big cats such as tigers, lions, leopards, jaguars, snow leopards, and cheetahs; medium cats like caracals, servals, ocelots, and lynxes; and small cats such as jungle cats, leopard cats, Pallas's cats, and rusty spotted cats. All of them are carnivorous predators with sharp teeth and retractile claws, generally exclusive, equipped with camouflage covering suitable to their habitats, and territorial, marking ranges with scent and scratches. Wildcat species are distinct organisms defined by uncommon phenotypical, morphological, or genetic traits within dynamic ecologies (Aurora, 2015). India's tiger population grew from 3682 in the year 2022 to an estimated 4000+ in 2026 (AITE, 2026), with Madhya Pradesh foremost, followed up by Karnataka, Uttarakhand, and Maharashtra states. Early surveys from the ongoing 2026 census of big cats show a 10 to 15 percent increase. According to the census, Maharashtra state's tiger population was about 444 in the year 2022, approaching 12 percent of India's total (3682), and revealed a steady increase compared to the pre-existing count, reflecting the successful conservation strategies. To conserve tigers, populations must be protected at core habitats and sustained across wider landscapes (Sanjay et al., 2017). According to NTCA (2005), tiger protection is strengthened through camera-trap and genetic monitoring, conflict is managed with compensation and awareness programs, and reserves play a vital role in climate regulation and water security. According to the status of tigers in India (2022) Report, rehabilitation is confirmed with expanded protected areas and corridors securing genetic diversity and connectivity. In Maharashtra, however, intense poaching has led to a decline in tiger populations both in reserves and in the wild (Gaidhane et al.,

2023). To strengthen conservation measures and ensure effective anti-poaching activities, the NTCA and the WCCB were constituted on 04.09.2006 and 06.06.2007 at Tadoba National Park, respectively.

2. Ecological Importance of Apex Predators:

Apex predators are crucial for ecosystem resilience. They regulate prey populations, prevent overgrazing, control disease spread, and maintain biodiversity through trophic cascades. Their decline often triggers habitat destruction and biodiversity loss. Apex hunters thoroughly shape ecosystems by limiting prey density and controlling secondary predators. Their decline causes secondary predators to intensify predation pressure and reduce biodiversity (Arian et al., 2015). Apex predators occupy the top positions in food webs and intensely influence prey traits and ecosystem interactions. All carnivores are agents of natural selection, shaping prey phenotypes over time (Jorgensen & Holt, 2013). Apex predators eliminate vulnerable traits, selecting against slow, weak, or disease-prone phenotypes (Bro-Jorgensen, 2013). Human disturbance impacts nearly all ecosystems, including terrestrial apex predators. Similarly, it also reduces predator populations and alters behavior, weakening their ecological role. Carnivore recovery benefits conservation but challenges management, especially in human-dominated landscapes.

3. National Context in Tiger Conservation:

The National Tiger Conservation Authority (NTCA), established on September 4, 2006, aims to strengthen tiger conservation. Its core functions include setting standards for tiger reserve management and formulating reserve-specific conservation plans. The Indian government has been actively engaged in big cat conservation, especially tigers, through various initiatives and reports. According to the NTCA Annual Report (2022-2023), India holds a considerable share of the globe's wild tiger population; however, poaching and habitat loss continue to drive declines. Since 2021, studies have shown that big cats have increasingly died due to unnatural causes, including poaching and seizures, with Madhya Pradesh state reporting the highest numbers, followed by Maharashtra and Karnataka states. As per data collected by WPSI, tiger body parts have been reported along India's borders with China, Nepal, Bhutan, and Myanmar. Similarly, it was noted that more big cats are dying outside protected reserves, with maximum dying beyond tiger reserves. To address this, the Indian government has launched a pilot scheme to manage human-tiger conflicts across 10 states. There are persistent challenges in big cat conservation in India, stressing the urgent need for strong government support and public involvement to secure their survival in reserve habitats.

4. Rising Poaching Incidents in India, Particularly in Maharashtra:

Poaching incidents in India endure a serious conservation challenge, particularly with Maharashtra state reporting the poaching of at least 41 tigers and 55 leopards in the past five years, emphasizing the state's weakness despite conservation efforts (TOI, 2025). Tiger and leopard body part trafficking is alarming, as these endangered species already face the risk of extinction. Poaching and trafficking endanger wildlife; urgent action is needed. The illegal hunting of wildlife pressures the survival of many species (Kemp et al., 2020). In Maharashtra state, Vidarbha region emerges as a wildlife crime hotspot; poaching and trafficking threaten endangered species (Sing, 2023). The countrywide inclination of wildlife poaching and trafficking threatens endangered carnivore species within the country, with state Uttar Pradesh recording the utmost incident rates in 2025. Unstrained human activities and poaching strain India's wildlife toward ecological imbalance. The government agencies emphasize prevention attempts needed to restore India's wildlife biodiversity. The main focus is on carnivores' survival; prey needs undisturbed forests. As per WCCB during the last five years, 41 tigers and 55 leopards were killed illegally in Maharashtra, exposing the threat of wildlife crime. The overall data shows that 168 tigers and 728 leopards died due to poaching, conflict, accidents, and natural causes. The highest tiger deaths occurred in 2023 (about 52), while leopard deaths peaked in 2021 (about 167) during lockdown-related forest closures. Table 1 shows the number of tiger poaching cases in Maharashtra state during the last five years.

Table 1: Number of tiger poaching cases identified in Maharashtra state (2021-2025)

Year	District-wise reported poaching cases	No. of poaching cases identified	Reasons behind tiger poaching
2021 to 2025 (During last 5 years)	Chandrapur	12	- Tiger body parts seized in Chandrapur Dist. - Retaliatory killing of a tiger in Yavatmal Dist. For claws & canines - Tiger body seized from Bhandara Dist. - Tiger skin were seized from Nagpur Dist. - Tiger body parts along with skin seized in Yavatmal Dist. - Tiger skin was seized from Amravati Dist.
	Gondia	8	
	Bhandara	7	
	Nagpur	6	
	Yavatmal	5	
	Melghat/Amravati	3	
Total:		41	

Source: NTCA, website: <http://ntca.gov.in/tiger-reserves/>

5. The Role of Tigers as a Guardian of the Ecosystem:

As a tiger, being an apex member of the food chain, can be considered an indicator of ecosystem stability. Conservation practitioners protect large apex hunters to maintain ideal interspecific interactions within predator groups, thereby benefiting rural socio-economies (Phuntsho et al., 2018). Tiger reserves safeguard rivers, absorb rainwater, and act as natural sponges for steady water flow (Verma et al., 2024). Observations show that without tigers, deer overpopulate, overgraze, and destroy plant diversity, collapsing the entire ecosystem. The role of apex predators like big cats is not just charismatic megafauna; they are essential components of a healthy, functioning ecosystem. The tiger is more than an impressive predator; it is the architect of its ecosystem, shaping landscapes and guarding balance. It is a much broader concept that requires the conservation of the entire ecosystem.

6. Reasons for Tiger Poaching in India:

Big cat poaching in India is determined mainly by the illegal wildlife trade, where tiger parts procure enormous prices in international markets, especially in China. Poor enforcement, cultural beliefs, and organized crime networks further nurture this crisis. The major reasons for tiger poaching in India are illegal wildlife trade, traditional medicine and cultural beliefs, organized crime and smuggling networks, weak enforcement and low conviction rates, socio-economic pressures, and the colonial legacy of trophy hunting. The IUCN (1967) proposed that nations control and restrict the import and export of all 'spotted cat' skins. India responded by banning the export of tiger and leopard skins in June 1968, except when carried as personal baggage or clothing

(Wright, 1969). Newspaper reports show that tiger poaching in India is driven by demand for skins, claws, bones, and teeth. Nails and teeth are most sought in local markets, while bones, flesh, and other parts are mainly seized in northern and eastern border states. These factors threaten tiger populations in India, emphasizing the need for continued conservation efforts.

7. Impact of Poaching on Wildlife:

Wild animal poaching disrupts ecosystems by removing keystone species, disturbing food chains, reducing biodiversity, and provoking trophic cascades that harm forests, rivers, and grasslands. Table 2 Showing impacts of wildlife poaching on forest ecosystems.

Table 2: Key impacts on wildlife ecosystem

Removes keystone species	Top-down regulation, once attributed only to predators, now includes many species across trophic levels, with keystone species playing vital, outsized roles in ecosystems (Sarah & John, 2018). Keystone species should be conserved because they have a disproportionate effect on the persistence of other species; they are truly 'keystone' species.
Disrupts Food Chain	Poaching pressure on food webs under multiple constraints remains an open problem in conservation. Field studies report that poaching alters food webs, as changes in one species' abundance affect others in the community (Berlow, 1999).
Disrupts Food Chain	Poaching pressure on food webs under multiple constraints remains an open problem in conservation. Field studies report that poaching alters food webs, as changes in one species' abundance affect others in the community (Berlow, 1999).
Reduces biodiversity	Animal poaching poses major threats to global biodiversity, causing irreversible ecological, economic, and social damage (Akash et al., 2023). Reduced biodiversity threatens smaller carnivores and herbivores.
Weakens genetic diversity	Poaching reduces genetic variability, tendering population viability through inbreeding depression and increasing vulnerability to random events (John et al., 1995).

Long-term impacts of the poaching problem may include genetic, physiological, and reproductive correlates, differing in size and age structure.

8. Law Enforcement & Policies on Illegal Wildlife Poaching:

India's fight against big cat poaching rests on strong laws like the Wildlife Protection Act (1972) and agencies such as the Wildlife Crime Control Bureau (WCCB). Wildlife offenses in India have become a serious threat, imperil biodiversity and undermining efforts to conserve the nation's rich ecological heritage. Table 3 Shows laws & policies against illegal wildlife poaching.

Table 3: Laws & Policies against illegal wildlife poaching

Wildlife Protection Act, 1972 (WPA)	Provides a legal framework to protect endangered species such as tigers, leopards, and lions. Poaching of big cats carries up to 7 years in jail and ₹25,000 fine.
Wildlife Crime Control Bureau (WCCB)	It was established in 2007 to combat wildlife trafficking; works with forest departments, customs, and police.
National Tiger Conservation Authority (NTCA)	The National Tiger Conservation Authority (NTCA), established in 2005 under the Environment Ministry, primary to strengthens tiger conservation in India.
International Big Cats Alliance (IBCA, launched 2023)	India launched the International Big Cats Alliance (IBCA) in April 2023 to mark 50 years of Project Tiger. It aims to conserve seven big cats Tiger, Lion, Leopard, Snow Leopard, Cheetah, Jaguar, and Puma with headquarters in New Delhi. Despite strong laws like the Wildlife Protection Act (1972) and treaties such as CITES, weak enforcement and barriers in implementation continue to threaten India's wildlife (Saxena et al., 2024).

9. Role of National Parks: Conserving Biodiversity

National parks in India conserve biodiversity, protect endangered species, preserve ecological balance, and encourage research, education, and ecotourism. Lawfully protected under the Wildlife Protection Act (1972), 106 parks cover over 44,000 km² nationwide (WII). National parks are planned to preserve a nation's wildlife, with emphasis on unique areas and keystone species (Molla, 2015). National parks in India protect keystone species, conserve habitats, balance ecosystems, and support livelihoods. Our country has 106 national parks, covering 1.23 percent of its area. The largest is Hemis National Park, Ladakh (3,350 km²), while the oldest is Corbett National Park. Madhya Pradesh hosts the maximum number (11), followed by Maharashtra (6). India has 515 wildlife sanctuaries, including 41 tiger reserves under Project Tiger (1973). The government has legislated effective laws for wildlife protection and conservation (Vikas, 2020). Wildlife conservation aims to protect keystone species and habitats, preserve nature, and involve government and NGOs in safeguarding biodiversity. India currently has an official 58 tiger reserves, which cover 84500 km². While Maharashtra state has six designated tiger reserves covering the Vidarbha and Western Ghats area. Table 4 shows major national tiger reserve parks in India and their tiger populations. Table 5 shows the national tiger reserve parks in Maharashtra State and the number of tigers.

Table 4: Major National tiger reserves in India

National Park	State	Area	No. of Tigers	Features	Established on
Jim Corbett Park	Uttarakhand	1288 km ²	266	India's first tiger reserve, highest tiger population (Project tiger)	1973
Ranthambore	Rajasthan	1411 km ²	88	Famous for tiger	1973
Bandhavgarh	Madhya Pradesh	1537 km ²	165	Highest tiger density	1993
Kanha	Madhya Pradesh	2052 km ²	129	Famous for bara Singha sp. conservation	1973
Sundarbans	West Bengal	2585 km ²	79	Famous for Mangrove habitat, swamp tigers	1973

Tadoba-Andhari	Maharashtra	1728 km ²	42	Famous for tiger & oldest & largest	1993
Melghat	Maharashtra	2769 km ²	30	Famous for tiger & first reserve	1973
Nagarjunsagar Srisailem	Andhra Pradesh	3296 km ²	76	Largest reserve in India	1982
Manas	Assam	2837 km ²	44	UNESCO World heritage site	1973
Periyar	Kerala	925 km ²	45	Famous for lake ecosystem	1978

Source: NTCA, website: <http://ntca.gov.in/tiger-reserves/>

Table 5: Major National tiger reserves in Maharashtra State

National Park	District	Area	No. of Tigers	Features	Established on
Tadoba-Andhari	Chandrapur	1728 km ²	42	Famous for tiger & oldest & largest	1993
Melghat	Amravati	2769 km ²	30	Famous for tiger & first reserve	1973
Pench	Nagpur	741 km ²	11	Tiger reserve	1977
NavegaonNagzira	Gondia & Bhandra	1305 m ²	6	Buffer zone & strong connectivity	1970
Bor	Wardha	138 km ²	15	Crucial for linking Tadoba & Pench	1978
Sahyadri	Kolhapur, Sangli, Satara	1165 km ²			2014

Source: NTCA, website: <http://ntca.gov.in/tiger-reserves/>

10. Wildlife Conservation Strategies in India:

India's big cat conservation strategies include a strong legal framework and designated protected reserves. Wildlife resources are primary to human survival and have long fascinated scientific attention. Occupying by increasing anthropogenic pressure and with several species endangered, effective conservation of wild faunal diversity is of critical ecological and evolutionary importance. Interactive management of wild and reserve populations helps habitat preservation, sustains endangered species, and advances zoos and aquaria as proactive conservation organizations (William, 1995). Several pivotal conservation strategies for big cats in India include: legal and Policy Framework, Protected Areas and Reserves, Species-Specific Programs, Community Participation, Technology Use (camera traps, drones, GIS mapping, AI), International Cooperation, and Education and Research. The implication of wildlife conservation extends beyond the ethical duty to protect species; it also encompasses sustaining ecosystems that provide essential services.

Conclusion:

The illegal poaching of wild cats in Maharashtra state raises a severe ecological and conservation problem, alarming the survival of iconic races such as tigers, leopards, and jungle carnivores. Illegal wildlife trading networks, driven by demand for skins, bones, canines, and other body parts, continue to fuel this menace, exacerbated by socio-economic pressures and weak enforcement. As apex predators, the declining population of wild big cats destabilizes prey populations and disturbs ecological balance, resulting in falling effects on biodiversity and forest health. Although India's Wildlife Protection Act (1972), initiatives like Project Tiger, and the establishment of the National Tiger Conservation Authority (2005) and Wildlife Crime Control Bureau (2007) provide a strong legal framework, enforcement in India, including Maharashtra state, is impeded by limited manpower, corruption problems, and porous boundaries. Local populations, often insecure to exploitation, can also serve as vital allies in conservation through awareness programs, ecotourism, and substitute livelihoods. In the future, a comprehensive strategy is essential to strengthening anti-poaching patrols; advancing coordination among forest departments, law enforcement, and NGOs; deploying technology such as close-circuit camera traps and drones; empowering communities with conservation-associated motives; and ensuring judicial efficiency in prosecuting wildlife crimes. Ultimately, battling illegal poaching in Maharashtra state is not only about conserving wild big cats but also about preserving ecological integrity and permanent sustainability, securing the majestic carnivore predators continue to thrive in the state's forests.

Acknowledgements:

I sincerely thank and gratefully acknowledge the support of Principal B. Raghunath ACS College, Parbhani, Maharashtra, India for facilitating academic research and student mobilization initiatives.

References:

1. AITE (2026). National Tiger Conservation Authority of India, Government of India.http://ntca.gov.in/aite/#field_guide.
2. Akash S. Chavan., E.D. Muley & S.R. Naphade (2023). Animal trafficking and poaching: major threats to the biodiversity, Jour. of Entomology & Zoology Studies, 11(5): 45-49. <https://doi.org/10.22271/j.ento.2023.v11.i5a.9231>.
3. Aurora Fredriksen (2015). Of wildcats & wild cats: Troubling species-based conservation in the Anthropocene, Sage Journals, 34(4). <https://doi.org/10.1177/0263775815623539>.
4. Andrés Ordiz., Malin Aronsson., Jens Persson., Ole-Gunnar Støen. (2021). Effects of Human Disturbance on Terrestrial Apex Predators, Diversity, MDPI, 13(2):68. <https://doi.org/10.3390/d13020068>.
5. Arian D., Wallach, Ido Izhaki., Judith D., Toms William J. Ripple., Uri Shanas. (2015). What is an apex predator? OIKOS, 124(11):1453-1461. <https://doi.org/10.1111/oik.01977>.
6. Berlow E.L. (1999). Strong effects of weak interactions in ecological communities, Nature.<https://doi.org/10.1038/18672>.
7. Bro-Jorgensen, J. (2013). Evolution of sprint speed in African savannah herbivores in relation to predation. Evolution, 67(11): 3371-3376.DOI: 10.1111/evo.12233.
8. Wildlife Institute of India. (2022). Status of Tigers, Co-predators & Prey in India, National Tiger Conservation Authority, Government of India, New Delhi, and Wildlife Institute of India, Dehradun.
9. Gaidhane D.M., Subhash M., Nikalje S.B. & Dandekar P.M. (2023). Animals Biodiversity of Tadoba National Park of Chandrapur, Maharashtra, India, IJRBT, 11(3):69-75.<http://doi.org/10.29369/ijrbat.2023.011.3.0010>.

10. George Nittu., Thekke T.S., Nanjanand K.N., & Ravendranathan Pillai S. (2022). The tide of tiger poaching in India is rising! An investigation of the intertwined facts with a focus on conservation, *GeoJour*, Springer Nat., 88: 753-766. <https://doi.org/10.1007/s10708-022-10633-4>.
11. Jhala, Y. V., & Sharma, D. K. (1997). Child lifting by wolves in eastern Uttar Pradesh, India. *Jou. of Wildlife Research*, 2(2), 94-101. <https://doi.org/10.11238/mammaliainscience.48.179>.
12. John S.K., James LD. Smith., Anthony M.S., & Charles W.M. (1995). The long-term effects of tiger poaching on population viability, *Conservation Biology*, Soc. For Cons. Bio., 9(5):1127-1133. <https://doi.org/10.1046/j.1523-1739.1995.9051116.x-i1>.
13. Johnson C. N., Balmford, A., Brook, B. W., Buettel, J. C., Galetti, M., Guangchun, L., & Wilmshurst, J. M. (2017). Biodiversity losses and conservation responses in the Anthropocene. *Science*, 356(6335):270-275. <https://doi.org/10.1126/science.aam9317>.
14. Jorgensen, C., & Holt, R. E. (2013). Natural mortality: Its ecology, how it shapes fish life histories, and why it may be increased by fishing. *Journal of Sea Research*, 75:8-18.
15. Molla Mekonnen Alemu (2015). Environmental Role of National Parks, *Journal of Sustainable Development*, 9(1):1-7. [10.5539/jsd.v9n1p1](https://doi.org/10.5539/jsd.v9n1p1).
16. Narendra G Chandewar (2024). Uncovering wildlife trafficking, poaching methods and law enforcement strategies in vidarbha region of central India: A comprehensive analysis, *IJCCSL*, 4(2):51-59. <https://doi.org/10.22271/27899497.2024.v4.i2a.93>.
17. Kemp, Galemba. Illicit trade and smuggling. Oxford Bibliographies. Available from: <https://doi.org/10.1093/OB/O9780199743292-0295>.
18. NTCA (2005). National Tiger Conservation Authority, Government of India. <http://ntca.in>.
19. Phuntsho T., Rajanathan R., James P.L., Stephen J.M., Paul D.C., Karl V. (2018). The ecological benefit of tigers (*Panthera tigris*) to farmers in reducing crop and livestock losses in the eastern Himalayas: Implications for conservation of large apex predators, *Biological Conservation*, ELSVEIR, 219:119-125. <https://doi.org/10.1016/j.biocon.2018.01.015>.
20. Pradhan M.S. (1997). Illicit Trade in Wildlife Species, Products And Derivatives In Maharashtra State, *Rec. zool. Surv. India*, 96(1-4): 195-210.
21. Robert J. Lennox, Jacob W. Brownscombe, Chris Darimont, Andrij Horodysky, Taal Levi, Graham D. Raby, Steven J. Cooke (2022). The roles of humans and apex predators in sustaining ecosystem structure and function: Contrast, complementarity and coexistence, *People & Nature*, British Ecological Society, 4(5):1071-1082. <https://doi.org/10.1002/pan3.10385>.
22. Sanjay Gubbi., Harish N.S., Aparna Kolekar., Poornesha H.C., Vasan Reddy & Madhusudan M.D. (2017). From intent to action: A case study for the expansion of tiger conservation from southern India, *Global Eco. & Conserv., ELSVEIR*, 9:11-20. <https://doi.org/10.1016/j.gecco.2016.11.001>.
23. Sarah L.H., & John L.K. (2018). Ecosystem-level effects of keystone species reintroduction: a literature review, *Restoration Eco., WILEY*, 26(3):439-445. <https://doi.org/10.1111/rec.1268>.
24. Saxena, Shalini; Sharma, Anurag; Chhabaria, Pallavi; Verma, Ashish; Mangaraj, Priyanka; Singh, Ramendra Pratap. (2024). Confronting Wildlife Crime In India: Challenges And Pathways To Effective Implementation, *Academic Journal*, 13(8): 3843. [10.11609/jott.9495.18.3.28524-28533](https://doi.org/10.11609/jott.9495.18.3.28524-28533).
25. Singh R, Sethy J, Chatrath D. (2023). Trends and patterns of illegal wildlife hunting and trading in Uttar Pradesh, India. *International Journal of Conservation Science*, 14(1): 307-316. [10.36868/IJCS.2023.01.21](https://doi.org/10.36868/IJCS.2023.01.21).
26. TOI (2025). 41 tigers & 55 leopards poached in Maharashtra over past 5 years: RTI data, *Times of India Daily News Parper* (dated. 26 Feb. 2026).
27. Verma V.K., Umesh Kumar & Archana Gupta (2024). *Ecology, Ethology, Environmental Science and Wildlife*, Thakur Pub. Pvt. Ltd., Lucknow, India.
28. Vikas Kumar Soni (2020). Wildlife Conservation in India: Issues & Challenges, *Journal of Interdisciplinary Cycle*, 12(10):796-802. https://www.researchgate.net/profile/Vikas-Kumar-Soni-2/publication/349098809_wildlife_conservation_in_india_issues_and_challenges/links/68c3b1209534473a6d4a2de7/wildlife-conservation-in-india-issues-and-challenges.pdf
29. WCCB, (Wildlife Crime Control Bureau), <https://moef.gov.in/index.php/wildlife-crime-control-bureau>.
30. William Conway (1995). Wild & Zoo animals interactive management & habitat conservation, *Biodiversity & Conservation*, 4:573-594. <https://doi.org/10.1007/BF00222515>.
31. WII (Wildlife Institute of India, Institute of the Ministry of Environment, Fores & Climate Change, Govt. of India. https://wiienvs.nic.in/Database/npa_8231.aspx.
32. Yadendra Dev V., Jhala, Ninand A.M., Rajesh G & Qamar Qureshi. (2025). Tiger recovery amid people and poverty, *SCIENCE*, 387(6733): 505-510. [10.1126/science.adk4827](https://doi.org/10.1126/science.adk4827).
33. Sunquist Mel & Sunquist Fiona (2002). *Wild Cats of the World*, The Uni. of Chicago Press, Chicago.
34. TOI (Times of India, Daily News Paper). (8th October 2024). Maha losing tigers, leopards to poachers. <http://timesofindia.indiatimes.com/articleshow/114023982>.