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Introduction to the Special Issue on Managing and Understanding Synanthropic Primates

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Historical co-occurrence of humans and nonhuman primates (primates), human modifications of primate habitats, and the introduction of primates to human-dominated landscapes have shaped patterns of human-primate resource and habitat sharing throughout time (Estrada *et al.*, 2017; IUCN, 2023). When primates encounter human-dominated landscapes and their resources, some may choose to avoid them while others may explore opportunities to live with humans, including in cities. Primate species belonging to the latter category are termed synanthropes (Dore *et al.*, 2017; Gumert, 2011; Klegarth, 2017). Synanthropy is the phenomenon in which organisms adjust to (and use) human resources and share habitats with humans (Baumann, 2023; Cucchi *et al.*, 2012; Froiland, 2017; Hoffman & O'Riain, 2012; Sukopp & Wittig, 1998). Previously, researchers used "commensalism" to refer to primates coexisting with humans, but this implies a benefit is conferred to at least one species, and this is not always the case (Gautier & Biquand, 1994; Riley & Bezanson, 2018; Schilaci *et al.*, 2009).

Synanthropic species are typically innovative, bold, curious, and possess remarkable behavioral and ecological plasticity, allowing them to respond quickly to environmental changes. These traits enable them to survive or adjust to anthropogenic and climate change. The most common synanthropic primate species are members of the genera

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Macaca, Papio, Semnopithecus, and *Chlorocebus*, although many other primate genera have synanthropic capabilities (e.g., *Callithrix, Aloutta, Sapajus*) (Engel *et al.*, 2010; García De La Chica *et al.*, 2023; Nunes *et al.*, 2021; Richard *et al.*, 1989). The study of synanthropic primates provides an opportunity to study the ecological flexibility that allows some primates to live in a human-altered and dominated environment (Riley 2013, 2019). From a human perspective, the study of such co-existence and co-occurrence provides insights into human-nature relationships and their determinants.

This Special Issue arises from the 2023 International Primatological Society symposium "*Abundant Primate Populations: Challenges & Strategies for Coexistence*." Our motivation for organizing this symposium was to share information and stimulate discussion on how primatologists defined and understood "overabundance" in primate populations, the factors contributing to it, and methods for accurately estimating and modeling populations. During the symposium, we learned that people often mistake synanthropic primate species as overabundant. Symposium participants also explored effective strategies to reduce competition for resources and examined the outcomes of using sterilization as a population control measure. This symposium contributed to the growing body of work showing that human-primate coexistence is a global challenge and perceived as problematic by some people who live alongside primates. We also learned that there are many strategies to reduce human-primate conflict and recognized that describing these primates as *synanthropic* is more accurate than simply calling them abundant. Shifting from an *"abundance"* framework to one centered on *"synanthropy"* required a clear understanding of what constitutes a synanthropic primate species, the factors that lead to synanthropy, the problems and opportunities of cohabiting with synanthropic primate species, and different mitigation measures that could potentially reduce conflict and foster better understanding.

In this Special Issue, we explore key aspects of synanthropy, including cases where communities view primates as kin and actively engage with them, case studies of sites where a long history of coexistence has recently increased in conflict, the physiological and behavioral changes primates experience from living in close association with people, and strategies designed to foster sustainable coexistence. In this introduction, we first provide an overview of the major drivers of primate use of human resources, the impacts these interactions have on both humans and primates, and several measures that promote human-primate coexistence. We then focus on the contents of the Special Issue, in which we seek to advance our understanding of human-primate interactions by assembling 12 articles that span the range of interfaces between synanthropic primates and humans and explore strategies for managing the challenges that may arise when they share resources.

Synanthropy in Primates: Drivers, Impacts, and Approaches to Coexistence

Primate use of human resources emerges through two major pathways. The first of these, human appropriation of landscapes around primate habitats, is one of the leading causes of increased human-primate cohabitation. In such cases, synanthropic

primate populations have remained in the same areas for generations while humans have progressively transformed the surrounding habitats. These populations have not moved *towards* human-provided resources; rather, humans have encroached upon primate habitats and altered them and resource availability through expanding infrastructure and land-use change. For instance, when forests are converted into villages and subsequently into cities, as in the ranges of long-tailed macaques (*Macaca fascicularis*, Malaivijitnond *et al.*, 2011; Sha *et al.*, 2009) and dusky langurs (*Trachypithecus obscurus*, Leen *et al.*, 2019), primates have to adjust to increasingly anthropogenic environments. Similar trends, due to urban sprawl, are evident in traditional habitats of hamadryas baboons (*Papio hamadryas*) in Saudi Arabia (Al-Ghamdi *et al.*, 2023; Alsharif *et al.*, 2022) and chacma baboons (*P. ursinus*) in South Africa (Fehlmann *et al.*, 2017; Pebsworth *et al.*, 2012). Such changes in the primate landscapes create both short-term needs and long-term drivers for the use of resources by primates. On a shorter time scale, the need for food, water, and shelter motivates primates' movement into anthropogenic landscapes (Reyna-Hurtado *et al.*, 2018; Scholz & Kappeler, 2004). Over longer timescales, human land expansion, habitat fragmentation, reduced predation pressure, overgrazing, drought, desertification, and climate change all contribute to primates' sustained use of human-modified areas (Korstjens & Hillyer, 2016; Schwitzer *et al.*, 2011). The current patterns of resource use by primates in human landscapes also depend on historical patterns of human-primate interfaces, and exploration of these patterns can provide insights into the current contours of human-primate interactions (Urbani *et al.*, 2022). Although not addressed in this Special Issue, examining changes and human-primate cohabitation across evolutionary time may offer valuable insights into how synanthropy develops in primates.

The second pathway for human-primate cohabitation is human-assisted (either intentionally or accidentally) movement of primates within and between countries (Dore, 2017a; Heinsohn, 2003). Over the years, the human-assisted movement of primates has happened for multiple reasons: for example, conflict mitigation, trade, and biomedical research. There are many examples of primate translocations in India. Wildlife officials have used translocation as a mitigation measure to reduce human-primate conflict in urban areas (Deol, 2023; Dhillon, 2021; PTI, 2024; Sudhi, 2024; Imam *et al.*, 2002; Reporter, 2017; Sambyal *et al.*, 2009), and state authorities have carried out multiple episodes of rhesus macaque (*Macaca mulatta*) translocation from urban tourist spots and temple towns in Northern India (Dhillon, 2021; Imam *et al.*, 2002). In states, such as Himachal Pradesh in Northern India, the release of rhesus macaques who had been captured and sterilized involved inadvertent translocation from one location to another (Dhillon, 2021). Many other countries have used translocation as a means of reducing human-primate interfaces. Several nations (e.g., South Africa and India) have moved primates between countries for the pet trade and biomedical research (Anderson *et al.*, 2019; Southwick & Farooq Siddiqi, 2011; Warne *et al.*, 2023). Sometimes these translocations are unintentional; for example, a synanthropic population of rhesus macaques became established in Silver Springs State Park, Florida, United States, following reintroduction in the 1930s to 1940s (Wade, 2018; Anderson *et al.*, 2019), and primates in Puerto

Rico escaped from a research facility on the south side of the island (Engeman *et al.*, 2010).

Humans intentionally translocated some synanthropic primate species hundreds of years ago. St. Kitts, Nevis, Barbados, and Santiago Island of Cabo Verde have been home to the West African green monkey (*Chlorocebus sabaeus*) since merchants and colonists translocated them in the 1600s (Almeida *et al.*, 2024; Dore, 2017b). Long-tailed macaques (*Macaca fascicularis*) have lived on Mauritius since approximately the same time, likely also transported by European colonists, but possibly even earlier via Arab or Malay voyagers (Dore, 2017a). While human actions can introduce primate species to new locations, not all of them turn into synanthropic populations. For example, mona monkeys (*Cercopithecus mona*) were brought to Grenada in the 1600s, but in contrast to the macaques brought to Mauritius and green monkeys to the Caribbean at the same time, mona monkeys are entirely arboreal and forest-dependent and thus remained in the forest and did not start using human resources.

Irrespective of pathways for the development of synanthropic primate species, using human resources, particularly food, is a key feature. Many species rely on intentionally provided food sources (e.g., humans offering food) or unintentional sources, such as garbage dumps, crops, and ornamental plants (Aslari Effendy *et al.*, 2024; Findlay & Hill, 2021). Intentional provisioning is especially common in places where cultural or religious traditions—such as Hindu, Buddhist, and Animist beliefs—promote close relationships with primates. In heterogeneous landscapes where crop fields are interspersed among primate habitat patches, primates incorporate crops into their diets (Anand *et al.*, 2021; Deneke *et al.*, 2024; Koirala *et al.*, 2021).

Close associations between synanthropic primates and humans across diverse habitats reveal a variety of reciprocal impacts (IUCN, 2023). These impacts can be negative, positive, neutral, and fall anywhere along the spectrum—fluctuating over time and varying according to the participants, their habitats, and the resources available (IUCN, 2023). Primates' morphological, ecological, and cultural interconnections with humans enable interspecific communication and interspecific social learning and a general ability to understand each other (Sueur & Huffman, 2024; Hansen & Fuentes, 2025). The plasticity of synanthropic primate behavior makes them readily able to adapt to alternative resources. This adaptation could require a change in behavioral, dietary, and spatial ecology. Some primate species readily change their diet to include high-caloric food waste, crops, and introduced plants (Maibeche *et al.*, 2015; Overton *et al.*, 2024; Pebsworth, 2020; Wu *et al.*, 2025). Human provisioning of primates (either intentionally or unintentionally through behaviors, such as primate crop foraging) can alter the behavior and ecology of groups, including disruption of key ecological functions, such as seed dispersal, intergroup relations, activity budgets, reproduction, and population densities (Asquith, 1989; Sengupta *et al.*, 2015; Klegarth, 2017; McKinney, 2011; Riley *et al.*, 2021; Sugiyama, 2015). Some provisioned groups experience increased intergroup aggression and territorial defense as food resources become spatially concentrated and predictable (Kaburu *et al.*, 2019; Marty *et al.*, 2019). Anthropogenic food sources reduce foraging time requirements, leading to substantial shifts in activity

budgets where primates allocate less time to feeding and traveling while increasing time spent resting and engaging in social interactions (Klegarth, 2017; Muruthi *et al.*, 1991; Sha *et al.*, 2009). Provisioned primates may have smaller home ranges, as less space is required for foraging (Hansen *et al.*, 2020; Klegarth, 2015). Primates feeding on a high-caloric diet mature earlier, conceive and give birth younger, their interbirth interval is reduced, and they continue having offspring for a longer time than those of primates eating fewer calories (Hill, 2017; Zinner *et al.*, 2006). Human provisioning may limit seed dispersal by primates, limiting their role in ecosystem restoration (Sengupta *et al.*, 2015).

There are often economic costs to humans at an increased human-primate interface. Synanthropic primates can cause crop and property damage (Angelici *et al.*, 2025; Hill, 2018; Jayarathne *et al.*, 2025). Introduced primates can negatively impact biodiversity (Jones *et al.*, 2018), harm avifauna (Zaluar *et al.*, 2022), and disperse introduced plants (DeSisto *et al.*, 2020). There is also an increased risk of bidirectional zoonotic disease transmission (Chaves *et al.*, 2024).

While humans and primates have always coexisted and still do in many areas without conflicts, human-primate conflict has intensified in other areas (Dittus *et al.*, 2019; Hill & Webber, 2010; Lee & Priston, 2005). While some communities have longstanding knowledge of primate behavior and view primates as an integral part of the ecosystem, in other places, groups or individuals may not recognize primates as part of the local ecosystem, and may even persecute them (Lee & Priston, 2005; Pebsworth *et al.*, 2020; Rahman *et al.*, 2025). In urban landscapes, for example, primates frequently share resources (e.g., food, water, sleeping sites) with humans, which may result in resource competition and increased negative human perceptions of primates (Angelici *et al.*, 2025; Knight, 1999). Tangible costs (i.e., financial loss) and intangible costs (i.e., diminished health, fear and anxiety, lowered sense of well-being) to humans shape their willingness (or lack thereof) to coexist with primates (Barua *et al.*, 2013; Hockings & Humle, 2009; Humle & Hill, 2016; Pebsworth & Radhakrishna, 2021). However, this willingness varies considerably with the type of human society and how long the society has been coexisting with primates (Anand *et al.*, 2018; Campbell-Smith *et al.*, 2010; Dittus *et al.*, 2019; Hill & Webber, 2010; Karimullah *et al.*, 2022; Nekaris *et al.*, 2013; Pebsworth & Radhakrishna, 2021; Poornima *et al.*, 2022; Riley & Priston, 2010). Importantly, because synanthropic primates are often terrestrial, gregarious, and large-bodied, people often perceive them as "overabundant," as threats to human health, and a cause of damage to crops with associated financial losses, whether or not these perceptions are accurate (Alghamdi *et al.*, 2025; Hansen *et al.*, 2019; McKaughan *et al.*, 2025).

Despite the potential challenges and costs involved, researchers, wildlife management authorities, and citizens in primate-range countries often seek to foster positive human-primate relationships, emphasizing the ecological, cultural, and social benefits of coexistence. State-enacted legislation and policies play a crucial role in modulating human-primate interactions and protecting primate populations. In India, for example, the enactment of the Wildlife Protection Act of 1972 was instrumental in safeguarding key primate habitats. More recently, amendments to the Prevention of Cruelty to Animals Act, 1960, have restricted the use of primate species in circuses and other entertainment activities promoting primate welfare (Anand, 2025). Several

cities and municipal corporations have laws preventing the provisioning of primates by humans (Riley *et al.*, 2015). Researchers have implemented action research to trial a variety of nonlethal strategies to improve human-primate coexistence in rural and urban areas (Baruch-Mordo *et al.*, 2009; Dickman, 2010; Findlay *et al.*, 2022; Hockings & Humle, 2009). Commonly used techniques are traditional fencing (Hill & Wallace, 2012; Pebsworth *et al.,* 2025), electric fencing (Feuerbacher *et al.*, 2021; Honda *et al.*, 2011), and living fences (Hockings, 2016; Hsiao *et al.*, 2013). Researchers have also tested novel strategies, such as conditioned taste aversion (Forthman *et al.*, 2005; Pebsworth & Radhakrishna, 2020) and virtual fences (Richardson *et al.*, 2017). In urban areas, one of the most challenging issues is direct and indirect provisioning. Urban municipalities across primate-range countries, such as Hong Kong, South Africa, Saudi Arabia, or Singapore, invoke financial penalties, post signage, and conduct awareness programs, asking people not to feed monkeys. For these initiatives to be effective, researchers and practitioners must complement them with long-term strategies such as education, awareness programs, and habitat restoration through reforestation. In countries where human-primate conflict has escalated in recent years, local people are testing out several different interventions for controlling primate populations. For example, countries such as India, Hong Kong, Singapore, and Thailand have used surgical sterilization for controlling primate populations, because many people consider sterilization as less invasive and more humane than culling (Martelli *et al.*, 2020). While these strategies do show promise, the effects of these procedures on primate social behaviour and long-term impacts on primate populations need to be assessed (Giraud *et al.*, 2025).

Abstract of the Special Issue

In this Special Issue, we examine four key topics associated with synanthropy:

1) The dynamics that emerge when humans and synanthropic primates share spaces;
2) Sites with a long history of human-primate coexistence that has recently become conflict;
3) Primate physiological and behavioral change as a result of living alongside humans; and
4) Strategies to promote coexistence.

Dynamics that Emerge When Humans and Synanthropic Primates Share Spaces

In this Special Issue, Hansen & Fuentes (2025) explore the dynamics that emerge when humans and synanthropic primates share spaces. In such contexts, primates and humans interact regularly and form reciprocal relationships and may develop a degree of mutual understanding due to their similar physical and social characteristics, their close phylogenetic relatedness, and their prolonged coexistence within shared habitats. Through these sustained interactions, humans and macaques can start to co-construct behaviors. The degree and nature of such behavioral co-construction vary according to their mode of interaction, and if maintained over time,

these shared behaviors can evolve into co-cultures. Recognizing and studying these co-constructed behaviors and potential co-cultures is crucial for advancing the coexistence and conservation of synanthropic primates. Accordingly, the authors advocate for their systematic inclusion in future research and conservation strategies.

Sites with a Long History of Human-Primate Coexistence that Has Recently Become Conflict

Five articles in this Special Issue examine how human-primate relationships with long histories of coexistence have recently experienced an increase in conflicts. Saiyed *et al.* (2025) used the case of West African green monkeys on St. Kitts Island to examine divergent perspectives of monkeys between local workers and residents in an affluent neighborhood. Through a multispecies lens, Saiyed *et al.* show how these two groups' rejection of, or perceived kinship with, the monkeys is rooted in their own positionality and power (or lack thereof). Nonfarmer St. Kitts' residents' rejection of the monkeys is a result of significant negative impacts from these synanthropic monkeys (e.g., damage to food and ornamental plants, attacks on pets, physical threats), and their frustration is exacerbated due to the animals' human-like qualities, adaptability, and intelligence. Local workers, in contrast, feel a kinship with the monkeys through their shared heritage-based cultural bond (as the ancestors of both groups were brought from West Africa) and perceived shared frustration that the wealthy, often foreign, residents are not adapting to the local way of life.

Saiyed *et al.*'s research was part of a broader project, initiated by the government of St. Kitts and Nevis, to develop a strategy to manage these monkeys, because they have been consuming crops since their arrival on the island and have now expanded their range to residential areas. Using Saiyed *et al.*'s results and additional pilot research data, Dore & Daigneault (2025) conducted a cost-benefit analysis of different monkey management strategies, illustrating the value of primatological-economic collaborations to create scientifically sound strategies aimed to reduce human-primate interfaces and perceived conflict. This paper also illustrated the importance of incorporating nuanced ethnographic data into economic analysis; doing so creates strategies that are more "bottom up" and thus more likely to be embraced by local people and governments.

Angelici *et al.* (2025) examined the economic and social impacts of hamadryas baboons in Saudi Arabia, whose population size has increased since the 1990s. They conducted 1,356 interviews with local residents and reviewed 4,450 complaints from six areas where baboons naturally occur. They assessed property damage and human-baboon interactions and found that 63% of respondents experienced daily baboon incursions on their farms or homes. Sixty percent of respondents reported annual property or crop damage ranging from USD $250 to USD $1,300 per household. Furthermore, 67% of respondents expressed negative attitudes towards baboons. Reactions to implemented mitigation strategies—such as feeding bans and improved waste management— were mixed. Thirty-eight percent felt mitigation strategies were ineffective, while 32% reported fewer baboon incursions following

the implementation of mitigation strategies. Overall, their study suggested that human-baboon conflict in Saudi Arabia was intensifying.

Radhakrishna *et al.* (2025) and Anand (2025) investigate synanthropic primates in India, where there is a great deal of primate diversity across different states. Several species, such as rhesus macaque, bonnet macaque (*Macaca radiata*), and hanuman langur (*Semnopithecus entellus*), are commonly found in human-dominated areas, such as villages, temples, and cities. The tolerance and religious affinities of the community have historically created pockets of co-existence. However, the same factors responsible for coexistence have created complications for the conservation and management of primates. In addition, ecological and behavioral differences between species (e.g., bonnet and rhesus macaques) contributed to the level of tolerance local people show towards these species. The human-primate relationship in India is highly dynamic and contingent upon the socioeconomic and developmental realities of the country (Anand, 2025). Anand (2025) showed that human-primate interactions across India vary widely in terms of diversity, perceived threats, and management measures. Therefore, attempts to promote human-primate coexistence must account for regional factors that shape these interactions. Together, these two articles highlight that rather than aiming for complete, static coexistence over a diverse country, we should focus on the dynamic nature of human-primate interactions and strengthen practices that facilitate coexistence.

Taken together, the articles on this topic illustrate that dimensions of human-primate interactions are highly dynamic and people's perceptions of primate species can change over time. These articles also show that mechanisms for achieving human-primate coexistence can vary across communities, requiring multidisciplinary approaches.

Primate Physiological and Behavioral Change as a Result of Living Alongside Humans

Two articles in this Special Issue examined how living alongside humans alters primate physiology and behavior. Bindhani *et al.* (2025) examine how food availability shaped rhesus macaque movement patterns. Using GPS collars, they documented how macaques navigate human-modified landscapes, moving strategically between clustered foraging and resting sites. The observed movement patterns suggest an adaptive response to spatially fragmented resources and highlight how resource distribution influences search efficiency and route optimization.

In Saudi Arabia, people have fragmented, overgrazed, and degraded hamadryas baboons' natural habitat. Baboons are migrating from these areas toward predictable food sources (e.g., garbage dumps, roadsides, and dumpsters) and human-made water places (e.g., dams). The drivers of baboon movements are both short and long-term. Boug *et al.* (2025) examined the baboon population, distribution, and density in six regions where baboons naturally exist. The number of baboons has increased significantly over the past 35 years. Moreover, their preferred habitat in the mountains above 1,500 m with a relatively mild climate overlaps significantly

with the areas where humans also prefer to live. Therefore, conflicts between hamadryas baboons and humans occur often.

Both articles on this topic illustrate how behavioral plasticity allowed primates to use anthropogenic resources, which in turn shaped primate behavior, distribution, and their interactions with people. Unfortunately, these behavioral changes also increased spatial overlap with people and the potential for conflict, underscoring the challenges associated with human-primate coexistence.

Strategies to Promote Coexistence

Five articles in this Special Issue examine strategies to promote coexistence:

1) Early warning systems,
2) Monkey patrols,
3) Fertility control, and
4) Deterrents/repellents to discourage crop foraging.

Morimitsu (2025) reported on research in rural Japan designed to modify the behavior of Japanese macaques (*Macaca fuscata*), a species responsible for agricultural losses. As an island nation that is heavily dependent on crop production, Japan has resorted to lethal control measures to reduce crop loss. To promote human-macaque coexistence, Morimitsu (2025) implemented two nonlethal strategies to discourage Japanese macaques from entering villages: an early warning system and monkey patrols. He deployed GPS collars linked to a satellite-based *early warning system* on a few monkeys per crop foraging group. When the macaques approached agricultural fields, their locations were transmitted in real-time directly to farmers via satellite and mobile phone. This system enabled farmers to take a second targeted deterrent measure, *monkey patrols*. Once alerted, community member chased monkeys from the fields with clapping, shouting, and fireworks. As a result, crop damage has decreased markedly without the need for monkey culling.

Two articles focused on *fertility control* as a long-term strategy for reducing human-primate conflict, highlighting how sterilization can influence population dynamics and primate behavior. In Hong Kong, Martelli *et al.* (2025) reported that close coexistence with humans has contributed to elevated primate birth rates, and rapid urbanization has intensified human-macaque interactions and conflicts. To promote coexistence, the government implemented a long-term contraceptive program, periodic population surveys, and a ban on provisioning wildlife. Their article found that the contraceptive program has effectively reduced the macaque birth rate. Furthermore, they provide a recommendation for the number of individuals to sterilize annually to achieve a stable macaque population. Their study also highlights the importance of a multifaceted management approach, which modifies both primate and human behavior to reduce conflict.

In Bali, Giraud *et al.* (2025) evaluated tubectomy, a sterilization method that preserves normal ovarian function, as a means of fertility control in female long-tailed macaques. They assessed whether the procedure altered sociosexual interactions and

found that when compared with intact females, sterilized females were more sexually receptive and received longer grooming bouts. Furthermore, sterilized females experienced decreased intrasexual aggression. Together, these studies demonstrated that fertility control can influence not only population size but also the social dynamics of synanthropic primates, offering insights for long-term coexistence strategies.

Finally, Pebsworth *et al.* (2025) evaluated the effectiveness of physical deterrents, chemical and acoustic repellents, and psychological techniques that discouraged monkeys from entering agricultural plots in India. The authors also interviewed farmers before and after the deterrent trials to gauge farmers' willingness to adopt these techniques. Simple fences made from local materials reduced crop loss, and farmers expressed an interest in using them. The authors cautioned that stated willingness may not translate into action. Researchers need to conduct further studies to confirm the results of this pilot study.

Collectively, these articles demonstrate that human–primate coexistence relies on coordinated efforts among researchers, communities, and governments. Successful strategies are those that balance primate and human needs, incorporate local knowledge and support, and remain flexible in the face of shifting social and ecological conditions.

Conclusion

The articles in this Special Issue show that human-primate coexistence requires context-specific strategies. There is no "one-size-fits-all." Effective strategies must reflect cultural, social, and ecological differences. Local communities should guide the strategies they use, drawing on their knowledge systems rather than relying on external solutions. Researchers and practitioners should take holistic approaches that consider both human and primate behavior. We hope this special issue will engage primatologists, veterinarians, conservation biologists, and others working with primates and other wildlife that share ecological spaces with humans. In supporting the decolonization of research, we emphasize the importance of local perspectives, knowledge systems, and decision-making processes in shaping coexistence strategies that are culturally grounded, ethically sound, sustainable, and that will necessarily vary across locations. We also emphasize that all studies must meet the highest professional and ethical standards, including consulting appropriate experts before undertaking intervention. Finally, we encourage holistic approaches that consider both human and primate behavior when developing strategies to promote coexistence.

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Declarations

Conflict of interest The co-authors declare that they have no conflicts of interest.

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