Decolonizing Primate Conservation Practice: A Case Study from North Morocco



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Abstract

Understanding the historical context of an area enables an incoming conservationist to reflect on their role in communities and to better position themselves both politically and socially within them. Here, we explore how outside agencies and institutions, including a former colonial power, have affected and influenced local communities who share their landscape with Barbary macaques (Macaca sylvanus) in Bouhachem forest, north Morocco. In the context of initiating Barbary macaque conservation activities, we interviewed representatives from local governmental and nongovernmental organizations, city dwellers, and villagers about the historical, political, and social context of the study site. We found that villages around Bouhachem were politically and socially marginalized and discriminated against by the state and urban society. The existence of these divisions and the outside agencies' simplistic view of villages as homogeneous communities negatively influenced conservation interventions, because people resisted initiatives imposed on them without prior consultation. We found that Bouhachem villagers have been, and still are, excluded from meaningful participation in the conservation of the forest and this finding encouraged us to decolonize our own practice. We engaged meaningfully with members of the surrounding communities and responded to news of erroneous stories about our activities by developing a project working in three villages that included all households. Based on our experiences, we recommend that all conservationists conduct historical and qualitative research to gain a deeper, more nuanced understanding of the communities they work in. This understanding should encourage conservationists to recognize their own social and cultural biases and to decolonize their practice. Attending to our own position may help us to avoid underestimating and alienating people who view conservation actions through a very different but equally valid lens.

التخلص من التداعيات الاستعمارية في المحافظة على الرئيسيات :دراسة حالة من شمال المغرب

: خالة إن فه ا ي اق اتا ي خي لذن قة معين ي لذ ا حافظ ا ب ي خي او افد من ا تفكي في دو ه في ا جة عات و ان جا ي اي واجة اعي أه داخها. هن انكتف كيف أثت اوكا ات وا ؤ ات ا خاجية با في ذك اقوة (Macaca sylvanus) ا ا ت ع اي ة ا اب قة ع ى ا جة عات ا حية ا تي نت عاي مع قود ا كاك ا ب ب في غابة بوها ا ا نحب. في ي اق بد أن قا حفاظ ع ى ا كاك ا ب ب ي أج ين ا مقاب ات مع مد ي ن من ا ن ات ا حكو ي ة و خي ا حكو ي قا حية و كان ا دنوا قوي ين حو ا ي اق ا تا ي ي ي ي ي ي ي ي ي ي ي و ا جزاعي لوقع ا داة. وجدنا أن ا قى ا حي قاب به هم قود ا ي اي ا

Keywords Building trust \cdot Communities \cdot Decolonising conservation \cdot Primates \cdot Qualitative data

Introduction

Building trust between conservationists and local people is a complex undertaking but is vital to further conservation aims. Poor quality relationships between the various actors involved, along with imbalances in power relationships, which often go unacknowledged, have caused the failure of many conservation strategies (Dressler et al., 2010; Geoghegan, 2009; Russell & Harshbarger, 2003). Qualitative studies show that people living in the vicinity of conservation initiatives are often either ambivalent about conservation or somewhat resistant to it because they feel excluded from decision making (Butt, 2012; Hanes, 2017; Pujadas & Castillo, 2007; Saunders, 2011; Tumusiime & Svarstad, 2011). Some people feel ignored and perceive themselves to be less important than endangered wildlife to agents of the state and/or conservationists (Dore, 2018; Jalais, 2010; Mariki et al., 2015; Schauer, 2019). Some scholars suggest this is because outside agencies (such as incoming conservationists), view communities as homogeneous by virtue of their sharing similar livelihoods, depending on the same resources, speaking the same language, and following the same religion (Agrawal & Gibson, 1999). Such an approach, however, fails to account for individual differences and relations within a community that has its own conflicts, rivalries, and power struggles (Buscher et al., 2017; Butt, 2012) but will also often have complex institutions to regulate natural resource use enabling people to cope with the remote, and sometimes harsh, environments in which they live (Chatty, 2003; Ilahiane, 1999).

Understanding the historical, political, and social influences of activities by outside agencies may provide conservationists with a more nuanced understanding of the communities with which they intend to work (Szabo & Hedl, 2011). For example, remote village communities are often the focus of conservation interventions because their location makes them the last remaining habitats for many endangered species (Lanjouw, 2008; Rovero *et al.*, 2009). Such village communities are usually marginalized and suffer numerous disadvantages owing to their physical and political remoteness from centers of authority and power (Burli *et al.*, 2008; Jackson & Lama, 2016; Tawil, 2006). These community experiences may mean members distrust incoming conservation actors if the latter fail to consult and engage sufficiently with them. These poor, often politically weak, communities will have diverse values, needs, and priorities

and varied experiences of conservation and the uneven power relations that accompany it (Sandbrook, 2017).

Conservationists often fail to recognize that many countries with high biodiversity have a history of colonial occupation by European powers that still influences conservation practice today (Redford, 2011; Schauer, 2019). This lack of recognition may be explained by an edited perspective of colonialism taught to students in Western education systems (Sefa, 2006). Colonial occupations often served to intensify environmental exploitation, particularly during the nineteenth and early twentieth centuries (Schauer, 2019). Colonialists justified their treatment of people and places by portraying local inhabitants as incapable of managing natural resources (Adams, 2003; Buscher et al., 2017; Leach & Mearns, 1996; Schauer, 2019). The colonialist narrative persists in many African countries because it facilitates the monopoly of resource management by the state and/or conservation agencies (Adams, 2003; Hays, 2019; Leach & Mearns, 1996; Schauer, 2019). Many countries also have a history of conservation being forcefully imposed by colonial powers (Garland, 2008; Redford, 2011), or of conservation being monopolized by the state, marginalizing local people (Benjaminsen et al., 2013; Dressler et al., 2010; Schauer, 2019). Negative experiences of past conservation activities are likely to color indigenous peoples' perceptions of new activities (Blair, 2019). Thus, to formulate effective strategies, conservationists need to gain insight into how historical, political, and sociocultural factors have influenced local people's perceptions (Brosius et al., 1998; Fairet, 2012). Improving our capacity for reflection as both conservationists and researchers to understand our collective past may help to avoid the deployment of wildlife management activities that alienate an excluded or disempowered population because of the political or social context in which they are conducted (Dore, 2018; Fairet, 2012; Jalais, 2010; Webber et al., 2007).

For conservation to succeed it is widely recognized that common ground must be found between local communities and conservation managers to ensure people's wellbeing and livelihoods do not suffer as a result of any changes made to conserve an area or species (Hill, 2002). Communities must be given the right to self-determination and their local perspectives respected and represented enhancing the chances of conservation success (Carson *et al.*, 2018). However, conservation, and particularly fortress conservation, where people are excluded from areas of conservation interest, is essentially a colonial concept (Adams, 2003). Colonialist ideas of conservation remain in the postcolonial era and decolonizing conservation is imperative to rebalance the inequitable relationship between many communities and many conservation actors (Datta, 2018). Datta (2018, p. 2) argues, "Decolonisation is an on-going process of becoming, unlearning and relearning regarding who we are as a researcher and educator [and/or conservationist] and taking responsibilities for participants."

Colonized peoples were often "othered," denied their individuality, and negatively stereotyped and marginalized by the colonizers (Said, 1978). In this way, colonizers created or exploited divisions between privileged and nonprivileged groups in colonial society to facilitate control over the populace and enable resource exploitation (Plumwood, 2003). These divisions are manifested in the postcolonial era by discrimination against rural and tribal people by state officials and/or wildlife conservation NGOs and urban elites often to gain control or access to natural resources. Such discrimination is ubiquitous in many countries and can have major negative

consequences for conservation but is often ignored or mentioned as an aside in conservation literature (Dore, 2018; Govindrajan, 2018; Hays, 2019; Jalais, 2010). The discrimination is so entrenched and accepted in a society that it may be blatant. For instance, during an international conference held in Cameroon to discuss the human rights of Pygmy peoples, the BaAka attendees were served inferior, badly cooked food compared to the food served to other attendees because of their perceived low status as Pygmies (Lueong, 2017). In India, ethnic minority tribes are frequently discriminated against and blamed for deforestation because of legacies of colonial era portravals of them as "backwards" and underdeveloped. These negative descriptions continue to be propagated by contemporary state agencies and urban residents (Dominguez & Luoma, 2020). In an extreme case, World Wild Fund for Nature India accused the Pardhi people of being a "criminal tribe" for perceived tiger poaching (Sharma, 2020). Indigenous people play an important role in forest conservation because they depend on forests for their livelihoods (McNeely & Scherr, 2003). However, one of the first actions of incoming conservationists is to recommend a form of legal protection for areas of high biodiversity, which often excludes local resource use. Excluding people from conservation not only continues and reinforces the colonial ideas of conservation but also removes their livelihoods and risks the loss of their extensive ecological knowledge (Carson et al., 2018; Lueong, 2017).

Another practice inherited from the colonial era is the prioritization of university educated individuals' scientific findings over local people's knowledge. The discriminatory use of scientific findings by state officials and others to counter community perceptions of wildlife activities and its effect on their livelihoods further damages relations between agents of the state, conservationists, and communities (Moore, 2010). For example, in Zanzibar, scientists found that the Endangered Zanzibar colobus (Procolobus kirkii) did not destroy valuable coconut plants as subsistence farmers believed but actually improved coconut yields through their browsing behavior (Siex & Struhsaker, 1999). The local authorities used this finding to justify a policy of not compensating farmers for damage colobus did to the coconut plantations. The local authorities also belittled local cultural beliefs that the colobus was poisonous and killed trees and crops by feeding on them. These tactics served to alienate local communities from conservation activities (Saunders, 2011). It is difficult to assess the full effects of ignoring local people's wildlife knowledge, as they have rarely been documented. However, a lack of consideration of local people has resulted in covert resistance to conservation activities, illegal behavior, and conflict between conservationists and communities in both the Global North and South (Bell et al., 2008; Blaser, 2009; Dowsley & Wenzel, 2008; Saunders, 2011).

Conflicts inspired by conservation activities are often caused by feelings of exclusion, frustration, and lack of autonomy in local people (Hill, 2017; Mariki *et al.*, 2015; Setchell *et al.*, 2017). However, marginalized communities may also appear to accept the status quo because they are concerned about possible negative consequences of overt resistance activities. Instead, people may employ covert tactics to express their resistance (Scott, 1985). Gossip and rumor are strong social controls in smaller communities and can be powerful instruments of resistance to conservation activities by outside agencies (Delibes-Mateos, 2017; Garland, 2008; Leblan, 2016; McLennan & Hill, 2013; Russell & Harshbarger, 2003). For instance, despite careful attention to community communication regarding chimpanzee (*Pan troglodytes schweinfurthii*)

research in Uganda, rumors abounded that researchers conducting vegetation surveys to gain a better understanding of chimpanzee ecology were really "bio-prospecting or looking for oil" (McLennan & Hill, 2013, p. 51).

Reflexivity is "Understanding and managing our influence on the research process" (Riley, 2020, pp. 101–102) and must be integral to conservation action planning. Anthropological primatologists working in primate conservation and research are well placed to reflect on the social, cultural, and political context they are working in, and the, sometimes considerable, effect their presence and activities may have on social and political processes in local communities (Leblan, 2016; Lee, 2011; McLennan & Hill, 2013; Riley & Bezanson, 2018).

The presence of foreign researchers can inspire curiosity, fear, and interest at all levels of local society (McLennan & Hill, 2013). For example, in the chimpanzee research project in Uganda, a combination of political undercurrents, potential ecotourism ventures focusing on the chimpanzees, and insecure land tenure and forest resources led people in local communities to view the research project with grave suspicion. A rush to convert timber to cash resulting in high levels of felling forced the researchers to become involved in community issues that helped to build trust and good relations between the communities and the project (McLennan & Hill, 2013). Building and sustaining trust is one of the key elements of successful community collaboration efforts (Davis & Goldman, 2019; Mishra *et al.*, 2017).

Our case study is set within the context of a biosocial conservation approach (see Setchell et al. 2017). Such an approach has been advocated by primatologists when working with human communities and involves the continual reflection on what constitutes ethical practice and how our research and conservation activities might influence the human communities, primates, and ecosystems that constitute our focus (Riley & Bezanson, 2018). We undertook a place-based study, examining emergent theory collected using an ethnographic approach to gain a "holistic, reflexive and situated" (Setchell et al. 2017, p. 406) understanding of our project site. We explore some of the contexts in which a colonial power and, later, outside agencies and institutions have affected and influenced the local people living in remote mountain communities around the protected area of Bouhachem forest in north Morocco. We briefly review the foreign occupation and what it meant for the Moroccan environment and Bouhachem forest, using elderly people's descriptions of the Spanish occupation and its effects on the forest. We explore how the villages around Bouhachem have remained politically and socially marginalized by the state, its agents, and urban society post-occupation. We illustrate their marginalization with interviews with representatives of local governmental and nongovernmental organizations (NGOs) and city dwellers, as well as the villagers themselves. We discuss how the existence of these social divisions and the outside agencies' simplistic view of villages as homogeneous communities have influenced development interventions and describe villagers' responses to such interventions. We provide evidence that Bouhachem villagers continue to be excluded from meaningful participation in the development of their area. We then consider how these historical, political, and social factors affected the development of our own primate conservation activities. We end with an example of how mutual trust is integral to communicating conservation and make recommendations for improving our practice to decolonize primate conservation.

Study Site and Methods

Our study site is the forest of Jbel Bouhachem (Bouhachem hereafter) and 10 surrounding villages in north Morocco. Bouhachem is a remote mountainous area of *ca*. 142 km² of mixed oak (*Quercus* sp.) forest, part of which now has Moroccan Nature Reserve status. The forest is an important source of water and nontimber forest products for surrounding communities as well as being home to the Endangered Barbary macaque (*Macaca sylvanus*) and other wildlife. Many villagers rely on their goat (*Capra hircus*) herds for financial security and cooperate with neighbors and kin to herd the goats into the mountains for grazing. Most villagers grow corn, vegetables, and fruit with some villages producing honey.

In 2004, alongside a Barbary macaque population survey, the first author conducted a questionnaire survey on human–wildlife conflict in the villages surrounding the macaque habitat in Bouhachem. She was surprised at how eager villagers were to discuss their situation and how much importance they attributed to having their voice heard about issues that directly affected them. The first author felt that any further research on Barbary macaques should be situated within the framework of a conservation programme and established a long-term project. The conservation project commenced in October 2009 and gained Moroccan charitable status as an NGO in 2010. The name of the Moroccan NGO, Barbary Macaque Conservation in the Rif (BMCRif), reflects its primary aim and geographical location in the north of Morocco. We use the Barbary macaque's local name of Zaatoot in the Arabic translation of BMCRif on our logo and other materials to ensure a strong connection with local communities.

The mission statement of BMCRif is

This interdisciplinary Moroccan conservation NGO focuses on the Barbary macaque (Macaca sylvanus). This project aims to halt the decline of the Barbary macaque in Morocco by gathering scientific data, raising awareness, and working with local and national stakeholders to develop participatory programmes aimed at safeguarding the species, its habitats, and the health and livelihoods of the local people.

The project was founded and is managed by the first and second author. The first author is British and the second author is from the city of Tetouan and worked in public transport prior to 2010. He has always had a keen interest in wildlife and is very familiar with Bouhachem and its macaques. The two other project employees both come from a village adjacent to Bouhachem forest and formerly made their livings as a shepherd and mushroom collector. All men have excellent wildlife observation skills and all three finished their education early so have no formal qualifications.

We collected most of the qualitative data for this study from October 2009 to December 2010 and in April and May 2011. We interviewed 11 village men and 2 women informally to discuss diverse subjects including the Spanish occupation, and how villagers perceived outside agencies such as development NGOs and forestry officials. We also include excerpts from interviews with a member of staff from a development NGO, and one person working in a regional government medical centre. We used unstructured interviews to ensure the participants felt in control of and positive about the interaction when talking about sensitive subjects such as the Spanish occupation. The interviewees were 45–83 yr old, although older interviewees were sometimes unsure of their age, and gave us estimates.

The first author's grasp of Arabic was very basic and she conducted interviews via the second author (A). All interviews were recorded and [first author] and A translated and transcribed them into English. It is likely, however, that we lost some nuance during these translations and transcriptions. [First author] explored each transcript, noting emerging themes and placing them in coded categories. [First author] also kept field notes which proved useful for identifying the themes emerging from all engagements with local people. Our analysis thus followed an iterative grounded approach where we used open coding to further analyse and identify emerging themes based on the qualitative data as opposed to precipitating themes beforehand (Tadie & Fischer, 2013). We continued the analysis until these themes became stable (Cassidy, 2017). We select quotes and parts of conversations to support our analysis of the data.

Ethical Note

At the start of each interview we explained the study to each participant and asked them if they would like to participate in it. No one refused. All participants remain anonymous. This project gained approval from the Research Ethics and Data Protection Committee of the Department of Anthropology, Durham University, in spring 2009. The authors declare no conflict of interest.

Data Availability The datasets during and/or analyzed during the current study available from the corresponding author on reasonable request.

Communities and Authorities: Past and Present

France and Spain exerted control over different parts of Morocco during the occupation from 1912 to 1956 (Davis, 2007). The French Protectorate enforced a Forest Code from 1917 (Davis, 2007), favoring thinning forests rather than the intensive logging preferred by the Spanish. The timber and charcoal produced in Spanish-occupied forests were exported to Spain for ship construction and railway development (El Abdellaoui & Chikhi, 1999). The Spanish paid little attention to rural development, with long-term political and social repercussions for the north, which suffered further disadvantage and marginalization after the Spanish left in 1956 (Tawil, 2006).

Since 1912, the Moroccan state in one form or another has maintained jurisdiction over forest land (Davis, 2007). The *Haut Commissariat aux Eaux et Forêts et à la Lutte Contre la Désertification* (HCEFCLD) (now merged with the Department of Agriculture and known as the Department of Forests) adopted the Forest Code first laid down in 1917 (Davis, 2007). The code includes legal controls on many traditional forest activities, including limiting access to nontimber forest products, including mushrooms, cork oak bark, and medicinal plants, on which many people depend for subsistence.

Bouhachem forest was exploited intensively for its timber during the last years of the Spanish occupation (El Abdellaoui & Chikhi, 1999). The remains of numerous Civil

Guard and Forestry Service forts and outposts throughout Bouhachem are evidence of the previous heavy Spanish presence in the area. These buildings functioned as administrative centers to control the local population's activities in and around the forest.

After the Bouhachem population's violent resistance to the Occupation was finally quelled in 1927, the Spanish were particularly vigilant for signs of further resistance. Owing to their negative experiences of the Spanish Occupation, some elderly people were apprehensive about discussing it and we did not press them to do so. Others were forthcoming about the conditions they faced, often comparing them unfavorably to the present. For example,

Before when the Spanish were here, it wasn't like it is now. Now there is much more freedom.

The Spanish civil and forestry guard kept strict control of villagers' movements in and out of the forest using guard posts on all the main village routes, and heavy punishments for perceived transgressions. Another elderly man told us:

If the Spanish knew you had been in the forest without their permission, they tore a big strip off you [interpreted by 1st author to mean that they made their displeasure obvious] and if they caught you with firewood, they put you in prison.

The Spanish logging companies built single tracks for mule drawn carts that are still visible throughout Bouhachem. Three men, now in their 80s, who worked for the Spanish, confirmed that mature Pyrenean (*Quercus pyrenaica*) and zeen oaks (*Q. canariensis*) were felled for export to Spain, but that cork oaks (*Q. suber*) were felled and burned *in situ* to make charcoal. One man told us:

They [the Spanish] set fires that took three months to make charcoal because we put so many trees on them.

In addition to the tracks, other evidence of this industrial-scale logging can still be seen today in Bouhachem, where some areas bear the scars of intensive processing of timber products. There are also signs of the Spanish presence in some location names in the forest, such as the large space known locally as *El Cable* (the cable). El Cable was a site of intense activity during the Spanish logging of the forest due to its role as a loading site for a long winch cable which hoisted cut timber over the mountain to the processing facilities on the other side. AS described how the mountains looked "shaved" after the Spanish departed, but opined that the forest is recovering:

The Spanish took the majority of the forest—they eliminated it. This forest has only got its strength again since the Spanish left.

The Moroccan Forestry Department does not receive sufficient funding to operate effectively and forestry guards are responsible for large areas of territory, with all the logistical difficulties this presents. Forest users are allowed to collect some nontimber forest products, such as mushrooms, if they obtain a permit from the regional forestry authorities. Medicinal plants and timber for local house construction can be harvested

for domestic use without permits, although collection for commercial use is subject to a heavy fine. Forestry guards have powers to arrest and fine people who break the law. At the time of this study, an informant system enabled the guards to maintain an appearance of control over illegal forest activities. One or two men from each village informed the guard about any alleged misdemeanors in their area. For example,

If the forestry guards find out from their "friend" that we are cutting wood they will fine us so hard we will be unable to raise our heads afterwards. Anon, 80 yr

The system was very vulnerable to corruption. For instance, one village informant entered into an arrangement with men from a nearby town with access to chainsaws and heavy vehicles. They used this equipment to fell and transport mature oak trees in Bouhachem for sale elsewhere. The practice continued for weeks because the forestry guard responsible for the area was either unaware of, or chose to ignore, the illegal activity. Sometimes, the forestry guards will blame shepherds for such transgressions. For example, one of our shepherd colleagues told us:

I ran into a forest guard who accused us [the shepherds] of cutting all these trees. I told him that shepherds didn't have big tractors and chainsaws and to look elsewhere but the guard just said "when I find out which of you it is then you'll all get a big fine."

In practice, the forestry department had limited capacity to adequately protect the forest. This was evident in cases of forest fires, which were usually fought collectively by villagers who were on hand and alerted to the fire first. We took part in this collective action on one occasion when a forest fire began in an area where we were working. It took approximately an hour for forestry staff to arrive, by which time other villagers had joined us and we had controlled the fire. A 65-yr-old village man articulated the sense of responsibility the villagers feel for the forest, suggesting they are well placed to participate in forest management:

We are the ones who look after the forest, how can anyone else look after the forest? Who will take care of it if we don't take care of it? If we see a fire, we immediately all go to put it out. Who is going to react as quickly as us? Nobody else! If we wait for the forestry guards to arrive they will find scorched earth as the fire will have already destroyed everything by then. We know it's not good for us if there is a fire in the forest so we have to take care of it.

The official exclusion of Bouhachem villagers from forest management extends to the discussions to upgrade the legal status of Bouhachem from a *Site d'Intérêt Biologique et Ecologique* (SIBE) or nature reserve to National Park which will increase the possibility of funding for tourism related activities. This change, first suggested in 2001, cannot occur until the Moroccan Parliament passes the relevant legislation. In 2012, owing to concerns over slow progress, the Bouhachem Communities Group was formally established by decree of the Ministry of the Interior. Its mission is the creation and management of the National Park. The group consists of national and international NGOs with little or no input from the local people who will be most affected by this change.

strategies employed in other countries such as India and Benin (Gadgil et al., 2003; Idrissou *et al.*, 2011). The forestry department currently plans to reintroduce the Atlas red deer (Cervus elaphus barbarus) to Bouhachem where the animals will be vulnerable to poaching. Unfortunately, local communities are still excluded from project planning despite our success in recruiting them into forest and wildlife protection activities and our recommendations to include local communities who see themselves as integral to the protection of the forest have so far been ignored. Forest users have recently damaged two enclosures built to accommodate the animals before release illustrating the resentment they feel at their exclusion from this project.

Communities and Urban Society

The asymmetrical economic and social development in north Morocco since the colonial period has resulted in an urban-rural divide that is keenly felt by the rural population, although its effects are generally unaccounted for in the design of conservation programs. Bouhachem villagers suffer social discrimination at all levels due to their poor literacy rates (Tawil, 2006). They have been described by city dwellers as "poor, illiterate and backward" (Joseph, 1973, p. 238). Villagers are also subject to city dwellers' prejudice regarding their cultivation of cannabis (Cannabis sativa) (Joseph, 1973). Some Tétouan inhabitants told us they believe villagers are irresponsible and profligate because they spend their income from cannabis sales on consumer items such as property or cars, and not on their children's education. Some city dwellers sent to work in the area mock the villagers. One elderly village man asked us:

Some men came here with equipment measuring something. I asked them what they were doing and they told me they were taking measurements to make a garden for us to grow mint for tea. Is that true?

Another rumor started by a visitor from the city involved a fabricated story about the construction of a hotel high in the mountains which would employ lots of local people. One shepherd told me:

They will build a big hotel in El Cable where rich people can come to breathe the mountain air. The man from Tangier told me that there would be work for us all.

This example demonstrates that rumors can raise villagers' hopes of investment in their local area. However, if these are unfulfilled, this can lead to resentment and reluctance to trust people from "outside." For example, a man from the same village as the shepherd who told us about the planned hotel said that he had heard the story too, but he said:

I don't believe that story as I heard it about five years ago. It's just the people in the city-they think it's funny to make things up because they think we are stupid.

Urban prejudice against villagers reaches official levels. When a young woman died of rabies in a Bouhachem village in September 2010, we wanted to find out why the authorities didn't vaccinate villagers against the disease. We spoke informally to an employee of an urban Rabies Prophylactic Centre who told us that local councils were responsible for vaccinating villagers in their area and that each course of vaccinations cost DH800 (€80). Our informant said that people working with animals could be vaccinated free of charge so we asked if it would be possible to vaccinate shepherds. He replied in a shocked tone: "No! The vaccination is meant for professional people like veterinary surgeons" suggesting that he thought the villagers were of less importance than middle class professionals. The discrimination of subsistence people is common amongst the middle classes in other societies (Fairhead & Leach, 1995) where it sustains urban notions of rural backwardness and validates rural and minority groups' exclusion from society (Dominguez & Luoma, 2020; Gilbert, 2013).

The discrimination extended to individuals who had not attended university. For example, during the first author's preliminary field trip in 2004, a university professor was surprised that she intended to include the second author's name on the resulting publication "because he hasn't been to university" despite his extensive local knowledge and field skills. The second author had, in the past, acted as a field assistant to many academic researchers but his assistance had never been acknowledged in the scientific papers that resulted. This is still common practice among many researchers and may stem from a neo-colonialist perception that the knowledge of university educated individuals should be prioritized (Rubis & Theriault, 2019), leaving less formally educated team members' local knowledge and experience unacknowledged as coauthors or as individual research assistants.

The Value of Trust in Community Conservation Activities

Trustworthy relationships are foundational to fostering community engagement with conservation initiatives (Mishra et al., 2017). Such relationships can only be built through open and respectful communication and meaningful community participation (Davis & Goldman, 2019) and once lost are very difficult to regain. The origins of incomers are unimportant as long as those individuals embrace trustful, respectful relationships with the communities with whom they work (Keikelame & Swartz, 2019). In the early stages of this study, two regional NGOs initiated community conservation projects to improve the prospects of some Bouhachem villages and reduce their reliance on the forest. Different villages were subject to different efforts. For example, two villages received fuel-efficient bread ovens. The idea behind the ovens was to reduce the amount of wood used for fuel and the time women spent collecting the wood which outside agencies perceived as time-consuming and arduous work. According to the manufacturer, each oven was meant to be shared by five or six households and the villagers had to work together to build and maintain a shelter for it. However, one woman told me, "We don't want these ovens as we all [each household] have our own." We suggested that a fuel-efficient oven would require less work collecting firewood, but she laughed and pointed to the store of large store of dead wood around her house, saying "We have plenty of wood, that's what the forest is for." Her remark suggests that villagers perceived no shortage of firewood. Social factors

might also explain the women's resistance to the ovens, and another woman told us "We don't mind collecting the wood; we all go together and sing as we work." The outside agency responsible for the project may have made false assumptions about the time needed to gather firewood and neglected the positive social significance of firewood collection for village women. Neither village ever used the ovens and development workers were frustrated at the women's disregard of the ovens and puzzled by what they perceived as the women's refusal to decrease their workload. Some NGO employees express their frustration toward the villagers. For example, one told us:

The villagers are impossible to deal with as they are stubborn and don't want to change or listen to new ideas and they won't work together.

The NGO employee's perception of intransigence may stem from the villagers' covert resistance to the imposition of conservation initiatives. Consultation with the villagers might have identified the social significance of firewood collection for village women, and the time and money could have been spent collaborating with the women to provide something they perceived as more relevant to their lives.

Another top-down conservation initiative had more serious consequences for one village. An NGO project to increase tourism to Bouhachem was nearing its conclusion when we began work in the area in autumn 2009. The project aimed to decrease grazing pressure on the forest by providing an alternative source of revenue that would reduce the need for village families to keep goats. The project staff selected three households in one village to benefit from this project. The households were apparently chosen because they were close to the paved road. By autumn 2009, each of these households had been given funding to renovate a building for use as bed and breakfast accommodation by national and international tourists, with the support of the initiative. The inclusion of just three families in the project caused a great deal of hostility among the other villagers, who felt excluded and resentful at what they viewed as injustice. One anonymous man told us:

Only three families benefit and we get nothing so we don't want these outsiders. Surely, if a project comes then everyone has to benefit. It's not fair that my neighbour gets hot water and electricity provided for him and I get nothing.

The resentment felt by the excluded villagers culminated in a bad-tempered confrontation with the NGO responsible. Such direct confrontation is rare among villagers and the strength of their reaction demonstrated the injustice they felt. Unfortunately, this confrontation exacerbated the situation as it resulted in rumors spreading through the village that the whole forest would be enclosed by a fence and villagers would no longer have grazing rights for their livestock. The villagers were convinced that if found in the forest their goats would be impounded and they would incur a heavy fine to repossess them. This rumor further increased resentment and hostility toward the NGO and led to anxiety in other villages as the rumor spread. The villagers' anxiety reflected their worry that they would be permanently excluded from the forest if Bouhachem became a National Park. One villager expressed his frustration at their exclusion thus:

They [NGO] say they know better than us about the forest. They say that we (the villagers) don't know anything about it. They don't listen to us.

The social disruption of the bed and breakfast project also affected the households chosen by the project. One man felt so uncomfortable with the hostility that he moved his son's young family into the bed and breakfast accommodation and withdrew from the project. A member of one of the households chosen by the scheme also expressed his discomfort about being unfavourably singled out by other villagers and told us how he was trying to ensure that other villagers benefitted from his good fortune:

Other families haven't profited so they have woken up (to that) and started to say bad things. The villagers say that only three families will benefit and that if something comes then everyone should benefit. I am one of the people who have benefitted but when I need to buy oil, or need another mule I will go and ask the neighbours so they will benefit too.

The villagers' frustration at their exclusion from the bed and breakfast project illustrates how social cohesion can be put at risk by well-meaning interventions by outside agencies. Social divisions could affect group collaboration, for example, fire-fighting efforts may be compromised by poor relations between households. Our impression when talking to villagers was that, as in the oven project, the NGO had conducted a project that they felt the village needed rather than consulting with the village about their needs. Such disagreement between local people and outside agencies over conservation issues is common elsewhere and the failure of outside agencies to trust local people's knowledge or their ability to make decisions is reciprocated by local people (Fairet, 2012; Sillitoe, 2010; Torri, 2011).

Communities and the Conservation Team

Our engagement with villagers provided us with evidence of their continued exclusion from meaningful participation in the conservation of the forest and encouraged us to decolonize our own practice. To do this, we included forest users in our research activities by engaging with shepherds from the villages on the periphery of Bouhachem and including them in our Barbary macaque survey activities. We encountered these men regularly and built long-term relationships with many of them based on mutual trust and often a shared interest in wildlife. Both we and the shepherds enjoyed sharing general and specific knowledge about Barbary macaques and conversing on many other topics while the goats were resting and shepherds had time to chat. However, from summer 2010, we became aware that, beyond our encounters with village shepherds, many other villagers had little idea of what we were doing. We began to hear rumors that people believed we were feeding, trapping, or shooting macaques. These rumors about our activities worried us as they revealed a lack of effective communication between us (the conservation team) and the villagers. With our knowledge of the communities' history of exclusion and their resistance to the imposition of top-down initiatives, we were mindful of the problems this lack of communication could invoke.

To correct our oversight of excluding the villagers from our forest activities, we wanted to develop a village-focused project and turned our attention to village dogs because they were a threat to macaques (Waters *et al.*, 2017), their role in transmitting disease (particularly rabies), and their importance to local people as livestock and property guards. We had also discovered that a feral dog pack that villagers blamed for livestock and wildlife predation was, in fact, composed of free-roaming dogs belonging to villagers (Waters *et al.*, 2018). Direct communication that the villagers' belief was inaccurate risked loss of our own credibility, that of the villagers, or both, and a polarization of views as people strove to protect their cultural or professional identities. We believed a clash of these identities had caused the direct confrontation between the villagers and NGO about the bed and breakfast project and wanted to avoid the total breakdown in relations that this confrontation had evoked.

To resolve the lack of communication and to establish a positive connection between villagers and macaques we developed an activity that villagers perceived as beneficial to themselves, open to all households, and in which participation was voluntary. Our Dog Health Programme aimed to vaccinate dogs against rabies in order to safeguard human health in the villages, and (we hoped) reduce the risk of rabies transmission from dogs to wildlife and livestock. We learned from the inadvertently divisive action of excluding many villagers from the bed and breakfast project and visited every household in the focal villages even if we knew they had no dogs. Including all households allowed all villagers to meet and interact with the project team and seemed to reassure people that we valued them and their livestock as well as the macaques. We heard no more inaccurate stories about what we were doing in the forest. The initiative also acted to communicate the reality of the village/feral dog issue without creating conflict (Waters *et al.*, 2018).

After the dog health project, we found that more people approached us, often just to chat but also to express their grievances. Chief among these grievances was the illegal intensive logging conducted by outsiders. The villagers began to ask us to report illegal felling to the forestry authorities in the nearest city in case the local forestry guard was complicit in the illegal logging. We believed this to be in the interest of forest users and the macaques and, we have reported such incidences when asked to do so by villagers since 2011. This strategy has been effective. For example, in October 2016, five villagers stopped us to report illegal logging during 10 days and we also encountered a tractor traveling through the forest loaded with cut timber which we photographed and reported to the regional forestry department. No legal proceedings followed, but the logging stopped. Our role as mediators between communities and authorities over some forest issues indicates we have the trust of both entities. Successful management of similar relationships enabled a national NGO in Nepal to collaborate with the state to strengthen the conservation role of communities' coexisting with the Endangered snow leopard (*Panthera uncia*) (Jackson & Lama, 2016; Mishra *et al.*, 2017).

Implications for Primate Conservation Practice

Conservation is a social, cultural, and political process involving issues of social equity and environmental justice, the effects of which are connected to past histories as well as current politics (Brosius, 2006; Riley, 2020). Recognizing the moral complexities of our work is especially important when working with communities which are disadvantaged by protected areas or changing economies (Dore *et al.*, 2018; Hill *et al.*, 2002; Riley & Bezanson, 2018). For example, St. Kittitian farmers' ambiguous relations with the introduced vervet monkeys (*Chlorocebus aethiops sabeus*) are related to changes in agricultural practice, insecure land tenure and their difficulties preventing the monkeys from feeding and destroying their crops (Dore *et al.*, 2018).

We cannot pretend that the effects of colonialism have faded away and must tend to our own position in the communities where we work. Scapegoating of community members by agents of the state and others is common practice in conservation (Knight, 2000; van Assche *et al.*, 2012). Poor relationships between local communities and conservation authorities clearly undermine the necessary trust for the emergence of an effective partnership to jointly manage natural resources (Torri, 2011). As acknowledged social actors, we need to be aware of and mitigate the scapegoating and "othering" of rural and indigenous groups by urban elites, which include agents of the state, ourselves, and our fellow conservationists. This includes consideration of how we as conservationists deal with and communicate information about community activities (such as illegal primate hunting) that are not conducive to primate conservation aims. We (and that includes us as authors) must also remember that we are all colonized by prevailing ideas and reminding ourselves to be open minded is key to responsible, thoughtful, and inclusive conservation practice.

We must learn to "trust the emergent process of attentive engagement" (Rubis 2020, p. 5) with the place, the people, and the species on which we focus. The good intentions of outside agencies to improve local livelihoods and conditions will fail if they rely on, often incorrect, assumptions about communities' needs without doing the necessary groundwork engaging with people at the heart of the proposed intervention (Reddy *et al.*, 2017). We recommend coproducing knowl-edge about primates with people who have an ongoing connection to the animals' habitats. For example, we have always included shepherds in our Barbary macaque survey effort, establishing strong personal connections and developing a mutual respect for one another's knowledge as well as a population estimate for the species. We agree strongly with Riley and Bezanson's (2018) argument for investing in the training of local people. The insight provided by local BMAC team members has greatly contributed to the project's success in recruiting villagers to conservation activities.

Conservationists' default approach should be to create and design plans with the people directly affected without assuming that an initiative that has worked in one community will work in another. Such preparation may not deliver a quick solution but will ensure that local people come to view conservation activities as salient and worthwhile. This truly cooperative approach will pay future dividends because it will achieve conservation goals more quickly than a failed initiative that destroys trust, threatens outside agencies' credibility and may set back conservation action for many years.

Conservationists need to develop greater awareness of the potential threat posed to their relations with local people owing to their lack of awareness of, or failure to acknowledge, the historical and political context of their study sites. Understanding the history and context of a project area is crucial to enable us to decolonize our conservation practice. Omitting this understanding is a recipe for misunderstanding, suspicion and indifference among host communities with whom conservationists need to cooperate (Constant & Bell, 2017; van Assche *et al.*, 2012). Often it seems that incoming conservationists assume that local communities are obligated to cooperate with them rather than they alter their ideas to accommodate the communities in which they are the guests.

Poor communication can act as a constraint on relationships between the actors involved in conservation activities (Constant & Bell, 2017). To avoid alienating the very communities we wish to work with, we recommend carefully attending to covert expressions of community resistance, such as gossip and rumor that can subtly, but thoroughly, undermine conservation activities. Communication regarding scientific activities such as camera trap surveys must be conducted ethically and local people included in the survey design (Sandbrook *et al.*, 2021) to avoid incorrect information being spread about the cameras' presence in the communities concerned. For example, chimpanzee conservationists in Sierra Leone were forced to temporarily stop camera trapping due to the concerns of some community groups. The groups' concerns were allayed in a stakeholders' meeting when the conservationists clarified the project's objectives to the satisfaction of the community involved (Chesney *et al.*, 2020).

Publishing qualitative data, as we have here, allows others to hear the voices of people who would otherwise go unheard. We demonstrate in this study that to establish trust and decolonize conservation, practitioners need to comprehend historical explanations for the current circumstances and preoccupations of local people. Conservationists who have such an understanding will more quickly grasp people's perceptions and judgments of nature conservation and thus find ways of creating common ground, so essential for developing mutual trust and positive conservation outcomes. We provide a summary of recommendations to further inclusive conservation practice in Fig. 1.

Be humble	Acknowledge the common humanity we share with people living in or around conservation areas, and be prepared to learn about their historical ecology by listening to them.
Be aware	Research and confront the effects of colonial history, and its continuing influence, on the places where we work or plan to work; while reflecting on our own biases and those of the institutions we represent.
Be perceptive	Find out how local people view us, our employers, the organizations we associate with, our proclaimed intentions and our actions, so to behave sensitively toward different people and groups.
Be informed	Emphasise how understanding of human-human and human-primate social relations and cultural values is vital for achieving sustainable biodiversity conservation in any location.
Be influential	Examine how our policies, procedures, and practices might actually discriminate against, marginalise or exploit other people.
Be realistic	Use our position to advocate for just and inclusive conservation research and practice to be embedded in research policy, the disposition of grants and awards, and the ethical rubrics of professional and scholarly bodies.

Fig. 1 Recommendations for how we decolonize primate conservation in practice.

Conclusions

The marginalization of Bouhachem villagers by the occupying power, the state, and urban society is demonstrated by their past and present exclusion from resource and conservation management and planning by outside agencies. In common with many minority and ethnic groups worldwide (Dominguez & Luoma, 2020; Rubis, 2020; Torri, 2011), villagers in Bouhachem were scapegoated by forestry guards and thought of as backward and belittled (i.e., "othered") by the urban middle class who assumed they did not understand conservation and needed assistance to develop. The villagers were conscious of this discrimination and demonstrated their resistance both covertly, by ignoring initiatives, and overtly, by direct confrontation. As other scholars have pointed out, resistance to top-down initiatives may serve to strengthen or preserve villagers' identities in the face of what they perceive as unnecessary interference in their lives (Holmes, 2007) and outside agencies' insensitivity to local institutions may create further hostility toward future interventions (Klein *et al.*, 2007) or inspire apathy (Saunders, 2011).

To understand the human dimension of conservation with its messy entanglement of history, politics, and resource exploitation, deep ethnographic engagement is vital, as is a long-term approach building trust and working with communities to ensure a positive association with conservation activities. Fostering self-reflection means becoming aware of ourselves as social actors, leading to the evaluation of our own actions, values, and preferences and perhaps revising them (Montana *et al.*, 2020). Decolonizing our own practice will be uncomfortable, challenging and perhaps emotional because it is accompanied by a fundamental shift in how we see the world (Barker & Pickerill, 2020). Nevertheless, for us, and hopefully the communities with whom we engage, the process has been and, continues to be, a rewarding and fruitful one.

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References

- Adams, W. M. (2003). Nature and the colonial mind. In W. M. Adams & M. Mulligan (Eds.), *Decolonising nature: Strategies for conservation in a post-colonial era* (pp. 16–50). Earthscan Publications.
- Agrawal, A., & Gibson, C. C. (1999). Enchantment and disenchantment: The role of community in natural resource conservation. World Development, 27, 629–649. https://doi.org/10.1016/s0305-750x(98)00161-2.
- Barker, A. J., & Pickerill, J. (2020). Doings with the land and sea: Decolonising geographies, Indigeneity, and enacting place agency. *Progress in Human Geography*, 44, 640–662.
- Bell, S., Hampshire, K., & Tonder, M. (2008). Person, place and knowledge in the conservation of the Saimaa ringed seal. Society and Natural Resources, 21, 277–293.
- Benjaminsen, T. A., Goldman, M. J., Minwary, M. Y., & Maganga, F. P. (2013). Wildlife management in Tanzania: State control, rent seeking and community resistance. *Development and Change*, 44, 1087– 1109. https://doi.org/10.1111/dech.12055.
- Blair, M. E. (2019). Toward more equitable and inclusive spaces for primatology and primate conservation. *International Journal of Primatology*, 40, 462–464.
- Blaser, M. (2009). The threat of the Yrmo: The political ontology of a sustainable hunting program. American Anthropologist, 111, 10–20.
- Brosius, J. P. (2006). Common ground between anthropology and conservation biology. Conservation Biology, 20, 683–685.
- Brosius, J. P., Tsing, A., & Zerner, C. (1998). Representing communities: histories and politics of communitybased natural resource management. Society & Natural Resources, 11, 157–168.
- Burli, M., Aw-Hassan, A., & Rachidi, Y. L. (2008). The importance of institutions in mountainous regions for accessing markets: An example from the Moroccan High Atlas. *Mountain Research and Development*, 28, 233–239.
- Buscher, B., van den Bremer, R., Fletcher, R., & Koot, S. (2017). Authenticity and the contradictions of the "Ecotourism Script":Global marketing and local politics in Ghana. *Critical Arts*, 31, 37–52.
- Butt, B. (2012). Commoditizing the safari and making space for conflict: Place, identity and parks in East Africa. *Political Geography*, 31, 104–113.
- Carson, S., Kentatchime, F., Nana, E. D., Cole, B. L., & Godwin, H. (2018). Visions from local populations for livelihood-based solutions to promote forest conservation sustainability in the Congo Basin. *Human Ecology*, 46, 887–896.
- Cassidy, A. (2017). Badger-human conflict: an overlooked context for bovine TB debates in the UK. In C. M. Hill, A. D. Webber, & N. E. C. Priston (Eds.), *Understanding conflicts about wildlife* (pp. 65–94). Berghahn Books.
- Chatty, D. (2003). Environmentalism in the Syrian Badia: The assumptions of degradation, protection and Bedouin misuse. In D. G. Anderson & E. Berglund (Eds.), *Ethnographies of conservation* (pp. 87–100). Berghahn Books.
- Chesney, C., Bolanos, N. C., Kanneh, A. K., Sillah, E., Amarasekaran, B., & Garriga, R. M. (2020). Mobonda Community Conservation Project: Chimpanzees, oysters, and community engagement in Sierra Leone. *American Journal of Anthropology*. https://doi.org/10.1002/ajp.23219.
- Constant, N. L., & Bell, S. (2017). Governance, participation and local perceptions of protected areas: Unwinding traumatic nature in the Blouberg Mountain Range. *Environmental Values*, 26, 539–559.
- Datta, R. (2018). Decolonizing both researcher and research and its effectiveness in indigenous research. *Research Ethics*, 14, 1–24.
- Davis, A., & Goldman, M. J. (2019). Beyond payments for ecosystem services: Considerations of trust, livelihoods and tenure security in community based conservation projects. *Oryx*, 53, 491–496.
- Davis, D. K. (2007). Resurrecting the granary of Rome. Ohio University Press.
- Delibes-Mateos, M. (2017). Rumours about wildlife pest introductions: European rabbits in Spain. Ambio, 46, 237–249.
- Dominguez, L., & Luoma, C. (2020). Decolonising conservation policy: How colonial land and conservation ideologies persist and perpetuate indigenous injustices at the expense of the environment. *Land*, 9, 65. https://doi.org/10.3390/land9030065.
- Dore, K. M. (2018). Ethnoprimatology without conservation: The political ecology of farmer-green monkey (Chlorocebus sabeus) relations in St. Kitts, West Indies. *International Journal of Primatology*, 39, 918– 944.

- Dore, K. M., Eller, A. R., & Eller, J. L. (2018). Identity construction and symbolic association in farmer-vervet monkey (Chlorocebus aethiops sabaeus) interconnections in St. Kitts. *Folia Primatologica*, 89, 63–80.
- Dowsley, M., & Wenzel, G. (2008). "The time of the most polar bears": A co-management conflict in Nunavut. Arctic, 61, 177–189.
- Dressler, W., Büscher, B., Schoon, M., Brockington, D., Hayes, T. M., Kull, C. A., McCarthy, J., & Shrestha, K. (2010). From hope to crisis and back again? A critical history of the global CBNRM narrative. *Environmental Conservation*, 37, 5–15.
- El Abdellaoui, M., & Chikhi, N. E. (1999). Explotacion de los recursos naturales. In J. Nogue & J. L. Villanova (Eds.), *Espana en Marruecos* (pp. 511–550). Editorial Milenio.
- Fairet, E. M. M. (2012). Vulnerability to crop raiding: An interdisciplinary investigation in Loango National Park, Gabon. PhD Thesis, University of Durham.
- Fairhead, J., & Leach, M. (1995). False forest history, complicit social analysis: Rethinking some West African environmental narratives. World Development, 23, 1023–1035.
- Gadgil, M., Olsson, P., Berkes, F., & Folke, C. (2003). Exploring the role of ecological knowledge in ecosystem management: Three case studies. In F. Berkes, J. Colding, & C. Folke (Eds.), *Navigating* social-ecological systems: Building resilience for complexity and change (pp. 189–209). Cambridge University Press.
- Garland, E. (2008). The elephant in the room: Confronting the colonial character of wildlife conservation in Africa. African Studies Review, 51, 51–74.
- Geoghegan, T. (2009). Caribbean responses to global trends. In J. G. Carrier & P. West (Eds.), Virtualism, governance and practice: Vision and execution in environmental conservation (pp. 112–133). Berghahn.
- Gilbert, H. (2013). "Bedouin overgrazing" and conservation politics: Challenging ideas of pastoral destruction in South Sinai. *Biological Conservation*, 160, 59–69.
- Govindrajan, R. (2018). Animal intimacies: Interspecies relatedness in India's central Himalayas. University of Chicago Press.
- Hanes, S. (2017). White man's game. Metropolitan Books.
- Hays, C. M. (2019). The 'park' as racial practice: Constructing whiteness on Safari in Tanzania. *Environmental Values*, 28, 141–170.
- Hill, C. M. (2002). Primate conservation and local communities: Ethical issues and debates. American Anthropologist, 104, 1184–1194.
- Hill, C. M. (2017). Introduction complex problems: Using a biosocial approach to understanding humanwildlife interactions. In C. M. Hill, A. D. Webber, & N. E. C. Priston (Eds.), Understanding conflicts about wildlife: A biosocial approach (pp. 1–14). Berghahn Books.
- Hill, C. M., Osborn, L. V., & Plumptre, A. J. (2002). Human-wildlife conflict: Identifying the problem and possible solutions. In *Albertine Rift Technical Report Series* (Vol. 1). Wildlife Conservation Society.
- Holmes, G. (2007). Protection, politics and protest: Understanding resistance to conservation. *Conservation & Society*, 5, 184–201.
- Idrissou, L., van Paassen, A., Aarts, N., & Leeuwis, C. (2011). From cohesion to conflict in participatory forest management: The case of Oueme Superieur and N'Dali (OSN) forests in Benin. *Forest Policy and Economics*, 13, 525–534.
- Ilahiane, H. (1999). The Berber Agdal institution: Indigenous range management in the Atlas Mountains. *Ethnology*, 38, 21–45.
- Jackson, R. M., & Lama, W. B. (2016). The role of mountain communities in snow leopard conservation. In T. McCarthy & D. Mallon (Eds.), Snow leopards: Biodiversity of the world: Conservation from genes to landscapes (pp. 139–149). Elsevier.
- Jalais, A. (2010). Forest of tigers: People, politics and environment in the Sundarbans. Routledge.
- Joseph, R. (1973). The economic significance of Cannabis sativa in the Moroccan Rif. *Economic Botany*, 27, 235–240.
- Keikelame, M. J., & Swartz, L. (2019). Decolonising research methodologies: Lessons from a qualitative research project. Cape Town, South Africa. *Global Health Action*, 12, 1561175. https://doi.org/10.1080/ 16549716.2018.1561175.
- Klein, J., Reau, B., Kalland, I., & Edwards, M. (2007). Conservation, development and a heterogeneous community: The case of Abohitantely Special Reserve, Madagascar. *Society & Natural Resources*, 20, 451–467.
- Knight, J. (2000). Introduction. In J. Knight (Ed.), Natural enemies: People-wildlife Conflicts in anthropological perspective (pp. 1–35). Routledge.
- Lanjouw, A. (2008). Transboundary conservation in the Virunga-Bwindi region. In T. S. Stoinski, H. D. Steklis, & P. T. Mehlman (Eds.), Conservation in the 21st century: Gorillas as a case study,

Developments in Primatology: Progress and Prospects (pp. 271-281). Springer Science+Business Media.

- Leach, M., & Mearns, R. (Eds.) (1996). The lie of the land: Challenging received wisdom on the African environment. Heinemann.
- Leblan, V. (2016). Territorial and land-use rights perspectives on human-chimpanzee-elephant coexistence in West Africa (Guinea, Guinea-Bissau, Senegal, nineteenth to twenty-first centuries). *Primates*, 57, 359– 366.
- Lee, P. C. (2011). Problem animals or problem people? In J. MacClancy & A. Fuentes (Eds.), *Centralizing fieldwork: Critical perspectives from primatology, biological and social anthropology* (pp. 69–83). Berghahn Books.
- Lueong, G. M. (2017). The forest people without a forest. Berghahn Books.
- Mariki, S. B., Svarstad, H., & Benjaminsen, T. A. (2015). Elephants over the cliff: Explaining wildlife killings in Tanzania. *Land Use Policy*, 55, 19–30.
- McLennan, M. R., & Hill, C. M. (2013). Ethical issues in the study and conservation of an African great ape in an unprotected, human-dominated landscape in Western Uganda. In J. MacClancy & A. Fuentes (Eds.), *Ethics in the field: Contemporary challenges* (pp. 45–66). Berghahn Books.
- McNeely, J. A., & Scherr, S. J. (2003). Ecoagriculture: Strategies to feed the world and save biodiversity. Island Press.
- Mishra, C., Young, J. C., Fiechter, M., Rutherford, B., & Redpath, S. M. (2017). Building partnerships with communities for biodiversity conservation: Lessons from Asian mountains. *Journal of Applied Ecology*, 54, 1583–1591.
- Montana, J., Elliott, L., Ryan, M., & Wyborn, C. (2020). The need for improved reflexivity in conservation science. *Environmental Conservation*, 47, 217–219.
- Moore, L. E. (2010). Conservation heroes versus environmental villains: Perceiving elephants in Caprivi, Namibia. *Human Ecology*, 38, 19–29.
- Plumwood, V. (2003). Decolonizing relationships with nature. In W. Adams & M. Mulligan (Eds.), Decolonizing nature: Strategies for conservation in a post-colonial era (pp. 51–78). Earthscan Publications.
- Pujadas, A., & Castillo, A. (2007). Social participation in conservation efforts: A case study of a biosphere reserve on private lands in Mexico. *Society & Natural Resources*, 20, 57–72. https://doi.org/10.1080/ 08941920600891371.
- Reddy, S. M. W., Montambault, J., Masuda, Y. J., Keenan, E., Butler, W., Fisher, J. R. B., Asah, S. T., & Gneezy, A. (2017). Advancing conservation by understanding and influencing human behavior. *Conservation Letters*, 10, 248–256.
- Redford, K. H. (2011). Misreading the conservation landscape. Oryx, 45, 324–330. https://doi.org/10.1017/ s0030605311000019.
- Riley, E. P. (2020). The promise of contemporary primatology. Routledge.
- Riley, E. P., & Bezanson, M. (2018). Ethics of primate fieldwork: Toward an ethically engaged primatology. In D. Brenneis & K. B. Strier (Eds.), *Annual review of anthropology* (Vol. 47, pp. 493–512). https://doi. org/10.1146/annurev-anthro-102317-045913.
- Rovero, F., Marshall, A. R., Jones, T., & Perkin, A. (2009). The primates of the Udzungwa Mountains: Diversity, ecology and conservation. *Journal of Anthropological Sciences*, 87, 93–126.
- Rubis, J. M. (2020). The orang utan is not an indigenous name: Knowing and naming the maias as a decolonizing epistemology. *Cultural Studies*, 34, 811–830.
- Rubis, J. M., & Theriault, N. (2019). Concealing protocols: Conservation, Indigenous survivance, and the dilemmas of visibility. Social & Cultural Geography, 21, 962–984.
- Russell, D., & Harshbarger, C. (Eds.) (2003). Groundwork for community based conservation: Strategies for social research. Altamira.
- Said, E. (1978). Orientalism. Pantheon Books.
- Sandbrook, C. (2017). Weak yet strong: The uneven power relations of conservation. Oryx, 51, 379–380.
- Sandbrook, C., Clark, D., Toivonen, T., Simlai, T., O'Donnell, S., Cobbe, J., & Adams, W. (2021). Principles for the socially responsible use of conservation monitoring technology and data. *Conservation Science* and Practice. https://doi.org/10.1111/csp2.374.
- Saunders, F. (2011). It's like herding monkeys into a conservation enclosure: The formation and establishment of the Jozani-Chwaka Bay National Park, Zanzibar, Tanzania. *Conservation & Society*, 9, 261–273.

Schauer, J. (2019). Wildlife between empire and nation in twentieth-century Africa. Palgrave Macmillan.

Scott, J. (1985). Weapons of the weak: Everyday forms of resistance. Yale University Press.

- Sefa, G. J. S. (2006). Introduction: Mapping the terrain—towards a new politics of resistance. In G. J. S. Sefa & A. Kempf (Eds.), Anti-colonialism and education: The politics of resistance (pp. 1–23). Sense Publishers.
- Setchell, J. M., Fairet, E. F. M., Shutt, K., Waters, S., & Bell, S. (2017). Biosocial conservation: Integrating biological and ethnographic methods to study human-primate interactions. *International Journal of Primatology*, 35, 401–426.
- Sharma, V. (2020). Pardhi criminality in postcolonial Chhattisgarh: Of tigers, tribals and misfits. *Studies in History.*, 36, 98–120.
- Siex, K. S., & Struhsaker, T. T. (1999). Colobus monkeys and coconuts: A study of perceived human-wildlife conflicts. *Journal of Applied Ecology*, 36, 1009–1020.
- Sillitoe, P. (2010). Trust in development: Some implications of knowing in indigenous knowledge. Journal of the Royal Anthropological Institute, 16, 12–30.
- Szabo, P., & Hedl, R. (2011). Advancing the integration of history and ecology for conservation. Conservation Biology, 25, 680–687.
- Tadie, D., & Fischer, A. (2013). Hunting, social structure and human-nature relationships in Lower Omo, Ethiopia: People and wildlife at a crossroads. *Human Ecology*, 41, 447–457.
- Tawil, S. (2006). Qur'anic education and social change in Northern Morocco: Perspectives from Chefchaouen. Comparative Education Review, 50, 496–517.
- Torri, M. C. (2011). Conservation, relocation and the social consequences of conservation policies in protected areas: Case study of the Sariska Tiger Reserve, India. *Conservation and Society*, 9, 54–64.
- Tumusiime, D. M., & Svarstad, H. (2011). A local counter-narrative on the conservation of mountain gorillas. Forum for Development Studies, 38, 239–265.
- van Assche, K., Bell, S., & Tempau, P. (2012). Traumatic natures of the swamp: Concepts of nature in the Romanian Danube Delta. *Environmental Values*, 21, 163–183.
- Waters, S., El Harrad, A., Chetuan, M., Bell, S., & Setchell, J. M. (2017). Dogs disturbing wildlife: Domestic dogs disturb and kill Barbary macaques in Bouhachem forest, North Morocco. *African Primates*, 12, 55– 58.
- Waters, S., Watson, T., Bell, S., & Setchell, J. M. (2018). Communicating for conservation: circumventing conflict with communities over domestic dog ownership in north Morocco. *European Journal of Wildlife Research*, 64, 69. https://doi.org/10.1007/s10344-018-1230-x.
- Webber, A. D., Hill, C. M., & Reynolds, V. (2007). Assessing the failure of a community-based humanwildlife conflict mitigation project in Budongo Forest Reserve, Uganda. *Oryx*, 41, 177–184.

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