

## Renegotiating citizenship: stories of young rhinos in Nepal

Michelle Szydłowski 

University of Exeter, EASE working group, Exeter, UK

### ABSTRACT

Nepal has linked protection of endangered rhinos to nature-based tourism and poverty reduction. Successful anti-poaching and conservation campaigns have resulted in increases in tourist numbers and rhino populations, which in turn have increased incidences of human and rhino casualties in the areas surrounding Chitwan National Park. Thanks to Nepal's National Trust for Nature Conservation, orphaned or injured rhinos are transported to facilities where they can safely recover or mature. This paper suggests the use of a posthuman and symbiotic ethics view of multispecies communities to challenge normative ethical assumptions on animal 'rescue.' It tells the stories of rhinos raised at the NTNC campus, who became celebrities as well as tourist attractions. These rhinos regularly transgressed both human- and other rhino-imposed boundaries. Their stories offer insight into the struggles of wild individuals who find themselves thrust into increasingly anthropogenic areas, and the ways in which rhinos and humans adapt to shared landscapes.

### ARTICLE HISTORY

Received 20 December 2021  
Accepted 19 October 2022

### KEYWORDS

Nepal; rhinoceros; nature-based tourism; posthumanism; anthrozoology; symbiotic ethics

## Introduction

Nepal is among the world's poorest nations but has the impacted global conservation of biodiversity by designating nearly a quarter of their land mass as protected areas (PA) (National Trust for Nature Conservation [NTNC], 2019). Nepal boasts 208 mammal species, 25% which are endangered, in 118 distinct ecosystems representing a variety of altitudes and climates (Jnawali et al., 2011). In these diverse landscapes resides the Greater One-Horned Rhinoceros (*Rhinoceros unicornis*, henceforth rhino). Currently listed as vulnerable by the International Union for the Conservation of Nature, this species was downgraded from endangered thanks to focused conservation efforts in both India and Nepal (Ellis & Talukdar, 2019). In fact, numbers in Nepal have quadrupled since the 1970s, reaching 645 individuals at last census (Ghimire, 2020).

This rebound has resulted in increasing rhino-human interactions and rising numbers of orphaned rhinos due to predation of mothers, natural disasters, and abandonment related to human activity (e.g. tourism and human provisioning) (Government of Nepal [GoN], 2015). Because the government and local communities are committed to wildlife protection, such individuals are transported to protected facilities where they

**CONTACT** Michelle Szydłowski  michelle@szyd.me  University of Exeter, EASE working group, Exeter, UK

© 2022 The Author(s). Published by Informa UK Limited, trading as Taylor & Francis Group  
This is an Open Access article distributed under the terms of the Creative Commons Attribution-NonCommercial-NoDerivatives License (<http://creativecommons.org/licenses/by-nc-nd/4.0/>), which permits non-commercial re-use, distribution, and reproduction in any medium, provided the original work is properly cited, and is not altered, transformed, or built upon in any way.

can grow and recover without threat of predation or poaching. What follows are the stories of three injured or orphaned rhinos. Taken to facilities for protection and medical care, these rhinos became must-see attractions for tourists and locals alike. As they grew, they often escaped facility boundaries and wandered through town, frequenting local farms and gardens. These wanderings were greeted by a mix of concern, anger, and joy by townspeople and tourists. At times, they found themselves surrounded by vehicles and crowds, and unsurprisingly charged when approached too closely. These rhinos moved beyond their human-designated boundaries, and their stories offer insight into the struggles of wildlife who are thrust into human-dominated landscapes or unusual multispecies communities.

## Methods

Information was collected through semi-structured face-to-face interviews with community members, nature guides, tourists, National Trust for Nature Conservation (NTNC) staff, and government employees. These interviews consisted of open-ended questions with participants chosen using a purposive sampling method. Information was collected regarding animal biographies, medical procedures, prognoses, treatment plans, and oversight. These interviews also gathered community perspectives on free-ranging wildlife cared for by the NTNC, and on the NTNC's motives and methods in providing care. Interviews were recorded to allow for narrative analysis. Additional material was drawn from participant observations of community members including orphaned, free-ranging, or captive rhinos. Ad hoc interviews took place following rhino-human interactions. Follow up data was collected via email and messaging applications for a year following fieldwork.

## Frameworks

Communities, such as those examined herein, are complex and constantly evolving. Deleuze and Guattari (1987) refer to such communities as 'becomings,' in which different organisms 'create new ways of being and knowing' through their interactions (Guia & Jamal, 2020, p. 3). These 'becomings' evolve further when individuals whose *Umwelt* (von Uexküll, 1934/2010), or way of perceiving their environment, differs from that of other community members. Derrida and David Wills (2002, p. 399) describes such communities as a 'multiplicity of the living,' in which it is impossible to dissociate individual organisms from the whole of 'life.' These organismic associations remain despite repeated human attempts to employ language which situates them above or outside 'other' taxonomic groups (Derrida & David Wills, 2002; Hill et al., 2022). Thanks to the complexity of such multispecies communities, it is necessary to use frameworks that intersect several philosophical and theoretical viewpoints. Herein, I propose the use of posthumanism and symbiotic ethics to better examine the interplay between nature-based tourism, rhino conservation, and human-wildlife conflict within multispecies communities.

Posthumanism, according to Cohen (2019, p. 416), seeks to 'erase the human-animal divide,' and may provide a useful tool for tourism and conservation studies. Posthumanism problematizes long-held beliefs surrounding the perceived rights of humans to

practice tourism which ‘uses’ animals as objects (such as elephant-backed safaris, dolphin shows, and zoos). In addition, it problematizes the ethical assumptions surrounding the benefits of tourism for communities, and forces researchers to consider whether humans remain the primary (or sole) beneficiaries (Cohen, 2019). Posthumanism challenges us to reconsider the intrinsic value of sentient individuals, rather than simply their value to humans; it attempts to shift the focus from exploitation to ‘coexistence and mutual dependence’ with other species (Genç, 2019, p. 3). Rather than focusing on humanism’s ‘resentment or domination’ of other species, posthumanism approaches interspecies relationships with affirmation and acceptance (Guia & Jamal, 2020, p. 3). Posthumanism asks us to reconsider tourism and conservation practices through a lens of environmental (or ecological) justice, acknowledging, as Thomsen et al. (2021, p. 2) propose, that humans have a ‘moral responsibility to care for the environment and the wildlife that inhabit it.’

Likewise, theories useful in examining multispecies communities require some risk-taking which extends beyond simple engagement, and transects multiple academic fields (Whatmore, 2006). They require novel approaches including ‘more-than-human modes of enquiry’ (Whatmore, 2006, p. 607), such as those found in anthrozoological practice, especially that of ‘anthrozoology as symbiotic ethics’ (EASE, 2016). This concept first focuses on a recognition that two (or more) beings function not necessarily to the benefit of both, but simply in ‘close association’ (North, 2018:np). Symbiotic ethics requires that we reject human exceptionalism, especially when undertaking multispecies research. We should instead consider the ‘relative ethical significance’ of individuals, especially their risk of harm ‘at the moment of observation’ (North, 2018:np). The relative ethical significance of the individual, in these cases, takes precedence over that of their (or other involved) species. This significance comes into play within Nepal when conservationists attempt to rescue, rehabilitate, or preserve native species.

Symbiotic ethics further demands respect for all research participants as ‘autonomous subjects’ with unique perspectives, equally worthy of ethical consideration regardless of species (EASE, 2016, p. np). Symbiotic ethics may be a useful tool in re-examining tourism, human-wildlife conflict (HWC), and coexistence alongside posthumanism. Symbiotic ethics and posthumanism both encourage critical reflexivity (Murdoch, 2004) and address outdated concepts of a nature-human divide to avoid anthropocentric bias in tourism research. Furthermore, both symbiotic ethics and posthumanism embrace data collection which extends beyond human speech or writing and into ‘other sensory, bodily, and affective registers’ (Whatmore, 2004, p. 1362). Both encourage the use of Deleuzian affective, intuitive, or affirmative methodologies which help researchers avoid traditional anthropocentric approaches (Guia & Jamal, 2020, p. 3). These methodologies are especially helpful in multispecies ethnography, as they can decrease our reliance on spoken language as the only way to ‘communicate’ with participants. They allow us to attend to our sensory experiences and those of our participants, forcing us to reconsider ‘what forms of intelligence, truth and expertise count’ (Lorimer, 2013, p. 62). These methods allow us to examine assemblages, ignore boundaries (e.g. a researcher/researched binary), embrace embodied knowledge, and allow for the inclusion of non-verbal physical and emotional reactions (Lorimer, 2013; Whatmore, 2004). As such, symbiotic ethics and posthumanism ask us to move beyond human-imposed perceptions of where, when, who and how one is allowed to ‘be.’ In Nepal,

these perceptions are being challenged; perceptions of what it means to be a conservationist, a rhino, an endangered individual, and a community member.

## A brief environmental history of Nepal

Nepal has not always focused on biodiversity conservation, especially in the Terai Arc Landscape (TAL) which lies along the southern border. Initially sparsely populated only by Indian nationals or indigenous communities, this area was considered uninhabitable by outsiders thanks to its wide expanses of hard to defend land and the presence of malaria-bearing mosquitos (Brown, 1996). The area's inhospitable environment is likely responsible for keeping the British East India Company from officially colonizing Nepal as they worked their way across the sub-continent (Brown, 1996).<sup>1</sup> Following the eradication of malaria<sup>2</sup> in the Terai during the 1960s, widespread human migration displaced a variety of other species (Mishra, 2008). Floods and crop failures led the Nepalese monarchy to institute emergency relocation programs for poverty-stricken villagers, sending them onto the now-inhabitable TAL. Further anthropogenic pressures arose from the wide-scale immigration of Indian laborers and the return of military personnel from Burma (Myanmar). Due to political unrest, swelling populations, and a lack of structured local government during this period, vast swaths of forests were haphazardly cut or burned for grazing, wood products, and agriculture (Whelpton, 2005). These actions decimated forests; 65% of the land cover was lost, along with a large amount of fauna (Mishra, 2008, p. 55). In what is now Chitwan National Park (henceforth CNP), the number of wild elephants fell below 200 individuals, and rhinos below 65 (GoN, 2015; Yadav et al., 2015).

## Using tourism to save rhinos

Fearing mass extinctions, King Mahendra declared that the key to rhino conservation and human poverty-reduction lay in linking the two, and quickly adopted the armoured-looking Greater One-Horned Rhinoceros as a symbol of Nepal (Mishra, 2008). To support increasing demand for nature-based tourism, Nepal designated twelve national parks and thirteen buffer zones (Bajracharya & Dhakal, 2018, p. 32). Multitudes of threatened species reside within these PAs, which also happen to be the very locations which draw the greatest number of tourists (GoN, 2015). CNP, for example, is home to 37% of the country's mammals, and 65% of its birds (GoN, 2015, pp. 2–8). Visits to CNP jumped from just 6000 in 1962–70,000 by 1970 (Bhattarai et al., 2005, p. 672); currently, 60% of international tourists visit Nepal's PAs (Dhakal, 2018, p. 21). Nature-based tourism in Nepal reached an all-time high prior to the outbreak of COVID-19, with almost 430,000 tourists visiting PAs in 2018 (GoN, 2020b). The government launched a campaign hoping to welcome even more tourists, anticipating 2 million in 2020 (GoN, 2020a; Nepal Tourism Board, 2020). These efforts fell short, however, following the COVID-19 outbreak.

This use of nature-based tourism to attract conservation funding into environmentally fragile areas under the guise of saving endangered species is a much-debated topic. Some suggest it serves to 'protect entire wildlife populations' (Stronza et al., 2019, p. 231), or increase survival for endangered species (Buckley et al., 2016). Others claim these

efforts are little more than ‘marketing tactics,’ luring tourism consumers into falsely believing they are saving wildlife or wild spaces (Wondirad, 2019, p. 1059). Buckley (2011) suggests that linking ecotourism to PA finances and management may inadvertently lead to neoliberal practices such as removing conservation areas from local community use and instead offering them (and their subsequent financial gains) to private stakeholders. These stakeholders often represent higher socio-economic tiers, foreign interests, or national rather than local communities (Castree, 2008). Others suggest that such expansions of neoliberal practices are not accidental, claiming that operators wilfully create the perception that nature-based tourism supports local communities or offers stakeholders workarounds to ineffective government oversight (Castree, 2008; Fletcher, 2009). The true impacts of tourism are difficult to measure thanks to the unique social, political, and environmental characteristics of each location (Hughes & Carlsen, 2008), but it is likely that communities experience both positive and negative effects (Newsome & Hughes, 2016). What is missing from these debates is any consideration of the perspectives of other stakeholder species (e.g. see Kopnina, 2016). An examination of tourism’s benefits using posthumanism and symbiotic ethics might help balance the equation, providing less anthropocentric views of tourism’s beneficiaries (and potential victims) (Cohen, 2019).

Since Mahendra’s call to link tourism to conservation, tourism dollars have been perceived as key to protecting natural areas, reducing poaching, and promoting research (NTNC, 2019). These efforts have resulted in perceived benefits to rhinos in the form of increasing population numbers and decreasing poaching. However, despite the success of similar programs in other countries (see Newsome & Hughes, 2016; Oglethorpe and Crandall, 2010), Nepal has not achieved its anticipated positive outcomes for human poverty reduction. Studies over a 20-year period showed that income from nature-based tourism had little or no effect on local household finances (Bookbinder et al., 1998; Puri, 2019). Rather, tourism income was funneled to international interests, residents in the highest socio-economic tiers, and agencies in larger cities.<sup>3</sup> Still, governments continue to tout the benefits of nature-based tourism on local income (GoN, 2015).

While populations of certain species are thriving, the pressures of nature-based tourism on Nepal’s biodiverse areas have been of increasing concern to biologists for two decades (Bhandari, 2012; Subedi & Devlin, 1998). Studies warn of increasing environmental damage, loss of biodiversity and negative impacts on the health of wildlife, while recognizing the perceived benefits of tourism on conservation funding and sustainable development. There is a pressing need to balance tourist demands and sustainable development with environmental and species protection (Bajracharya & Dhakal, 2018).

### Challenges to rhino conservation

Conservation and anti-poaching campaigns have led to a much-celebrated increase in rhino numbers (Ghimire, 2020). However, increasing rhino populations coupled with the limited footprint of PAs and anthropogenic pressures such as refuse, disease transmission, and human disturbance have also resulted in increasing numbers of rhino deaths (2020). Between 25 and 43 rhinos have died annually since 2016, significantly more than in previous years (Ghimire, 2020; Mandal, 2019). While these deaths are

often attributed to ‘natural causes,’ veterinarians explain that necropsies are rarely undertaken.<sup>4</sup> In fact, necropsies were not performed on 79% of the deaths between 2016 and 2019 (Mandal, 2019). Numerous fatalities have been attributed to territorial fights caused by overpopulation, and from falls into septic tanks or wells (Mandal, 2019). Several rhinos have been (presumably) unable to extricate themselves from the river during monsoon floods, and their bodies found only as water receded (Subedi et al., 2017). Only a few of these deaths are officially attributed to ‘disease,’ but there is concern that transmissible bacterium (e.g. tuberculosis, anthrax, brucellosis), from livestock or captive wildlife is increasingly to blame (Mikota et al., 2009; Thapa et al., 2016).

Along with threats of zoonosis, human migration continues to impact the Terai and its wildlife, with growth estimated to persist at the rate of ~1.25 million every five years (GoN, 2014). The rise in human numbers has led to competition for natural resources and increasing rhino-human conflicts. In addition, Nepal’s rhinos are facing a rapid loss of habitat due to several invasive plants, including the *Mikania micrantha* vine (Jnawali et al., 2011). Dubbed the ‘mile-a-minute’ weed for its ability to grow over three inches daily, this plant suffocates native flora and now envelops 44% of all rhinoceros habitat within CNP (Murphy et al., 2013, p. 361). Growing numbers of rhino and shrinking areas of suitable habitat have resulted in a variety of issues, such as increased consumption of human crops by grazing rhinos<sup>5</sup>, and rising conflicts from human incursions (legal and illegal) into protected rhino grazing areas.<sup>6</sup>

These pressures have resulted in the need to relocate a growing number of injured or orphaned wildlife to NTNC facilities around the country. As Nepal’s wildlife management organization, the NTNC is tasked with the care of injured or dangerous wildlife<sup>7</sup> and typically has members of numerous species in residence. Wildlife is housed in a variety of enclosures while awaiting re-release or transfer. Human caregivers at these locations have decades of experience rehabilitating wildlife and have successfully released everything from leopard (*Panthera pardus*) to chital deer (*Axis axis*) (NTNC, 2019). Individuals of different species are often grouped, housed, and raised together, both to ease the number of personnel required and to create communities for what staff calls ‘friendship’ and opportunities for ‘play.’ Many of these animals, especially commonly orphaned boar (*Sus scrofa*) and deer species, are later released (individually or in pairs) near local villages, where humans are encouraged to feed and protect them until they choose to move off.

## Orphan stories

However, none of these orphans have caught the public’s attention more than rhinos. According to van Dooren (2015), an animal’s charisma, nativity and rarity often result in greater protection by political, economic, and scientific interests. The juvenile rhinos residing at the NTNC’s Biodiversity Conservation Center (BCC) are exceedingly charismatic and rare, and as such have captured the attention of locals and tourists alike. While these orphaned rhinos are enclosed at night for their safety<sup>8</sup>, they roam freely during the day, passing between office buildings, staff housing and the rest of the campus. This facility is not completely fenced, and rhinos often choose to cross the river into the PA or onto the streets of town. Many of these rhinos have navigated their anthropocentric upbringing and been returned (or have self-released) into the

national park. However, others have proven un-releasable thanks to their early experiences with humans and have been relocated to the Central Zoo, 'gifted' to other countries, or been otherwise permanently contained (discussed below).

There is a disconnect between the discourse and practice of staff involved in the care of these rhinos. They purport a desire to limit human (touristic) contact with juvenile rhinos, to prevent habituation resulting in an inability to survive in the wild, or a reliance on human provisioning and a refusal to leave. However, the area is easily accessible to tourists, and the area surrounding the camp is a popular walking trail. Juvenile rhinos raised at the BCC are regularly petted, fed, chased, and photographed by tourists, often in the company of (or encouraged by) staff. Therefore, while the idea of 'saving' injured or orphaned wildlife, especially those impacted by anthropogenic causes, seems appropriate from a symbiotic ethics perspective, a more critical examination of rescue outcomes is required. In particular, how an animal's adult autonomy is impacted by early human intervention. Are these individuals offered equal consideration in the community as they reach adulthood?

### Shivran

One such individual lives near Bardia National Park, a remote and largely undisturbed PA in southwestern Nepal. Shivran is described as 'the rhino in jail' thanks to the wooden corral he permanently occupies. Following rehabilitation under human care, Shivran was released into the national park. He promptly sought out farms at the PA's edge and showed no flight response to humans. Following several visits for grazing and attempts by villagers to run him off using noisemakers and fire, Shivran trampled a local woman as she defended her crops.<sup>9</sup> Out of options and without the ability to transfer Shivran to the zoo (Kathmandu was 'too far'), park staff simply built a corral around him. Today, Shivran is a local celebrity and tourist attraction, quickly approaching when he hears human voices. Tourists bring produce, which they exchange for pats on Shivran's neck and back.

Shivran's case problematizes the discourse versus practice of saving wildlife in Nepal. According to Thomsen et al. (2021) and North (2018), humans had a moral responsibility to rescue and rehabilitate Shivran. While he did not willingly choose to affiliate with humans, Shivran's survival without human intervention was unlikely. However, his ongoing incarceration to 'protect' human lives, coupled with his use to attract tourists, places the ethics of his captivity in question. While his 'right to live' (Thomsen et al., 2021) has not been infringed upon, his freedom of movement and ability to make meaningful choices in his daily activities is greatly decreased.

For example, it may appear to visitors that Shivran has a great deal of agency given the large size and location of his enclosure within 'typical' rhinoceros habitat. Tourists and staff regularly commented on Shivran's 'friendliness' and apparent desire to interact. While he willingly approaches those surrounding his enclosure, this may simply be an adaptation to current conditions, using the currency of his presence to secure both physical affection and agricultural produce. The corral size and materials limit Shivran's range (for a wild male rhinoceros 2.5–43 km<sup>2</sup>), ability to escape the smell or noise of humans, the ability to change locations or diets seasonally, and the ability to interact with breeding females or other land-dwelling species (who can't get through the fence). While Shivran's

medical needs made prior invention by humans ethically defensible, his adult agency was subsequently limited, problematizing the ethics of an organization ‘rescuing’ wildlife without the ability to house them beyond tourist reach, and which does not have a plan to ensure physical and agential protection in the long-term. (Figure 1)

### Other failed rescues

Mayure, an infant rhino, was orphaned during 2016s floods and subsequently attacked by a crocodile. He was taken to the BCC for supplemental nutrition, wound care, and protection. Wildlife technicians spent hours boiling grain for his meals, which they offered daily along with produce, cow’s milk, and grass. Mayure grew quickly, with staff observing and protecting him (reportedly to limit tourist disturbance) and ensuring he did not wander beyond the relative safety of the grounds. Mayure was paired with a tiny, abandoned boar (Dojur) and other juvenile wildlife while at the BCC. Rhino and boar soon became inseparable, ‘playing’ together despite their thousand-pound discrepancy in weight. After a year, Mayure seemed adjusted to life in the BCC. He no longer lived a typical rhino’s life (which, for a wild male, would mean interacting nearly exclusively with his mother for years, followed by a solitary existence in whatever range he could defend), but was instead firmly entangled in a multi-species community. Mayure



**Figure 1.** ‘The rhino in jail’ and tourists .



explored with Dojur, occupied a favorite wallow fed by runoff from human showers, snorted at his water bowl to cue staff when empty, and carried his food dish to communicate hunger before flinging it at humans. Mayure was strong and confident, head-butting humans who were in his way (author included) much as he might another young rhino, and at one point stomping across a very upset biologist's carefully labeled fecal samples which had been inconsiderately laid out across Mayure's regular trail. Despite the biologist's purported interest in local wildlife, he was clearly unaware of (or simply refused to respect) Mayure's perspective regarding ownership of the trail. These examples serve to highlight the fact that despite the care afforded Mayure and other orphaned wildlife at the BCC, they remained strangers living in human-designed and human-dominated areas. These rescue and rehabilitation practices would benefit from further examination through a posthumanist lens, where the perspectives, emotional needs, and desires of otherthanhuman animals could be considered equally.

Despite the year-long effort to protect them, when floodwaters again rose in 2017, Mayure, Dojur, and other rescued wildlife had nowhere to go. Caregivers reported desperately trying to save their charges, but after being submerged numerous times, the orphans succumbed to drowning or water-borne illness. The social, economic, and scientific interest shown to this endangered rhino, and other wildlife, was little help against a natural disaster, or the lack of infrastructure and planning. Stories like this are not uncommon in Nepal, where floods, earthquakes, and disease place heavy burdens on humans and other species. Yet the NTNC, and the community surrounding the BCC, reportedly remain committed to preserving wildlife.

### Success story?

A thousand-pound rhino slowly rises above the ridge, where a moment ago a large stag stood gazing across the BCC pasture. Suddenly, he surges forward towards a tarp-covered crate and begins an olfactory exploration. He turns toward the open gate leading to town, and an employee jumps from his seat and closes it before the rhino can exit. Another employee arrives on the scene, reopens the gate, and non-plussed, climbs on his motorcycle directly in front of the rhino. Although the rhino is large and intimidating, staff do not appear concerned; this is clearly not an ordinary wild rhino. Employees hold out their hands as he passes, and he indulges them with sniffs before casually leaving the BCC through a gap in the fence. The sounds of horns explode as tourists spot the rhino, and word spreads quickly. Jeep after jeep arrives, pursuing the rhino alongside tourists on foot who press together inches away. He heads down a dirt road alongside homes as children rush out to see him. The rhino is leading a parade of hundreds, marching forward in search of fresh crops to eat. This is Meghauli, rhino resident, community member, and local celebrity of Sauraha. (Figure 2)

### Saving Meghauli

Villagers discovered the rhino when he was nine months old, stuck in the mud near the Meghauli forest (hence his name). His mother was missing, and locals tried unsuccessfully to extricate him. They contacted the NTNC, and staff were sent to tranquilize him, dig him out, and relocate him to the BCC. Like most youngsters, Meghauli required



**Figure 2.** Meghauli exploring the BCC.

a great deal of attention as a baby. Wildlife technicians worked as chefs, guards, and parents. They chopped produce and collected grass while carefully watching over Meghauli as he wandered around the facility. Because the BCC lies on the edge of Chitwan National Park, ‘dangerous’ wildlife regularly uses the area, placing Meghauli at risk. For example, a wild rhino has made his territory within the grounds, and wild bull elephants, large boar and a variety of other species traverse the area.

As Meghauli approached two years of age, he began to leave the BCC confines and cross the river into the national forest. These excursions were not uneventful, and he often returned with bite wounds from adult rhinos defending their territories. Each evening, he returned, passed through the BCC, and headed into town in search of snacks. Today, Meghauli is munching garden plants across the street. The homeowner keeps a wary eye on Meghauli’s progress. Tourists follow the rhino, snapping photos as he knocks over a pile of hay which the homeowner quickly straightens without complaint. Meghauli wanders across another street, to a field of corn shoots where a tiny, elderly Tharu woman flies from her home screaming and throws a bamboo pole. Her younger relatives emerge and drag her, kicking, away from the rhino. They tell me ‘it’s ok he eats the plants,’ as it was rhino territory before it was theirs, but their grandmother disagrees. Meghauli continues down the road, toward a field full of tender rice shoots. The owner waves a small branch as Meghauli approaches and explains that the local community ‘loves nature and likes to see the rhino,’ so they endure his incursions. However, this field represents hundreds of thousands of rupees investment, and the owner is less

inclined to indulge Meghauli's appetites and attempts to shoo him away. Meghauli, unaware or unconcerned with anthropogenic boundaries, slogs through the paddy.

The presence of human infrastructure has not deterred Meghauli or other rhinos (human-reared or wild) from using the farms, gardens, or streets of town as quick passageways between PAs. Locals post videos of passing rhinos on social media, hoping to encourage tourists to visit their shops and hotels. One hotelier explained that he purposely chose 'rhino-attracting' plants for the garden, hoping to encourage rhino visits (Arma, interview, 2019). This hotelier is not simply indulging his own enjoyment; he explains that tourists choose hotels 'near wildlife'. Guests at this hotel can be heard excitedly knocking on each other's doors nightly and exclaiming 'rhino in the garden!' before rushing downstairs to snap photos.

### Rhino-human conflict

For the most part, wild rhinos pay little attention to shop or hotel guests as they pass through town, and most are not considered dangerous. As solitary beings, these rhinos do not seek out humans, but rather pass-through human landscapes as they would that of any other species. Wild males are, according to interlocuters, 'serious', and will make 'a noise when people get near,' communicating that they do not wish to interact (Raj and Paudel, interviews, 2019). The humans understand these vocalizations and stand aside. Wild females with young, however, are considered 'unpredictable,' and their presence evokes concern. Typically, however, injuries and fatalities from wild rhino occur when humans enter the rhinos' habitat, not the other way around. Since 1998, rhinos have been responsible for 55 human fatalities and 180 injuries<sup>10</sup>, largely within PAs rather than downtown (Lamichhane et al., 2018). Partially to blame is legislation surrounding human settlements within these PAs. Indigenous human populations which once lived within the area were forcibly relocated when governmental focus shifted toward wildlife conservation (McLean, 1999). These populations now face the greatest number of fatalities from negative encounters with wildlife thanks to their reliance on survival provisioning from within CNP (Lamichhane et al., 2018). While PA zones have been set aside for local use, they rarely produce enough to support the number of people living there, nor are local people involved in decision making or land-use planning (Shrestha et al., 2010). These stakeholders reported feeling that they were 'less important' than local wildlife, and experience increasing competition with wildlife for land, forest products, and funding (Sedhain & Adhikary, 2016, p. 62). While entering the national park itself for survival provisioning (fodder, firewood, gravel, etc.) is now illegal, many families have little choice but to continue. Additionally, while attacks by wildlife which take place outside the park are compensated via governmental relief schemes, human injuries and deaths which take place *within* the park are not covered, increasing the burden on marginalized populations (Lamichhane et al., 2018).

Humans, while encouraging of sharing central spaces (roads, shops) with rhinos, had mixed emotions about rhinos living within protected areas or near homes. Humans who faced crop loss or fatality through HWC were overwhelmingly (80%) negative about sharing their land with rhinos; however, they still 'strongly' supported conservation legislation, with 65% agreeing or strongly agreeing that conserving them was crucial for income production and sustainable development (Sedhain & Adhikary, 2016, p. 57).

Stakeholders reported widescale *dissatisfaction* with the official compensation scheme for HWC losses suffered both within and outside PAs. Addressing the concerns of all stakeholders is vital, as research shows communities who feel their needs are being neglected experience escalating HWC and decreasing conservation support (Madden, 2004). Increasing governmental support which equally benefits humans and rhinos is likely key to HWC reduction. As such, an approach which situates stakeholders of various species equally at the center of debates surrounding land use and competition for resources might offer better techniques for future planning. Therefore, reconsideration of HWC through the lenses of posthumanism and symbiotic ethics may provide conservation bodies with more effective perspectives.

### Renegotiating citizenship in a post-humanist world

An acceptance of rhinos within the township appears to extend beyond their role as tourist attractions. One veterinarian explained that the drive to provide wildlife care in public locations (e.g. the BCC) was so community members could ‘witness human concern’ for other species (Ghaire interview, 2019). Only this way, he explained, can they see that ‘there is some space for care of wildlife’ in their lives. But this care has since escaped the boundaries of the BCC, and he laughingly states that locals now report even the most ‘minor scratch’ sustained by ‘their’ wildlife. This perspective is problematic, however, as it seems to suggest that veterinary care should be offered to wildlife not because it is the ethical choice, but rather because it offers some benefit to humans.

When asked their feelings regarding wild species within human-dominated spaces, locals described enjoying ‘animals by their homes,’ reported feeling ‘pride’ in sharing spaces, and stated that humans and other animals ‘have to live together’ to thrive. Wild individuals were described as fellow ‘community members’ who are equally ‘deserving of a life.’ Some explained that these attitudes are cultural; locals ‘feel good about nature’ and understand that they must share their environment, resources, and space with wildlife (interviews, 2019). However, human interlocutors also acknowledged that farms, restaurants, and shops have replaced wild habitats; they understood that wildlife had been heavily impacted through their actions. Stakeholders suggested that their multi-species community has learned to ‘co-exist’ as human encroachment into traditional animal habitat has forced rhinos into the township. Locals also acknowledged that living in such shared spaces is inherently dangerous; they note that humans regularly ‘die from tiger, rhino’ attacks.<sup>11</sup> This perspective, along with the attitudes shared above, could benefit from further examination, as they seem to suggest that ‘co-existence’ can be defined as human entitlement to land use. Such co-existence also appears to rely upon the acceptance of crop loss, injury, or death by wildlife. Can this relationship truly be defined as co-existence if it is predicated on losses which result from conflict?

What is also missing is the consideration of other animal perspectives. Wild animals did not willingly choose to reside near humans, but rather anthropogenic areas were placed *into* wild habitats. Wildlife is now forced to use such anthropocentric zones thanks to burgeoning human populations and competition for limited resources. There was little discussion among interlocutors regarding the need to preserve *more* undisturbed habitats, despite the call to increase PA footprints if there is any hope of offering adequate space for increasing tiger and rhino numbers, saving the last remaining

wild elephants, or counteracting the loss of edible fauna to non-native species (see Acharya et al., 2016).

### A dangerous species?

This sense of community ownership is not without danger for wildlife. In 2019, police sought a 14-year-old boy photographed riding upon Meghauri's back (LalKhabar, 2019). Thanks to social media posts, the youth was identified. Meghauri's continued presence in the area may put him at risk but finding a safe place to release hand-reared rhino is fraught. With the large number of wild rhinos occupying the park, potential release spots would have to be vetted lest Meghauri be placed within another's territory. Remaining in town is becoming less desirable (for humans) as Meghauri's appetite and potential for harm (to humans and croplands) continues to grow. Currently, stakeholders are hoping he simply self-releases and can discover land outside the territory of another rhino. Stakeholders warned that the even if Meghauri finds territory within the PA, he will return for crop-grazing. There are few other options. The zoo in Kathmandu already houses two un-releasable male rhinos, and they share an enclosure thanks to limited space. Males are territorial and solitary, so this situation is far from ideal, and both orphans carry numerous fight wounds. Adding Meghauri to the mix is not an option. Continuing a conservation program which hand-rears rhinos for release, while not identifying or monitoring potential territory for such release is problematic. The lack of consideration and planning for the future of these animals might give the



**Figure 3.** Meghauri in a hotel garden

impression that public perceptions of ownership and the availability of cute juveniles for tourist photos are more important than their successful rehabilitation and release. Therefore, a reconsideration of the policies and procedures surrounding wildlife interventions should be undertaken with equal consideration given to stakeholders of all species. (Figure 3)

## Conclusions

A crowd has formed on the bank of the river, overlooking a patch of wild grass where Meghauli is grazing. Humans are shoving to get closer for photos, pushing their children forward. Many of these tourists are new to Chitwan, having arrived this morning in anticipation of the New Year holiday. Conversations suggest that the tourists think this is a wild rhino – yet they still inch closer and closer. Army personnel arrive and try to drive back the crowd. Suddenly, Meghauli lunges forward, up the hill and into the mob as people scream and scatter. Tourist-laden jeeps race toward the crowd, speeding around them to cut between the army and the juvenile, hoping to provide their guests with an up-close encounter. A female elephant is returning from safari, sauntering down the road. She spots the rhino and freezes, trumpets, and then tries to veer off, but her mahout makes her stay put until a jeep can pull alongside her as a buffer.

More tourists arrive, inching closer to Meghauli until he turns and charges one; then escapes into the garden of a nearby lodge. The crowd follows, and one of the government mahouts pushes a foreign woman ahead of him so she can touch Meghauli's back. He stops to eat, and tourists kneel for photos, placing their children directly in front of the large rhino. Just then, the lodge caretaker arrives home, lights his prayer candle, kneels, and prays. He rises, shouts and waves at the crowd, chasing them off the property. The tourists simply move outside the fence and continue to reach over and pat Meghauli's leathery skin. Next to me stands Bishnu Lama, a wildlife technician with 30 years' experience at the NTNC. He simply points to my camera and tells me to record the interaction. 'There is human-wildlife conflict,' he explains.

This conflict arises from the disconnect between local definitions of coexistence, response to the desire to 'save' individuals, and a lack of consideration for the agency of wild, even wild hand-reared, animals. Humans claim to share a multispecies community with 'their rhinos' and desire the presence of wildlife even at the cost of human lives; but these same humans fail to consider the cost to other species forced to adapt to life within anthropocentric areas. Hand reared individuals bring in tourists, and while tourism may provide much-needed community income, it also creates a burden on existing infrastructure and may further commodify wildlife or encourage the conversion of wild habitats into tourist housing, restaurants, and shops.

Nepal's success in protecting native rhinos has led to increases in human-rhino conflict and changing perspectives on who has the greatest claim to anthropocentric spaces. As rhino and human populations continue to grow, there is a need to reconsider the impacts of tourism, and symbiotic ethics and posthumanism may offer new insights. Using methods which consider more-than-human communities and offer equal consideration to all stakeholders regardless of species may help us understand the true benefits, and dangers, of nature-based tourism. The rhinos of Sauraha have moved beyond their physical and species boundaries to exist alongside humans in shared

landscapes. Perhaps it is time to re-examine this parallel existence and find new ways to truly coexist within such communities.

## Ethics approval

This study was granted ethics approval by the University of Exeter College of Social Science and International Studies Ethics Committee, #201819-054R.

## Notes

1. There are other less-formal methods of colonization (Brown, 1996).
2. With the assistance of the US Government (Mishra, 2008).
3. Examples are not limited to Nepal, and have been documented in Africa (see Sullivan, 2006) and Chile (see Fletcher, 2009), among others.
4. Staff attribute this to factors such as staff inexperience, state of decomposition, accessibility during monsoon season, lack of funding, etc. (Sadaula, interviews, 2019).
5. The author chooses to avoid inflammatory words such as ‘crop-raiding.’
6. See OnlineKhabar, 2020.
7. Tigers who have consumed humans were captured and relocated to the zoo.
8. See following sections.
9. It is unknown if Shivran was trying to escape from the woman’s attacks and inadvertently trampled her, or if she was attacked.
10. The specific nature of these injuries is not documented.
11. In fact, villagers face between 10–15 annual fatalities near Chitwan National Park (Szydłowski, 2021) and average over 40 annual injuries and fatalities around the country (Lamichhane et al., 2018).

## Acknowledgements

Thank you to staff of the National Trust for Nature Conservation, members of the Chitwan Nature Guide Association, and the many rhinoceros of Nepal. Funding for Open Access publication of this article was provided through the University of Exeter and a Read & Publish Transitional Agreement with Taylor & Francis.

## Data statement

Due to ethical concerns for participant safety and anonymity, the research data supporting this publication are not publicly available.

## Disclosure statement

No potential conflict of interest was reported by the author(s).

## ORCID

Michelle Szydłowski  <http://orcid.org/0000-0002-4747-3257>

## References

- Acharya, K. P., Paudel, P. K., Neupane, P. R., & Köhl, M. (2016). Human-wildlife conflicts in Nepal: Patterns of human fatalities and injuries caused by large mammals. *PLoS One*, *11*(9), e0161717. <https://doi.org/10.1371/journal.pone.0161717>
- Bajracharya, S., & Dhakal, M. (2018). Nature-based tourism, protected areas and economic development in Nepal. *25 Years of achievements on biodiversity conservation in Nepal*. Kathmandu. Ministry of Forests and Environment. 23–25.
- Bhandari, K. (2012). Tourism or conservation? A controversy in Chitwan National Park, Nepal. In O. Moufakkir, & P. M. Burns (Eds.), *Controversies in tourism*. CABI. E-book.
- Bhattarai, K., Conway, D., & Shrestha, N. (2005). Tourism, terrorism and turmoil in Nepal. *Annals of Tourism Research*, *32*(3), 669–688. <https://doi.org/10.1016/j.annals.2004.08.007>
- Bookbinder, M., Dinerstein, E., Rijal, A., Cauley, H., & Rajouria, A. (1998). Ecotourism's support of biodiversity conservation. *Conservation Biology*, *12*(6), 1399–1404. <https://doi.org/10.1111/j.1523-1739.1998.97229.x>
- Brown, T. L. (1996). *The challenge to democracy in Nepal*. Routledge.
- Buckley, R. (2011). Tourism and environment. *The Annual Review of Environment and Resources*, *36*(1), 397–416. <https://doi.org/10.1146/annurev-environ-041210-132637>
- Buckley, R. C., Morrison, C., & Castley, J. G. (2016). Net effects of ecotourism on threatened species survival. *PLOS ONE*, *11*(2), e0147988. <https://doi.org/10.1371/journal.pone.0147988>
- Castree, N. (2008). Neoliberalising nature: Processes, effects, and evaluations. *Environment and Planning A*, *40*(1), 153–173. <https://doi.org/10.1068/a39100>
- Cohen, E. (2019). Posthumanism and tourism. *Tourism Review*, *74*(3), 416–427. <https://doi.org/10.1108/TR-06-2018-0089>
- Deleuze, G., & Guattari, F. (1987). *A thousand plateaus: Capitalism and schizophrenia*. University of Minnesota Press.
- Derrida, J., & David Wills, D. (2002). The animal that therefore I am (more to follow). *Critical Inquiry*, *28*(2), 369–418. <http://www.jstor.org/stable/1344276> <https://doi.org/10.1086/449046>
- Dhakal, M. (2018). Major achievements of 25 years of biodiversity conservation in Nepal. In *25 Years of achievements on biodiversity conservation in Nepal*. Kathmandu. Ministry of Forests and Environment. 17–21.
- Ellis, S., & Talukdar, B. (2019). *Rhinoceros unicornis*. The IUCN red list of threatened species. e.T19496A18494149.
- Exeter Anthrozoology as Symbiotic Ethics. (2016). *About us*. University of Exeter. <https://socialsciences.exeter.ac.uk/ease/about/>
- Fletcher, R. (2009). Ecotourism discourse: Challenging the stakeholders theory. *Journal of Ecotourism*, *8*(3), 269–285. <https://doi.org/10.1080/14724040902767245>
- Genç, R. (2019). The concept of post-humanism and its reflections on tourism education. *The Gaze: Journal of Tourism and Hospitality*, *10*(1), 1–7. <https://doi.org/10.3126/gaze.v10i1.22774>
- Ghimire, P. (2020). Conservation status of greater one-horned Rhinoceros (*Rhinoceros unicornis*) in Nepal: A review of current efforts and challenges. *Grassroots Journal of Natural Resources*, *3*(1), 1–14. <https://doi.org/10.33002/nr2581.6853.03011>
- Government of Nepal. (2014). *National population and housing census*. Volume 8. Central Bureau of Statistics. <http://old.cbs.gov.np/image/data/Population/Population%20projection%202011-2031/PopulationProjection2011-2031.pdf>
- Government of Nepal. (2015). *Chitwan national park and its buffer zone management plan*. Kathmandu. Ministry of Soil and Forest Conservation, Department of National Parks and Wildlife Conservation.
- Government of Nepal. (2020a). *January–December 2020 statistics*. Department of Immigration. [https://www.immigration.gov.np/public/upload/e66443e81e8cc9c4fa5c099a1fb1bb87/files/Data\\_jan\\_Dec\\_2020\(1\).pdf](https://www.immigration.gov.np/public/upload/e66443e81e8cc9c4fa5c099a1fb1bb87/files/Data_jan_Dec_2020(1).pdf)
- Government of Nepal. (2020b). *Nepal tourism statistics 2019*. Ministry of Culture, Tourism & Civil Aviation. Kathmandu. [https://www.tourism.gov.np/files/publication\\_files/299.pdf](https://www.tourism.gov.np/files/publication_files/299.pdf)



- Guia, J., & Jamal, T. (2020). A (Deleuzian) posthumanist paradigm for tourism research. *Annals of Tourism Research*, 84, 102982. <https://doi.org/10.1016/j.annals.2020.102982>
- Hill, K., Szydlowski, M., Oxley-Heaney, S., & Busby, D. (2022). Uncivilized behaviors: How humans wield “feral” to assert power (and control) over other species. *Society & Animals*, 1 (aop), 1–19. <https://doi.org/10.1163/15685306-bja10088>
- Hughes, M., & Carlsen, J. (2008). Human–wildlife interaction guidelines in Western Australia. *Journal of Ecotourism*, 7(2/3), 142–154. <https://doi.org/10.2167/joe0228.0>
- Jnawali, S. R., Baral, H. S., Lee, S., Acharya, K. P., Upadhyay, G. P., Pandey, M., Shrestha, R., Joshi, D., Laminchhane, B. R., Griffiths, J., Khatiwada, A. P., Subedi, N., & Amin, R. (2011). *The status of Nepal mammals: The National Red List Series*. Kathmandu.
- Kopnina, Helen. (2016). Wild animals and justice: The case of the dead elephant in the room. *Journal of International Wildlife Law & Policy*, 19(3), 219–235. <http://dx.doi.org/10.1080/13880292.2016.1204882>.
- LalKhabar. (2019). *After meeting the young rhinoceros in the park*. <https://www.lalkhabar.com/?p=3517>
- Lamichhane, B. R., Persoon, G. A., Leirs, H., Poudel, S., Subedi, N., Pokheral, C. P., Bhattarai, S., Thapaliya, B. P., & de Iongh, H. H. (2018). Spatio-temporal patterns of attacks on human and economic losses from wildlife in Chitwan National Park, Nepal. *PLoS ONE*, 13(4), e0195373. <https://doi.org/10.1371/journal.pone.0195373>
- Lorimer, J. (2013). More-than-human visual analysis: Witnessing and evoking affect in human-nonhuman interactions. In *Deleuze and research methodologies* (pp. 61–78). Edinburgh University Press.
- Madden, F. (2004). Creating coexistence between humans and wildlife: Global perspectives on local efforts to address human-wildlife conflict. *Human Dimensions of Wildlife*, 9(4), 247–257. <https://doi.org/10.1080/10871200490505675>
- Mandal, C. K. (2019). Rising rhino deaths in Nepal put conservationists on the horns of a dilemma. *The Kathmandu Post*. Retrieved January 20, 2019, from <https://kathmandupost.com/national/2019/01/20/rising-rhino-deaths-put-conservationists-on-the-horns-of-a-dilemma>
- McLean, J. (1999). Conservation and the impact of relocation on the Tharus of Chitwan, Nepal. *Himalaya: The Journal of the Association for Nepal and Himalayan Studies*, 19(2), 38–44. <http://digitalcommons.maclester.edu/himalaya/vol19/iss2/8>
- Mikota, S. K., Kaufman, G., Dhakal, I. P., & Pandey, B. D. (2009). Tuberculosis in Nepal: Elephants, Humans, Livestock, and Wildlife. *Proceedings of the AAZV and AAWV Joint Conference*. 34.
- Mishra, H. (2008). *The soul of the rhino: A Nepali adventure with Kings and Elephant Drivers, Billionaires and Bureaucrats, Shamans and Scientists and the Indian Rhinoceros*. The Lyons Press.
- Murdoch, J. (2004). Humanising posthumanism. *Environment and Planning A*, 36(8), 1356–1363. <https://doi.org/10.1068/a37127>.
- Murphy, S., Subedi, N., Jnawali, S., Laminchhane, B., Upadhyay, G., Kock, R., & Amin, R. (2013). Invasive Mikania in Chitwan National Park, Nepal: The threat to the greater one-horned rhinoceros *Rhinoceros unicornis* and factors driving the invasion. *Oryx*, 47(3), 361–368. <https://doi.org/10.1017/S003060531200124X>
- National Trust for Nature Conservation (NTNC). (2019). *Biodiversity conservation center and about us*. <https://ntnc.org.np/index.php/project/biodiversity-conservation-center-bcc> and <https://ntncbcc.org.np/welcome-to-ntncbcc/>
- Nepal Tourism Board. (2020). *Nepal tourism board website*. <https://trade.welcomenepal.com/regular-scheduled-international-flights-to-be-allowed-in-kathmandu-from-september-1-2020/>
- Newsome, D., & Hughes, M. (2016). Understanding the impacts of ecotourism on biodiversity: A multiscale, cumulative issue influenced by perceptions and politics. In D. Geneletti (Ed.), *Handbook on biodiversity and ecosystem services in impact assessment* (pp. 276–298). Edward Elgar Publishing.
- North, S. (2018). Non-humans, technology and symbiotic ethics: the challenges of developing an ethical framework for an emerging research area. *27th International Society of Anthrozoology Conference*. Sydney, Australia. July 2–5.

- Oglethorpe, J., & Crandall, D. (2010). *Eastern Himalayas ecoregion complex: Terai arc landscape*. WWF Final Closeout Report. [https://pdf.usaid.gov/pdf\\_docs/PDACS977.pdf](https://pdf.usaid.gov/pdf_docs/PDACS977.pdf).
- OnlineKhabar. (2020). *Chitwan National Park blames locals as rhino is found dead*. Retrieved 28 September, 2021, from <https://english.onlinekhabar.com/chitwan-national-park-rhino-dead.html>
- Puri, J. (2019). Socio-Economic impacts of wildlife tourism in Kasara, Chitwan. *Journal of APF Command and Staff College*, 2(1), 70–79. <https://doi.org/10.3126/japfsc.v2i1.26746>
- Sedhain, J., & Adhikary, A. (2016). Human-Rhino conflict: Local people's adaptation to impacts of rhino. *Journal of Forest and Livelihood*, 14(1), 53–63. <https://doi.org/10.3126/jfl.v14i1.23162>
- Shrestha, U., Shrestha, B., & Shrestha, S. (2010). Biodiversity conservation in community forests of Nepal: Rhetoric and reality. *International Journal of Biodiversity and Conservation*, 2(5), 98–104.
- Stronza, A., Hunt, C., & Fitzgerald, L. (2019). Ecotourism for conservation? *Annual Review of Environment and Resources*, 44(1), 229–253. <https://doi.org/10.1146/annurev-environ-101718-033046>
- Subedi, B. R., & Devlin, P. J. (1998). Wildlife tourism: Impact of elephant safaris in Royal Chitwan National Park, Nepal. In J. Kandampully (Ed.), *Proceedings of the New Zealand tourism and hospitality research conference* (Part 1) (pp. 1–4). Lincoln University.
- Subedi, N., Lamichhane, B. R., Amin, R., Jnawali, S. R., & Jhala, Y. V. (2017). Demography and viability of the largest population of greater one-horned rhinoceros in Nepal. *Global Ecology and Conservation*, 12, 241–252. <https://doi.org/10.1016/j.gecco.2017.11.008>
- Sullivan, S. (2006). Elephant in the Room? Problematising 'new' (neoliberal) biodiversity conservation. *Forum for Development Studies*, 33(1), 105–135. <http://dx.doi.org/10.1080/08039410.2006.9666337>.
- Szydłowski, M. (2021). *Framing conservation, colonialism and care: Captive endangered Asian Elephants (Elephas maximus) in Nepal*. [Unpublished Master Thesis], Doctor of Philosophy. University of Exeter. <https://ore.exeter.ac.uk/repository/handle/10871/127765>
- Thapa, J., Paudel, S., Vidanta, A., Shah, Y., Maharjan, B., Kaufman, G. E., McCauley, D., Gairhe, K. P., Tsubota, T., Suzuki, Y., & Nakajima, C. (2016). Mycobacterium orygis-associated tuberculosis in free-ranging rhinoceros, Nepal, 2015. *Emerging Infectious Diseases*, 22(3), 570–572. <https://doi.org/10.3201/eid2203.151929>
- Thomsen, B., Thomsen, J., Copeland, K., Coose, S., Arnold, E., Bryan, H., Prokop, K., Cullen, K., Vaughn, C., Rodriguez, B., Muha, R., Arnold, N., Winger, H., & Chalich, G. (2021). Multispecies livelihoods: A posthumanist approach to wildlife ecotourism that promotes animal ethics. *Journal of Sustainable Tourism*, 30(8), 1–19. <https://doi.org/10.1080/09669582.2021.1942893>.
- van Dooren, T. (2015). A day with crows - rarity, nativity and the violent-care of conservation. *Animal Studies Journal*, 4(2), 1–28. Available at: <https://ro.uow.edu.au/asj/vol4/iss2/2>
- von Uexküll, J. (1934/2010). *A Foray into the worlds of animals and humans: with A theory of meaning*. University of Minnesota Press.
- Whatmore, S. (2004). Humanism's excess: Some thoughts on the 'post-human/ist' agenda. *Environment and Planning A*, 36(8), 1341–1363.
- Whatmore, S. (2006). Materialist returns: Practising cultural geography in and for a more-than-human world. *Cultural geographies*, 13(4), 600–609.
- Whelpton, J. (2005). *A history of Nepal*. Cambridge University Press.
- Wondirad, A. (2019). Does ecotourism contribute to sustainable destination development, or is it just a marketing hoax? Analyzing twenty-five years contested journey of ecotourism through a meta-analysis of tourism journal publications. *Asia Pacific Journal of Tourism Research*, 24(11), 1047–1065. <https://doi.org/10.1080/10941665.2019.1665557>
- Yadav, B. R., Dutta, C., Chalise, M. K., & Williams, C. (2015). Human-Asian wild elephant (*Elephas maximus*) conflicts and its socio-economic consequences in and around the protected areas of Central Terai, Nepal. *Banko Janakari*, 24(1), 47–54. <http://dx.doi.org/10.3126/banko.v24i1.13490>.