

CELEBRATING NATURE-CULTURE RELATIONSHIPS
A RELATIONAL PERSPECTIVE OF
SLOTH BEAR-HUMAN RELATIONS
IN THE HAMPI REGION OF
KARNATAKA

Submitted by Mohammed Hisham K



WCS-India



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Abhishek Gurudutt

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Bismillah

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ABSTRACT

What does it mean to live alongside wild animals such as sloth bears (*Melursus ursinus*)? In the Hampi–Koppal region of Karnataka, villagers share their everyday spaces, including fields, forests, shrines and footpaths, with these powerful and often feared animals. This report explores how people in this landscape understand, respond to, and coexist with sloth bears. It does so through an exploration of practical strategies, cultural narratives, beliefs, and ethical choices passed down through generations.

Based on three and a half months of ethnographic fieldwork involving interviews, informal conversations, and place-based walks, the study uncovers a deeply relational understanding of sloth bears. These animals are seen not only as wild creatures but at times as divine beings, or morally significant presences deserving of respect. Communities employ non-lethal and culturally grounded practices, such as travelling in groups, using fire, and avoiding going outside at night. These practices reflect both ecological awareness and an ethic of cautious coexistence.

The data were coded and thematically organized using QDA Miner Lite. This process led to the identification of three central themes: (1) Bears in the moral landscape; (2) Bear behaviour and movement in human spaces; and (3) Human responses to bear presence. These themes reveal how local knowledge and memory inform human–bear relationships in shared landscapes.

Rather than treating coexistence and conflict as binary opposites, the study presents a spectrum of interactions shaped by lived experience. It highlights the emotional, spiritual, and ethical dimensions that influence how rural communities manage their relationships with wildlife. By centering local perspectives, this research contributes to more inclusive and culturally informed approaches in conservation science, human–animal studies, and multispecies ethnography.

INTRODUCTION

SOCIO-ECOLOGICAL SURVEYS

Across South Asia, humans and animals have long co-inhabited landscapes shaped by shared ecologies, spiritual associations, and everyday negotiations (Aiyadurai, 2016; Dhee et al., 2019; Jalais, 2014; Locke, 2014). In India, animals such as monkeys, snakes, cows, elephants, and tigers are not only part of ecological systems but also cultural, religious, and moral beings. These relationships are often marked by ambivalence, combining reverence, fear, intimacy, and conflict and cannot be fully captured by conventional categories like "human-wildlife conflict."

In recent years, multispecies ethnography has provided a powerful framework to examine such entanglements, positioning animals as active participants in social worlds. This approach moves beyond viewing animals as mere symbols or ecological agents, and instead attends to their agency, affect, and moral presence (Haraway Donna, 2008; Kirksey & Helmreich, 2010). In the Indian context, Radhika Govindrajan's *Animal Intimacies* (Govindrajan, 2018) and Annu Jalais's *The Forest of Tigers* (Jalais, 2014) have demonstrated how rural communities engage with animals from monkeys to tigers through layered relations of care, danger, reciprocity, and memory. These works expand how we understand what it means to live with animals not as abstract species, but as remembered and situated beings.

Conservation science, by contrast, has historically taken decades to meaningfully engage with culturally informed ways of knowing, particularly in communities whose worldviews do not fully align with the frameworks of modernity (Pooley et al., 2017). However, there is now increasing recognition that human-wildlife relationships are far more complex than earlier conservation models acknowledged. They are shaped by emotional, moral, and social entanglements (Pooley et al., 2017). As a result, conservation itself is undergoing a paradigm shift. There is growing awareness that technocratic and managerial approaches alone are often insufficient (Dhee et al., 2019), in their work "The leopard that learnt from the cat," explore how rural communities in northern India engage with leopards not merely as threats, but as sentient beings endowed with memory, intention, and moral agency. Using ethnographic and interpretive methods, they highlight how local stories, beliefs, and lived experiences give rise to an ethics of coexistence rooted in place. These insights offer more than academic value, they are essential for developing conservation approaches that are culturally sensitive, socially just, and ecologically sound.

While there has been a growing shift in conservation and anthropology toward understanding human–animal relationships as emotional, cultural, and moral encounters (Dhee et al., 2019; Govindrajan, 2018; Jalais, 2014; Pooley et al., 2017), sloth bears (*Melursus ursinus*) have remained largely absent from these discussions. Their presence in both academic literature and policy debates continues to be limited (Dharaiya et al., 2023). In this landscape sloth bear known locally as *karadi* (ಕರಡಿ), they move not through a distant wilderness but across a mosaic of scrub forest, farms, shrines, canals, and village margins around Hampi, Karnataka. Their frequent incursions into fields and water sources make them an ideal case for examining how subsistence agriculture and everyday rural lifeways shape human–animal coexistence.



Figure 1: A painting at Chintamani cave in Anegundi showing the meeting of bear Jambavan with Rama, Sugriva, Hanuman, and Lakshmana | Mohammed Hisham K/WCS-India

In the villages around Hampi, sloth bears are not only part of the ecological landscape but also embedded in cultural and spiritual worlds. Local stories often link them to epic figures like Jambavaan and Hanuman, and associate them with regional deities. These layered mythologies shape how communities understand and relate to the bears in their midst.

Alongside these narratives, there are also widely circulated local stories, such as one about a woman being taken into a bear's den and another about leopards in the region being unusually aggressive, even cannibalistic. Some villagers speculate that such leopards were not native to the area but were introduced deliberately, possibly by the forest department or other actors, to instil fear and restrict access to certain forest patches. While the sources of these claims remain unclear, they reflect a local belief that fear-inducing stories may be used to serve territorial or regulatory agendas.

Despite these deeply embedded cultural meanings, there remains a significant gap in how sloth bear–human relationships are understood in conservation science and policy (Arun et al., 2022; Dharaiya et al., 2023). Much of the existing literature focuses on sloth bears primarily as a source of conflict, overlooking the nuanced, everyday practices and values that local communities use to coexist with them.

This study addresses a critical gap in both multispecies ethnography and conservation literature by centering human–sloth bear relations in this historically and ecologically significant landscape. Through local stories, spatial practices, and moral languages of encounter, it traces the seasonal movements and foraging behaviours of sloth bears as understood by farmers, fishermen, former hunters, forest guards, and temple caretakers, individuals whose daily lives are deeply entangled with the bears' presence.

In doing so, this research contributes to a more inclusive understanding of coexistence, one that foregrounds local knowledge, emotions, and narratives, and reveals how humans and bears co-construct each other's worlds through practices of becoming-with. The findings are explored through three central themes: 'Background: Bears in the moral landscape', which examines how sloth bears are woven into the cultural and moral fabric of the region through oral traditions, divine associations, poetic performances, and toponyms; 'Bear behaviour and movement in the human–bear interaction landscape', which focuses on how villagers perceive and understand the seasonal presence and habits of sloth bears; and 'Human responses to bear presence', which examines the diverse, culturally grounded strategies communities use to navigate risk, maintain safety, and foster coexistence.



Figure 2: *Naga kallu* (Snake stone) on the banks of the Tungabhadra River near Anegundi | Mohammed Hisham K/WCS-India

OBJECTIVE OF THE STUDY

This study aims to understand how rural communities in the Hampi-Koppal region engage with sloth bears through both observation and interpretation. It focuses on two key aspects: how villagers perceive and describe bear behaviour and movement within shared landscapes, and how they respond to bear presence through everyday practices, cultural narratives, and moral reasoning. By examining these dimensions together, the research offers a grounded account of human–bear relationships shaped by local knowledge, memory, and coexistence.

MATERIALS AND METHODS

This study is based on three and a half months of ethnographic fieldwork conducted between November 2024 and March 2025 around Hampi, Karnataka. It examines how local communities perceive, interact with, and live alongside sloth bears through a relational, multispecies ethnographic lens.

Participant observation formed the backbone of this research. The investigator lived in a village, participating in daily routines, attending local gatherings, and listening to informal conversations about bears and forest life. He also travelled to nearby villages and spent time in the fields with residents.

Semi-structured interviews were held with a broad cross-section of residents—farmers, herders, honey collectors, fishermen, forest guards, and former hunters to capture individual and collective experiences, ecological knowledge, and the moral and emotional dimensions of human–bear encounters.

Informal conversations unfolded in settings that people naturally gather in the evenings, at tea shops, fields where farmers kept watch over their crops, community meetings and canal sides where fishermen cast their nets. These chance exchanges yielded rich, spontaneous narratives revealing how residents cope with and make sense of living in bear-inhabited landscapes.

Place-based walks took the researcher alongside honey collectors and herders looking for beehives and fodder, and across groundnut fields at night, accompanying farmers on their nocturnal patrols. Along the way, participants pointed out sites of past bear visits.

In addition to these immersive methods, this study also attended oral traditions, poetic expressions, and mythological narratives. Stories of bears as divine forms, these poetic and mythic materials were treated not merely as folklore, but as frameworks through which interspecies relations are imagined, justified, and practiced.

All field notes, interview transcripts, and observational data were later coded and organised thematically using QDA Miner Lite, a qualitative data analysis software. This helped structure the ethnographic material into key categories. While advanced analytical features of the software were not used, the coding process facilitated the identification of recurring themes and relational patterns across multiple village contexts.

Together, these methods provided a deeply grounded, nuanced view of human–bear relations illuminating how everyday practices, spatial memories, and cultural values intertwine to shape coexistence in the forest-agriculture mosaic of Hampi.

STUDY SITE

This study was conducted in the Deccan plateau region of eastern Karnataka, focusing on areas in and around Hampi, across parts of the Koppal and Vijayanagara (formerly Bellary) districts. The landscape is characterized by a mix of rocky outcrops, agricultural lands, dry deciduous forests, and thorny scrub jungles, offering a shared habitat for both humans and wildlife, particularly sloth bears (*Melursus ursinus*).

The villages studied fall within the administrative units of Koppal Taluk and Gangavathi Taluk in Koppal, and Hospet Taluk in Vijayanagara. The region is broadly divided by the Tungabhadra river, which also marks an ecological and agricultural contrast. On one side lies the *Bayalu Seeme* or "Plain lands," where rain-fed farming is common, and red soil supports crops like groundnut, jowar, maize, and vegetables. Villages such as Halekumta, Husainpura, Rampura, and parts of Malapur, fall in this area.

On the other side, referred to as *Bhattada Naadu* or "Paddy land," canal irrigation supports widespread paddy cultivation. Villages here include Sanapur, Virupapuragaddi, Anegundi, Basapur, Mohammed Nagar, Rajarampete, and Narayanpete. These contrasting landscapes shape different patterns of human-bear interactions, both in terms of agricultural exposure and land use.

In the Vijayanagara district, the study included settlements such as Narasapura, Danapura, Khalagatta, Gudioblapura, Venkatapura, and Bukkasagara, where farming is centred around sugarcane, banana, groundnut, and vegetables.

The area hosts a culturally diverse population, primarily Hindu, with a significant Muslim minority and various Scheduled Castes and Tribes. Several tribal communities live in and around the study villages, including Nayaka sub-groups (Beda, Bedar, Naikda, Valmiki) in Vijayanagara and Dubla, Halpati, Gamit, Gavit, and Padvi in Koppal.



Figure 3: Map of India showing the location of the study site in Karnataka state

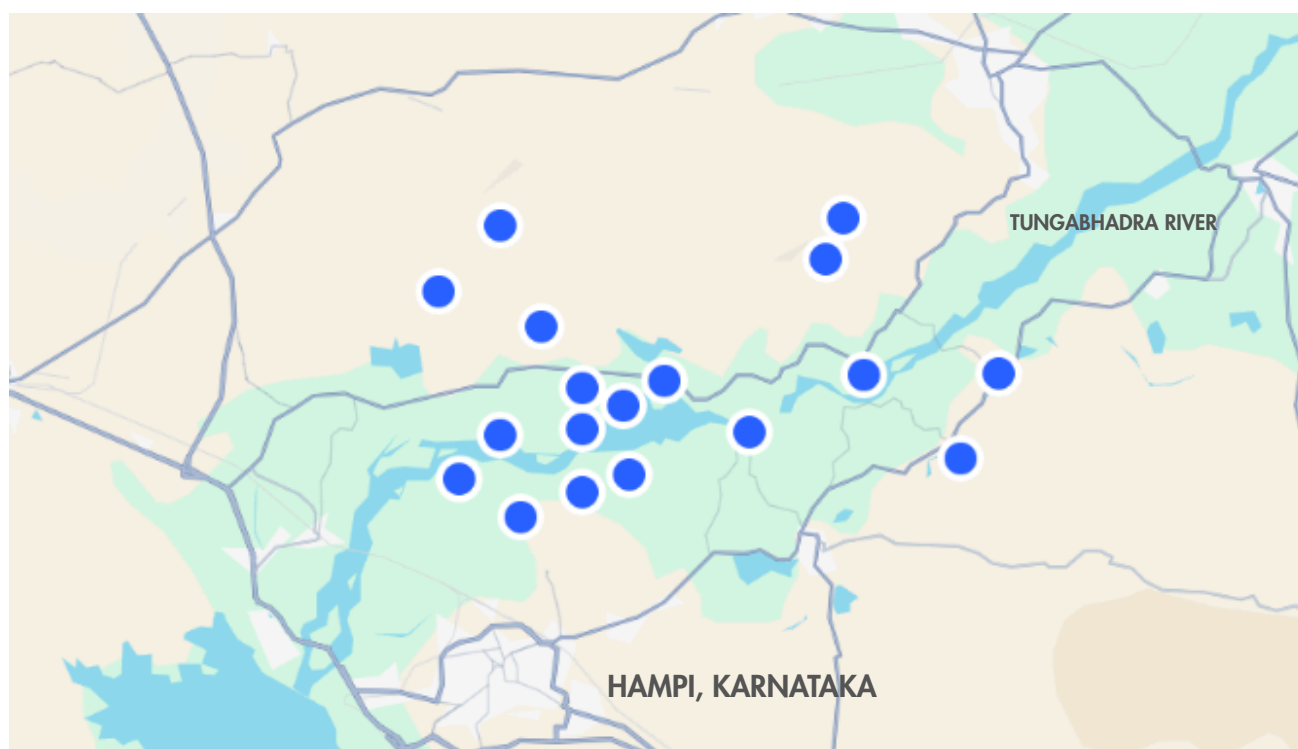


Figure 4: Villages where study was conducted on either sides of Tungabhadra River

FIELDWORK PROCESS

An initial visit to the field site was conducted during the first week of November 2024 to develop a preliminary understanding of the landscape and to begin establishing relationships with residents. Over four days, travelling across the area, particularly on the Koppal side of the Tungabhadra River, helped in identifying key field locations and forming early connections.

Fieldwork resumed on December 15, 2024. The initial phase involved exploratory visits and informal interactions with a range of community members, including farmers, fishermen, hunters, and forest guards. These engagements supported trust-building and helped identify villages where human–bear interactions are both frequent and culturally significant. Based on these insights, 17 villages located along both banks of the Tungabhadra River, spanning the Vijayanagara and Koppal districts, were selected as the primary field sites.

INTERVIEWS AND DATA COLLECTION

After receiving clearance from the Human Research Ethics Committee (HREC), 32 semi-structured interviews were conducted with individuals from diverse socio-economic and occupational backgrounds. A flexible questionnaire guided these interviews, focusing on historical connections to the land, lived experiences with sloth bears, and local narratives surrounding the species.

Audio recordings of all interviews and group discussions were made with participant consent. These recordings were later transcribed into English with the assistance of a field assistant whose mother tongue is Kannada. The assistant was from the local region, fluent in Kannada and Hindi and familiar with English, which substantially supported the transcription process. While most residents primarily spoke Kannada, individuals speaking Hindi, Telugu, Tamil, and Urdu were also encountered. Familiarity with Hindi, combined with the assistant's linguistic knowledge, enabled collaborative transcription by carefully listening to the audio, discussing contextual meanings of words and expressions, and ensuring accurate and culturally grounded translations.

DATA ANALYSIS

All field data, including interview transcripts, field notes, and observations, were organised and coded using QDA Miner Lite. The software was primarily used to code and categorise the material under key thematic areas such as cultural beliefs, shared-space practices, and narratives of fear and reverence.

Although the advanced analytical tools within the software were not utilised, the coding process enabled a meaningful structuring of the data. It supported the identification of recurring patterns, contrasts, and locally grounded interpretations across different villages and contexts.

The analysis followed an inductive approach, allowing themes to emerge from the data rather than applying predefined categories. These themes were then refined into three central areas of inquiry:

1. Bears in the moral landscape
2. Bear behaviour and movement in human spaces
3. Human responses to bear presence

This analytical process supported a nuanced interpretation of how local communities understand and negotiate their lives alongside sloth bears.

BACKGROUND: BEARS IN THE MORAL LANDSCAPE

The villagers around this region speak of bears as an animal having formidable strength and unpredictable ferocity with a mix of awe and respect. One elder hunter recounted that, although his father once hunted in these forests, bears were never harmed but were seen instead as sacred beings. Dreams of bears are said to bring good fortune. Through such stories and practices, sloth bears are woven into the local moral world through myths of divine strength, talismanic charms, cautionary legends, and poetic performances.

At Chintamani cave in Anegundi (Fig 1), villagers point to a site where, according to legend, lord Rama met Jambavaan the sloth bear and Sugriva. Within this cultural context, the sloth bear is not seen merely as an animal but often as an embodiment of Jambavaan himself. In local sayings, bears are also believed to be forms of Hanuman, or associated with regional deities such as Dharmasthala Manjunatha and Yellamma. These mythic associations create

a powerful moral landscape where bears are seen as divine or semi-divine actors, and their presence is interpreted through religious and historical memory.



Figure 5: Photo of a bear hair talisman collected from the field | Mohammed Hisham K/WCS-India

Families still recall the talismanic use of bear hair (Figure 5). When itinerant “bear players” toured villages with trained bears during festival times, they would distribute strands of bear hair tied into small charms. As famous poet D. R. Bendre records in his *Karadiya Kunittha* Kannada poem:

ಬಂದಾರೆ ಬರೆವ್ವ, ಕಂದನ ತರೆವ್ವ.
ಅಂಜೀಕಿ ಗಿಂಜೀಕಿ ಕೊಂದಾನ.
ರೋಮ ರೋಮಗಳಲ್ಲಿ ಭೀಮರಕ್ಷಿಯ ಬಲ
ಕೊರಳಾಗ ಕಟ್ಟಿರಿ ಒಂದಾನ

“Sisters, come hither and bring the babies
He shall kill all fears and worries.
Take a hair and tie it around the necks
For each carries the power of Bhima Raksha.”

By preserving a single strand of bear hair, villagers believed they carried a fragment of the bear's near-divine vigour, part protective charm, part sacred relic of Jambavaan's lineage.

Complementing reverence are forest-born legends designed to keep villagers safe. A widespread tale tells of a woman carried into a bear's den, her leg stripped bare by its tongue, only to be "sustained on wild fruits" until rescue. In some variants, a man also meets a similar fate. While many today admit these stories were exaggerated to deter solitary forest journeys, they still shape behaviour, young women nearly always travel in groups and villagers often advise that anyone regardless of gender should never enter the forest alone. Few villagers who are in need to go for forest products enter the woods after dawn, like herders typically complete their forest visits before evening, although some may go during the day to gather seasonal fruits. Both firewood collectors and livestock herders gather what they need- wood, fodder, or leaves well before nightfall.

In the same poem from another stanza bear appears as a cosmic witness, one who has seen the ages pass, from Rama and Krishna to the end of time:

ತ್ರೇತಾಯುಗದ ರಾಮನ್ನ ದ್ವಾಪರದ ಕೃಷ್ಣನ್ನ
ಕಲಿಯುಗದ ಕಲ್ಕೀನ ಕಂಡಾನ.
ಜಾಂಬು ನದಿ ದಂಡೆಯ ಜಂಬುನೇರಲ ಹಣ್ಣು
ಕೃತಯುಗದ ಕೊನೆಗೀಂವಾ ಉಂಡಾನ

"Rama of Treta Yuga, Krishna of Dwarapa Yuga
And Kalki of Kali Yuga-he has seen them all.
At the end of Kali Yuga-he was there too
Eating Jamun by the banks of Jambu river."

By linking the bear to all four ages (*Yugas*) and to the Jambu River of divine geography, the verse casts them as living bridges between mythic time and daily life. But more than a witness, the bear becomes a moral agent, one who walks in chains not for its own sake but for the well-being of others. In another stanza the author continued:

ಹೊಟ್ಟೆಗಿಲ್ಲದವರ ಹೊಟ್ಟೆಗೆ ಹಾಕಲು,
ನಡೆದಾನ ಪಡೆದಾನ ಬಂಧಾನ.
'ಕುಣಿಸುವವರ ಹೊಟ್ಟೆ ತಣ್ಣಗಾಗಲಿ' ಎಂದು
ಮುಗಿಲಿಗೆ ಕೈಮುಗಿದು ನಿಂದಾನ.

“To feed those unfilled bellies,
He walks accepting his chains.
“May the stomachs of those who make us dance be filled,”
He prayed to the skies, standing with folded hands.”

Through these lines, villagers understand the bear not simply as a subjugated creature, but as a spiritually aware being. It is one that prays for the villagers, especially for those who offer food for him and his master. In doing so, the bear assumes a mediatory role: it becomes a bridge between the community and the divine, offering prayers on behalf of those who care for them.

People described how, during performances, the bear would raise its paws as if in supplication. This gesture was echoed by the handler. These performances were not seen as mere theatrics but as sincere acts of prayer. In this view, the power of the bear lies not only in its physical strength but also in its capacity to channel divine blessings. It is a being who, though bound, holds spiritual agency.

These four narratives of strands mythic landscape, bear-hair talismans, cautionary lore, and poetic homage together form a unique moral framework. Here, the sloth bear is at once wild force, divine presence, and negotiating partner in a landscape where reverence and vigilance go hand in hand.

Across the region, small hillocks and granite outcrops are frequently named *Karadi Gudda*, literally, “Bear Hill.” This naming practice recurs across multiple villages, suggesting that bears have historically inhabited or been sighted around these rocky landscapes. Far from arbitrary, these place-names reflect a kind of cultural cartography shaped by interspecies encounters. Such names encode both memory and movement, indicating areas of past conflict, cohabitation, or seasonal foraging. In this way, the landscape itself becomes a living archive of bear presence, signalling how people have long navigated their terrain in relation to these animals. These toponyms and cultural tales form a living archive of interspecies memory and moral imagination.

Agriculture further intensifies these interactions. In the predominantly rain-fed “*Bayalu Seeme* - ಬಯಲು ಸೀಮೆ,” (meaning plain land), farmers cultivate groundnut, maize, jowar, and vegetable crops that attract foraging bears. Canal-irrigated “*Bhattada Naadu* - ಭತ್ತದ ನಾಡು” (paddy land) villages grow paddy adjacent to scrublands, making bear encounters part of their daily life. Crop cycles, beliefs, and spatial memory all shape an ongoing negotiation rather than a simple “conflict.”

BEAR BEHAVIOUR AND MOVEMENT IN THE HUMAN-BEAR INTERACTION LANDSCAPE

In and around Hampi, sloth bears, do not reside in a fixed wilderness but move fluidly across a mosaic of ecological and cultural terrains. The bear's landscape spans forest patches, farmlands, shrines, and village peripheries, spaces deeply embedded in human activity and memory. Rather than intruders from the "wild," bears are experienced by many local residents as expected, seasonal co-inhabitants of this environment. This section focuses on the behavioural ecology of sloth bears in the Hampi-Koppal landscape, based on oral histories and field-based conversations. Although I did not witness bears directly, local knowledge and observation of how people and bear live alongside one another reveals detailed and consistent patterns in their movement, diet, and spatial memory.



Figure 6: A goat herd in a harvested paddy field in the *Bhattada Naadu* ("rice country") region | Mohammed Hisham K/WCS-India

A LANDSCAPE OF MOVEMENT AND RESOURCE TRACKING

Sloth bears are highly opportunistic foragers, guided by shifting cycles of fruiting, cultivation, and ritual activity in temple offerings. Their movement is seasonal and responsive to both ecological and human rhythms.

- **Monsoon and Post-Monsoon:** During these months, the availability of termites and ants draws bears to the edges of farmland and scrub forests. Locals frequently observe them digging into termite mounds, cow dung piles or bunds, displaying remarkable sensory precision to take termites, ants, and other insects. As one forest watcher described, a bear could be seen “sucking out termites like pulling air through a pipe.”
- **Summer and Dry Season:** As crops dry and water becomes scarce, bear activity shifts to zones where sugarcane, jowar, corn remains or wild fruits ripen. Some retreat deeper into forest interiors or the nearby waterbodies, while others follow irrigation canals like those along the Tungabhadra, where fruit trees and crops remain accessible.

This movement shows that bears track resources across ecological and social terrains, showing a deep familiarity with human presence, agricultural cycles, and ritual spaces.



Figure 7: A Groundnut field in the *Bayalu Seeme* (open zone) region | Mohammed Hisham K/WCS-India

DIVERSE AND ADAPTIVE FORAGING PRACTICES

From farms to forests to shrines, bears feed on a wide array of cultivated and wild foods, including:

- Cultivated crops: Groundnut (*shenga*), sugarcane (*kabbu*), maize (*mekkejola*), tomatoes (*tamati*), bananas (*baale hannu*), and jowar (*jola*) form the core of their agricultural foraging.
- Wild fruits: Local fruits such as *batti hannu* (fig), *seetaphal* (custard apple), *chithra kayi* (ಚಿತ್ರ ಕಾಯಿ), *hulpe hannu* (ಹುಲೈ ಹಣ್ಣು), *bare hannu* (ಬಾರೆ ಹಣ್ಣು), *kare hannu* (ಕಾರೆ ಹಣ್ಣು), and *parale hannu* are commonly consumed by bears and foraged by local communities as well. Several respondents recounted seeing bears eating these fruits at the forest edge.
- Insects and invertebrates: Termites and ants form a crucial part of the sloth bear's diet. One forest watcher described a bear breaking open a mound and "sucking out termites like pulling air through a pipe." locals also noted seeing bears forage for insects in cow dung piles or digging into bunds for ant colonies in paddy fields.
- Oil from shrines: Bears are also drawn to the aroma of oil lamps lit in shrines located near forests and village peripheries. Their nighttime visits to drink oil left in *deepa* (lamps) illustrate how ritual practices and bear foraging intersect, producing new zones of multispecies interaction.

These foraging patterns highlight the sloth bear's ecological flexibility and its capacity to navigate human-dominated landscapes without being wholly dependent on forests. They move through a cultural landscape not as strangers, but as participants engaging with food sources from agricultural, ecological, and ritual alike.

They move through shrines, cultivation fields, water bodies, and scrublands as habitual users of space. Their movements often coincide with ecological cues fruiting seasons, water availability and oil offering in the shrines.

Importantly, these spaces are not viewed simply as "edges" of wild space. They are central zones of multispecies interaction, marked by seasonal rhythms, memory, and adaptation. In this co-inhabited landscape, bears are not entirely wild nor out of place. They are part of a shared spatial and temporal fabric that includes gods, crops, livestock, and people.



Figure 8: A lit *deepa* (lamp) at a Hanuman temple | Mohammed Hisham K/WCS-India

SENSORY ATTUNEMENT

Local account on bears capacity to smell

The sloth bears' sensory world is shaped predominantly by smell, and this is vividly observed in their interactions with village shrines and agricultural spaces. Across the region, small sacred sites known locally as *gudis* dot the agricultural and forest margins. Though constructed for human devotion, these shrines have become nocturnal waypoints for bears. Drawn by the scent of oil from earthen lamps (*deepas*) (Figure 8) lit as offerings to local deities, bears are seen entering these spaces after dark. The scent becomes a signal in a multispecies interaction where ritual and bear foraging converge.

These visits are predictable. In one anecdote, a family recounted how a bear broke into their uncle's home shrine at midnight, breaking locks to access the oil. While communities have responded by installing gates or fencing off shrines, the bears persist, adapting to human routines and returning regularly. As one of the shrine keepers from a Hanuman temple near a forest remarked with quiet resignation, "They don't do anything, they just go through here and we don't do anything."

Farmers also describe how the maturing of certain crops, especially groundnut, corn, attracts multiple animals, including sloth bears. As one farmer put it, “Once the groundnut matures, we start staying overnight in our *menchige* (field huts) to protect the crop, beyond shrines, bears are drawn to the smells of matured crops, especially good quality sugarcane and groundnut. Farmers note that sloth bears can distinguish ripeness by scent alone, selecting the most mature stalks. In areas with dense sugarcane fields or active cultivation, the bears’ olfactory preference often leads them to specific plots during harvest seasons.

Equally significant are their visits to jaggery processing sites and sugarcane factories. Several communities in the region spoke of bears being attracted to the scent of molasses and unrefined sugar. Although these visits are not daily, they occur periodically, especially when waste from jaggery production is discarded. Bears have been known to come sometimes in molasses dumping sites and even enter factory areas, where workers pour hot jaggery to solidify it. Along the edges of these areas, residual sweetness left on the ground or cooling slabs draws the bears in. These opportunistic visits reflect a highly attuned sensory strategy that enables sloth bears to locate ephemeral but energy-rich food sources embedded in human industrial activity.



Figure 9: Jaggery preparation at a local factory | Mohammed Hisham K/WCS-India

This olfactory attunement whether to oil, sugarcane, groundnut, or jaggery demonstrates the bear's capacity to navigate a hybrid landscape where ecological, agricultural, and devotional resources are interwoven. It also underscores a pattern of learned and remembered spatial behaviour, where bears return to resource rich sites shaped by seasonal rhythms and human labour.

This olfactory attunement parallels the bears' preferences for other sweet or fatty resources like sugarcane sap, palm toddy (*seendhi*), or ants drawn to jaggery in the shrines. This reflects a sensory-driven strategy that allows bear to navigate both ecological and devotional terrains with precision, revealing their capacity to detect, remember, and return to resource-rich locations shaped by humans.

Auditory and Visual Perception: Gesture, sound, and shared body language

While olfaction dominates local accounts, community members also describe how bears respond to sound and sight. Sloth bears are said to detect distant footsteps, human voices, or the flash of a torchlight and in many cases, they retreat before humans even notice them. However, posture and pace matter: walking calmly or speaking softly may lead to peaceful disengagement, while sudden movements or approaching during sensitive times, such as when a bear has cubs or during the mating season, can provoke defensive aggression.

These gestural and auditory exchanges form a kind of communicative boundary-setting, a shared behavioural grammar shaped by co-presence and mutual attentiveness. Locals learn to read bears' body language and vocalisations, just as bears appear to respond to human signals with calibrated caution. One farmer explained that if he walks along a path at night and hears the sound of a bear with cubs, he quietly changes his route. This mutual recognition underpins everyday tactics of avoidance, negotiation, and coexistence.

Understanding bear behaviour through local expertise

Forest-goers like Manjul Anna, who have spent decades moving through bear-inhabited terrain, offer nuanced insights into bear behaviour. According to him, sloth bears rarely attack without provocation. He outlines three common scenarios:

"When a bear is with her cubs, she feels threatened. About 90% of attacks happen then. She thinks we're coming for her babies, so she defends them fiercely."

“During mating season, you’ll see a female followed by four or five other males. They’re extremely agitated, so angry that they don’t know what they are doing. If you stumble upon one of them, they assume you’re there to attack and they strike first.”

“Finally, sometimes bears charge surprisingly. There’s a narrow path here by the tea shop wall where we sit,” he pointed out. “Because of that blind corner hidden by the building, you only see each other at the last moment. The bear thinks you’re charging at it and attacks in self-defence.”

These narratives point to maternal protectiveness, hormonal aggression, and sudden encounters as common behavioural triggers. Such interspecies interactions are shaped by ecological rhythms and embodied perception by both bears and humans resulting in everyday strategies of recognition, avoidance, and survival.



Figure 10: Bear scat on a rock beside a *Thupre Hannu* plant in the landscape.
(A fresh sign of bear presence, indicating foraging activity near the berry-bearing shrub locally called *Thupre Hannu*, a seasonal food source for sloth bears.) | Mohammed Hisham K/WCS-India

Tactile Intelligence and Foraging Skill

Beyond sensory perception, villagers attribute dexterity and tactical intelligence to sloth bears. Bears are described as peeling groundnuts by “pulling them forward” and neatly discarding the husks, or climbing and jumping down from coconut trees when trapped. Others recount how bears dig into termite mounds and “suck ants with a sarr sound,” demonstrating both strength and foraging finesse.

Community members also differentiate among the insects' bears consume. They name species such as *kari iruve* (large black ants) and *gorli mannu*, a type of ant pellet found inside termite mounds (*butta*), which the bears relish. These observations reflect a nuanced ethno-ecological knowledge and an appreciation for the bears' discriminating tastes and environmental awareness.

CHANGING LANDSCAPES, SHIFTING MOVEMENTS

In the villages along the Tungabhadra River on the Vijayanagara side, respondents reported little to no change in bear presence over the years. In these villages, where sugarcane and banana remain the dominant crops, sloth bears continue to visit as they did in earlier times. Both crops are attractive to bears and are raided by them; many farmers used to encounter them in the field.

In contrast, many older respondents from the Koppal side recalled that bear sightings were more common in previous decades, especially before major agricultural changes in the *Bhattada Naadu*. The shift from sugarcane to paddy cultivation less appealing to bears, has altered the local foraging landscape. As a result, bear presence has declined in these areas, but this doesn't mean bears have entirely abandoned this area; several farmers reported seeing them at night, especially when irrigating the land at night, they come to search for ants or termites rather than crops. But in the *Bayalu Seeme* region, like the Hampi side, people used to explain no change in bear presence, where diversified cropping, including groundnut, persists.

According to several respondents, individual bears appear to remember specific routes or fields, returning year after year when crops are ripe or oil is offered at shrines. This suggests a form of place-based memory in their foraging behaviour.

These shifts are uneven across the landscape. While some communities now report fewer bear encounters, others experience more frequent crop raids and shrine visits.

This variability reflects the ongoing fragmentation and reorganisation of bear habitats due to agricultural modernisation and changing land-use patterns.

Across these accounts, sloth bears emerge not merely as background fauna but as alert, adaptive co-inhabitants of the human-wild interface. From decoding oil-scented rituals to cautiously negotiating human presence through posture, voice, and light, their behaviour reflects both ecological intelligence and interspecies awareness. Local knowledge does not frame bears as not only rogue intruders but also as beings with memory, sensory precision, and shared spatial patterns. Attending to bear behaviour through the eyes of those who live with them offers not just insights into sloth bear ecology but a model for coexistence rooted in mutual recognition and familiarity.



Figure 11: View of *Bhattada Naadu* ("rice country") from a hilltop.

(Photo shows a wide stretch of paddy fields from the canal-irrigated region. In the distance, the Hampi area is visible, where banana and sugarcane are the main crops. A banana plantation can be seen at the far end, showing the shift from rice fields to the Hampi landscape.) | Mohammed Hisham K/WCS-India

HUMAN RESPONSES TO BEAR PRESENCE

Living alongside sloth bears in the villages around Hampi is not just about fear or avoiding danger, it's about sharing space with a wild animal in ways that are thoughtful, practiced, and shaped by generations of experience. People here have learned to read signs, adjust their behaviour, and use tools and senses to manage life with these animals. This section brings together the voices and stories of villagers, showing how they live with sloth bears not by trying to control them, but by staying alert, respectful, and aware.

SEEING BEARS AS PART OF THE PLACE

For many people in these villages, bears are not outsiders they are part of the same land. One day, I met Balakrishna Anna, a tourist guide near the Tungabhadra River. When he heard I was studying bears, he smiled and said, "Bears are our brothers." He told me about his house on top of a hill, where bears often come close, looking for termites. "We sleep inside the wall, they are outside the wall," he said. It wasn't fear in his voice, but familiarity.

Many villagers understand that bears are drawn to the same things as them like the smell of groundnut, jaggery, or molasses. One farmer explained how, when the groundnut is ready for harvest, they start sleeping in small, raised huts in the field to protect the crop. "That's when animals, even bears, come around," he said.

At a jaggery factory, people told me about how bears used to come to lick leftover jaggery and discarded molasses. These are memories that mix wonder with caution, showing how close and ordinary such encounters were.

USING FIRE TO PROTECT AND SIGNAL

Fire plays a big role in helping people feel safe. Villagers often carry sticks wrapped in cloth and soaked in kerosene or oil. When they see a bear, they light the stick not to harm it, but to scare it away. One man said, "Bears are scared of fire...they have a lot of fur, they think it will burn their fur." Even something small, like lighting a match or a beedi, can make a difference. One Banjara fisherman remembered how a lit beedi helped him escape a bear that came too close.

Fire is more than light, it's a signal. It tells the bear that a human is nearby. It gives people a sense of control, especially during sudden meetings in the dark.



Figure 12: A fisherman casting a net from a coracle in the Tungabhadra river | Mohammed Hisham K/WCS-India

CARRYING TOOLS FOR COURAGE, NOT VIOLENCE

When going into the fields or forests, people don't go empty-handed. They carry tools like sticks (*kattige*), axes (*kodali*), knives (*katti*), or special staffs with blades at the end (*kudugolu*). These tools help them do their work, but they also bring confidence. "If we carry the kudugolu, we feel stronger," one farmer said.

These tools are not meant to hurt bears. They are for clearing bushes, walking safely, or keeping a distance if a bear comes too close. People here know that the goal is not to fight the bear, but to stay calm and avoid harm for both sides.

DOGS AS WATCHERS AND PROTECTORS

Dogs are an important part of how villagers stay safe. They are not seen as only pets, but as working animals that help alert people when a bear is nearby. Their barking makes noise that can scare bears away and gives people time to react.

One farmer told me a story from about ten years ago. He was walking in his field at night and didn't see a mother bear and her cub near a termite mound. The bear attacked him, biting his leg. But his two dogs jumped in, one barking at the cub, the other going towards the mother. The chaos gave him a chance to escape. Though he was injured, he said clearly: "The dogs saved my life."

SOUND AS A WAY OF SHARING SPACE

At night, especially during harvest time, the fields become more alert. Farmers whistle, shout, clap, and sometimes play radios or beat drums but not all the time, only now and then, sporadically. These sounds are often made along with shining flashlights while checking their fields. They aren't just random noise they're messages saying, "I'm here." They let animals like bears know that people are nearby.



Figure 13: A *menchige* (watch hut) in a groundnut field.
(This small surveillance hut is built in a groundnut field to help farmers keep watch over their crops, especially at night, to prevent damage from wildlife such as sloth bears.) | Mohammed Hisham K/WCS-India

I remember sitting with a groundnut farmer in his *menchige* (*watch hut*) one evening as the sky darkened. Soon, sounds echoed from different nearby fields, the whistles and calls of “choo-choo,” “shu-shu-kurre,” and different sounds even from my own field. Sometimes farmers light firecrackers, even when no animals are visible, just to announce their presence. One farmer explained, “We keep making noise, so they don’t come too close.”

In some places, people beat local drums like the *tamate* or *tapdi* throughout the night. The steady rhythm acts like a sound fence, helping both humans and animals avoid accidental encounters.

MODERNISATION AND CHANGING PATTERNS

Over the years, life in the village has changed, and so have bear movements. In the past, when there were fewer houses and no electric lights, bears used to come right into the yards, sometimes even drinking oil from local shrine lamps. One farmer remembered, “Back then, bears would come into the yard. But now, every corner has lights, houses, resorts, steel doors on shrines. They don’t come into the village like before.”

Now, most bear encounters happen near the forest edges or in farmland. People use flashlights at night, and when someone sees something, they shout or flash the light to warn others. The system works like an alert chain one light followed by another.

Modern things like electricity, stronger house doors, and new buildings have pushed the bears a bit further from homes. But the deep attentiveness, the night sounds, the fire, and the tools they still remain part of everyday life.

Living with sloth bears in this part of Karnataka is not a matter of conflict or conquest. It’s a daily practice of attention of listening to sounds, watching for signs, and understanding when and how to respond. People don’t see themselves as helpless or as heroes. They are neighbours sharing a landscape, learning how to stay safe, to warn, to retreat, and sometimes, simply to coexist.

This way of life isn’t built only on rules or technologies. It is built on embodied knowledge, on knowing when groundnuts ripen, on how firelight flickers, on the rhythm of barking dogs, and on the courage a simple walking stick can give.



Figure 14: In the evening light, a goat herd makes its way back to the village along a path that runs beside the forest, with distant streetlights glowing near human settlements | Mohammed Hisham K/WCS-India

DISCUSSIONS

This study contributes to ongoing conversations in multispecies ethnography, human-animal studies, and conservation science by offering grounded insights into how rural communities in the Hampi-Koppal region navigate coexistence with sloth bears. Drawing from theorists such as (Anna Tsing, 2015), (Ingold, 2002), and (Kirksey & Helmreich, 2010), who emphasise relational, co-inhabited worlds, this research shows how coexistence is not a static ideal but a set of lived and negotiated practices.

Rather than framing conflict and coexistence as binary opposites, the villagers' experiences reflect a dynamic continuum of responses shaped by beliefs, memory, seasonality, and shared space. While people recounted fear, crop damage, and even personal injury, these

narratives were often accompanied by expressions of understanding or acceptance. This ethic of restraint, even after negative encounters, demonstrates a nuanced approach to human-animal relationships.

Communities use a repertoire of non-lethal strategies such as making noise, using fire or torches, travelling in groups, and avoiding forests at night to minimise risks. These are not just survival tactics; they reflect generational ecological knowledge, shaped by direct interaction with the landscape and its more-than-human inhabitants. This aligns with (Berkes et al., 2000), who describe traditional ecological knowledge as an adaptive, evolving system informed by lived experience.

As (Bhatia, 2021) argues, coexistence should not be understood merely as “negative coexistence,” or the absence of violence, but also as “positive coexistence,” where humans and nonhumans intentionally and respectfully share space. The strategies used by the villagers reflect the latter. They embody an ethic of cautious familiarity, teaching younger generations how to move through shared environments with awareness, not hostility.

These findings also have direct implications for conservation science and policy. Conservation in India has often followed top-down, technocratic models focused on managing threats or excluding human presence. In contrast, the coexistence practices documented here illustrate a community-led conservation ethic, built on moral restraint, situated knowledge, and emotional attunement. This resonates with the work of (Dhee et al., 2019), who document similar narratives in northern India, where communities coexist with leopards a carnivore by drawing on culturally embedded ethical frameworks.

Together, these insights challenge dominant conservation narratives that position local communities as either victims or threats. They invite a reimagining of conservation models that value coexistence as an everyday practice, rooted in both emotion and ecology.

CONCLUSION

Coexistence with sloth bears in the Hampi-Koppal region is not a romantic notion but a lived, practical reality shaped by risk, memory, and mutual adaptation. Villagers alter their behaviour by avoiding forest entry after dark, staying alert, and traveling in groups. Bears, too, adjust their movement patterns to avoid humans. Over time, both species have learned to share the landscape through subtle forms of negotiation.

This study shows that coexistence is not merely about preventing attacks. It is about relational knowledge of place, species behaviour, and ethics. The actions of the villagers reflect a deep awareness for the bear's presence, where fear, caution, and care are not contradictions but coexisting responses.

By centering lived knowledge, ethical restraint, and relational engagement, this study contributes to scholarship in multispecies ethnography, conservation science, and human-animal relations. It argues for more inclusive and respectful conservation approaches that recognize local ways of knowing and being with wildlife, especially in human-dominated landscapes where rigid boundaries between nature and culture no longer hold.

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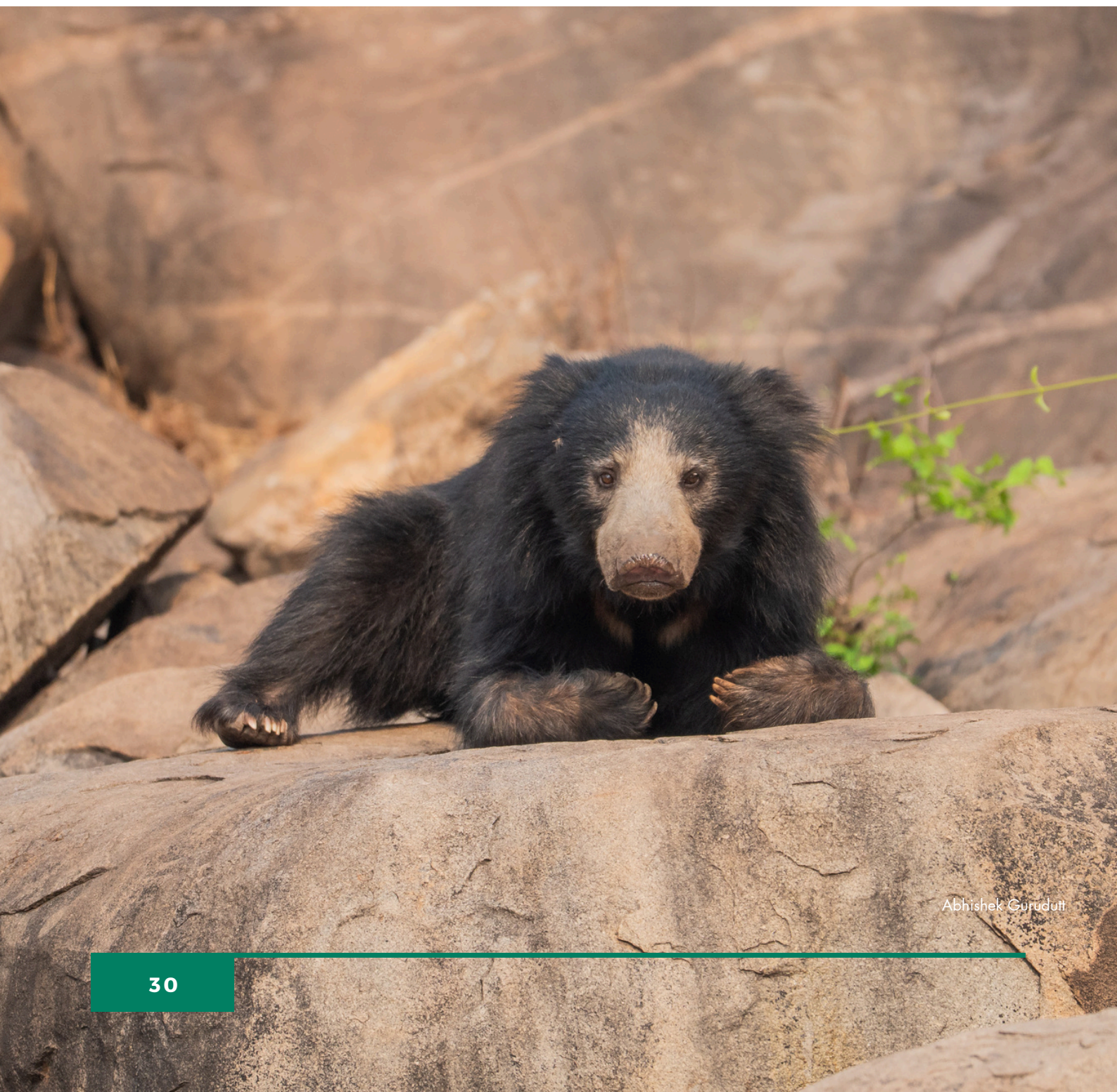
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Abhishek Gurudutt

