Joshua Matanzima
Beaven Utete *Editors*

Living with Wildlife in Zimbabwe

Navigating Conflict and Co-existence

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Editors
Joshua Matanzima
Sustainable Minerals Institute
The University of Queensland
Brisbane, QLD, Australia

Beaven Utete
Chinhoyi University of Technology
Chinhoyi, Zimbabwe

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Cover illustration: The image shows a scarecrow in a maize field in the Middle Zambezi Valley, Zimbabwe. Credit The Editors.

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Summary

Communities residing in or near protected areas in Zimbabwe interact with animals every day. These interactions are mostly negative and have a bearing on the socio-economic activities of communities as well as conservation. Factors such as urban expansion and climate change are engendering the increased contact between people and animals. Urban expansion is encroaching animal habitat, and at the same time, climate change is resulting in loss of animals' habitat and natural food sources for animals, as a solution animals encroach human habitats for survival. Evidence indicates that wildlife encroaches human communities in search of water and food; at the same time, humans encroach protected areas for several socio-economic activities including fetching for firewood, poaching, and gathering of fruits. Thus, the two are increasingly sharing space translating into competition over resources and conflict. Based on document analysis, qualitative interviews, and discussions with impacted communities, chapters in this book examine the prevalence of human wildlife conflict and opportunities for coexistence in different parts of Zimbabwe. While conflicts between people and animals are on the rise in the country, we believe that detailed data about the prevalence of conflict can be used by policymakers and conservationists to promote coexistence between humans and wildlife. Themes covered in this book will be of interests to academics, policymakers, conservationists, students, and government agencies working within the field of wildlife conservation.

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About the Editors

Joshua Matanzima is a researcher at the Centre for Social Responsibility in Mining (Sustainable Minerals Institute), University of Queensland in Brisbane, Australia. He holds a Ph.D. in anthropology from La Trobe University, Australia. His research interests include natural resources conflicts between indigenous people, governments, and extractive companies; social aspects of mining and energy transitions; and social, environmental, and governance risks and impacts of large-scale infrastructure development and conservation projects. He has carried out extensive fieldwork on these topics in the Middle-Zambezi Valley.

Beaven Utete is a professor and chairperson of the Freshwater and Fishery Sciences Department at the Chinhoyi University of Technology, Zimbabwe. His research interests are in human-wildlife conflicts in water systems and sustainable water dependent livelihoods in southern Africa. He loves tracking crocodile egg nests long streams and rivers.

Contributors

Joshua Chakawa National University of Lesotho, Maseru, Lesotho

Itai Dhliwayo School of Wildlife and Environmental Sciences, Chinhoyi University of Technology, Chinhoyi, Zimbabwe

Codelia Dhodho The Catholic University of Zimbabwe, Bulawayo, Zimbabwe

Edson Gandiwa Zimbabwe Parks and Wildlife Management Authority, Causeway, Harare, Zimbabwe

James Hlongwana Great Zimbabwe University, Masvingo, Zimbabwe

Vincent Jani Government of Zimbabwe, Harare, Zimbabwe

Owen Mangiza Midlands State University, Gweru, Zimbabwe

Joshua Matanzima The University of Queensland, Brisbane, Australia

Blessing Mathe Department of Animal Science and Rangeland Management, Faculty of Agricultural Science, Lupane State University, Lupane, Zimbabwe

Anele U. Matshisela Department of Animal Science and Rangeland Management, Faculty of Agricultural Science, Lupane State University, Lupane, Zimbabwe

Tagwirei C. Maunganidze Department of Nursing and Social Work, University of Hertfordshire, Hertford, UK

Chiedza L. Mgumba Department of Animal Science and Rangeland Management, Faculty of Agricultural Science, Lupane State University, Lupane, Zimbabwe

Mlamuleli Mhlanga Department of Animal Science and Rangeland Management, Faculty of Agricultural Science, Lupane State University, Lupane, Zimbabwe

Prosperity Mpala Department of Animal Science and Rangeland Management, Faculty of Agricultural Science, Lupane State University, Lupane, Zimbabwe

Dumoluhle Bukhosi Mpofu Department of Human Capital Development, Faculty of Commerce, Lupane State University, Lupane, Zimbabwe

Never Muboko School of Wildlife and Environmental Sciences, Chinhoyi University of Technology, Chinhoyi, Zimbabwe;
Zimbabwe Parks and Wildlife Management Authority, Causeway, Harare, Zimbabwe

Teverayi Muguti Stellenbosch University, Stellenbosch, South Africa

Gift Mwonzora Willy Brandt School of Public Policy, University of Erfurt, Erfurt, Germany

Knowledge Mwonzora Centre for Security, Peace and Conflict Resolution and Centre for the Advancement of Non-racialism and Democracy, Nelson Mandela University, Gqeberha, South Africa

Luckson Ncube World Vision International, Harare, Zimbabwe

Emmanuel Ndhlovu University of Johannesburg, Johannesburg, South Africa

Keith Phiri Department of Development Studies, Faculty of Humanities and Social Sciences, Lupane State University, Lupane, Zimbabwe

Munyika Sibanda Great Zimbabwe University, Masvingo, Zimbabwe

Beaven Utete Department of Freshwater and Fishery Sciences, Chinhoyi University of Technology, Chinhoyi, Zimbabwe

Chapter 1
Human Wildlife Conflict and Opportunities for Co-existence

Beaven Utete and Joshua Matanzima

Abstract Human-wildlife conflicts are on the rise in Zimbabwe; and co-existence between the two can be hardly achieved in the short-term due to numerous socio-economic, environmental, institutional, and political conditions. There are challenges in defining the key concepts of conflict and co-existence among different stakeholders. Resultantly, conservationists devise solutions that are inapplicable in solving critical conservation, conflict and co-existence challenges. For example, some incidents labelled human-wildlife conflict are not, but they are contestations among different stakeholders over conservation. In this introductory Chapter we discuss these concepts of human-wildlife conflict, human conflicts over wildlife, co-existence and conservation; by synthesizing their available working definitions as it is provided in the previous literature. This is pertinent in that it makes it easier for the reader to follow these issues as they are raised in the book. These issues prevail variedly in Zimbabwe, and different chapters based on fieldwork elucidate these variations as they occur in different parts of the country.

Keywords Wild animals · People · Protected areas · Conservation · Retaliation · Compensation

Introduction

Chapters in this book variedly documents human-wildlife conflict problems, and provide essential data needed in promoting co-existence, mitigating conflict and the formulation of robust conservation policies. Studies have shown that studying closely the occurrence of negative interactions between people and animals at both local and national scale yield positive results (Aswani & Matanzima, 2024; Van der

B. Utete
Chinhoyi University of Technology, Chinhoyi, Zimbabwe

J. Matanzima (✉)
The University of Queensland, Brisbane, Australia
e-mail: matanzimajosh@gmail.com

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Ploeg et al., 2019). Unavailability of data makes it difficult to understand the nature, trends, and severity of conflict which makes it difficult to solve the problem resulting in the perpetuation of its devastating impacts on both humans and wildlife (Pooley, 2015).

This Chapter critically discusses the key arguments around the issues of conflict between people and animals. This is crucial as such arguments and debates form the critical foundation upon which chapters in the book are predicted. The HWC concept is defined differently among different actors. For example, HWC victims define it as simply "animal attacks on humans". And for conservationists the definition may be more biased towards animals often seeing the conflict through the ways in which anthropogenic activities are impacting on wildlife. The chapter provides a working definition as an entry point to the book, it does not engage in a sustained discussion of the definition complexity. Another key concept is *human-conflicts over wildlife* which is introduced in this chapter, and is a theme discussed in some chapters. Human conflicts over wildlife entail the conflicts between people over wildlife conservation and the problems they cause in communities. Different people hold different views and values over wildlife and when these are in opposite, people conflict. It has been argued that such conflicts have been mistaken for human wildlife conflict; and in this chapter we show how. We also provide a concise description of *coexistence* because our goal is to present data that can be used to promote co-existence in regions where conflicts are occurring. People and animals "are increasingly coming into contact due to climate change, habitat conversion, and species recovery and reintroductions. Thus, it is urgent to facilitate coexistence with wildlife in shared multiuse landscapes" (Pooley et al., 2021: 785) not just in Zimbabwe, but elsewhere where people and animals share space.

The book is about human-wildlife conflicts in Zimbabwe and it presents data that can be used by conservationists and Zimbabwe National Parks and Wildlife Management Authorities (national parks, hereafter) to promote co-existence in the country. Co-existence is essential in that it saves lives of both animals and people. Zimbabwe is a land locked country endowed with a plethora of flora and fauna. Unique flora and fauna in the country attracts and sustains the tourism, conservation and recreation activities. Most of the protected areas in the country are key sites of these industries. However, within and around these protected reside communities that conflict with animals everyday. It is these conflicts that chapter in the book focus on. As we discuss the key concepts of human wildlife conflict, human conflicts over wildlife and coexistence, we also refer more generally to what is happening in Zimbabwe, and more details are provided within the chapters.

Human Wildlife Conflict

Human Wildlife Conflicts (HWCs) can be simply defined as negative relationships between people and animals. The two have to adversely impact on each other's wellbeing and welfare for the relationship to be considered a "conflict" (Conover &

Conover, 2022). These conflicts "occur when the needs and behaviour of wildlife impact negatively on humans or when humans negatively affect the of wildlife" (Mekonen, 2020: 01). Conflicts are not only about the humans as "victims", but animals are increasingly becoming "victims" as well. As Mekonen (2020: 02) observed HWC is a "reciprocal process". Both humans and animals lose in HWC incidences. There are several reasons why animals attack humans; such attacks can be defensive, predatory, or territorial in nature. Often an animal is acting defensively when it attacks a human (Conover & Conover, 2022).

The Anthropocene age has witnessed increased human impact on the natural world. Anthropic developments—including agricultural and urban expansions, human settlements deforestation—are resulting in humans sharing space with animals culminating into conflict. For example, urban and agricultural expansions induce human encroachment of wildlife habitat, and its loss. In turn, animals also encroach on people's farms that are closer to their habitat. This crisscrossing of humans and wildlife on both urban and protected areas is making it challenging to distinguish between and wildlife spaces (Frank & Glikman, 2019).

Furthermore, numerous natural environmental changes (some of which are induced by humans) are inducing changes in animal behaviours leading them to conflict with humans. For instance, climate change events such as heat waves and incessant droughts are inducing the drying up of water and food sources that animals depend on in the wild, which then cause animals to encroach human communities in search of food.

Human-wildlife conflict is a complex phenomenon which is often difficult to curb on the part of the conservationists. These conflicts involve different animals and can be unevenly distributed across communities within the same region/area (Marowa et al., 2021; Messmer, 2000). "Different species cause different types of damage at different times of the year" (Mekonen, 2020: 01). Such differences may result in mixed perceptions about animals and conservation priorities. Thus, it is essential to devise animal specific policies or mitigation strategies as the problems they cause differ. General HWC mitigation strategies may be ineffective in terms of addressing the variations at play.

Both terrestrial and aquatic animals present challenges for communities. In Zimbabwe, as shown in some chapters in this book, communities residing near lakes, reservoirs and rivers are exposed to attacks from crocodiles, hippos and snakes (Marowa et al., 2021; Matanzima et al., 2023). Crocodiles eat and injure livestock and people, steal fish from fishermen's nets in the Lake and destroy nets (Chakanyuka & Utete, 2022; Utete, 2021). These challenges are also common throughout the African continent in communities that reside nearer to water bodies that shelter these predators. Hippos disrupt people livelihoods, forage people's gardens and kill people (Utete, 2020). Terrestrial species such as elephants, lions, buffaloes, leopards, and duiker also impact on people everyday across protected areas in Zimbabwe including in Matusadonha and Gonarezhou National Parks, Save Valley and Chizarira Conservancies.

Studies (and chapters in this volume) also refer to HWC incidents in Zimbabwe involving people and terrestrial animals—such as elephants, buffaloes, baboons,

and duikers—(Le Bel et al., 2016; Scrizzi et al., 2018) and predators—such as lions, hyenas and leopards—(Matema & Andersson, 2015; van der Meer & Dullemont, 2021). Elephants, buffaloes, baboons and duikers trample on people's crops resulting in loss of food production and they also damage people's properties. On the other hand, lions and hyenas predate on livestock and humans culminating into injuries and fatalities (Musiwa & Mhlanga, 2020). These visible HWC impacts are the most emphasized in mitigation conversations. Invisible impacts are often overlooked although they can be severe and persistent. Hidden impacts include social and psychological effects such as poor attendance and performance in schools for children who spend nights protecting crops from wildlife; decrease wellbeing, loss of sleep for guarding crops, fatigue and food insecurity (Khumalo & Yung, 2015). Such hidden impacts are difficult to measure and therefore cannot be compensated. As well, they can be magnified by human–human conflict over what reactions towards wildlife are acceptable under different circumstances (i.e. poaching, killing, negatively affecting species and wildlife habitats) (Frank & Glikman, 2019). It these hidden impacts that most shape people's attitudes towards problem animals (Kansky & Knight, 2014), and hence more research is required unearth detailed invisible or indirect impacts and devise better ways of mitigating them.

In these conflicts, animals are also impacted (Fisher, 2016; Messmer, 2009). As animals repeatedly attack humans, people end up developing negative attitudes towards wildlife. Negative attitudes and perceptions towards wildlife result in retaliatory attacks and killing which is a threat to conservation. The ethics of the use of lethal measures as revenge against animal attacks is increasingly being questioned. For example, it has been that argued that "[sometimes] the cost of lethal control in terms of animal lives lost may not be worth the benefit" (Conover & Conover, 2022: 19). As well, the use of lethal control is increasingly becoming controversial "because people view the same lethal control operation differently, based on their own experiences, hopes and concerns. One group's chief interest is to protect biodiversity, another group wants to protect traditional ways of life for rural residents, and a third group is passionate about preventing animal suffering" (Conover & Conover, 2022: 19).

Studies in Zimbabwe and beyond have reported cases of communities killing wildlife on purpose as revenge (Felix et al., 2022; Mbise, 2021; Usman et al., 2023; Zvingowanisei & Chirongoma, 2023). In instances where endangered wildlife species are involved in conflict, human retaliatory measures impact on the species' conservation efforts (Treves et al., 2006). Hence, there is increased necessity to devise animal specific conflict mitigation strategies—these would enhance the protection of endangered species across the African continent and beyond. It is wrong to assume that "a one-size-fits-all solution for mitigation can be applied successfully across the wide spectrum of specific conflict situations. Widely held global principles and lessons learned should be shared across a wide spectrum [and] be put into perspective with an understanding of the unique, local context of any conflict" (Conover & Conover, 2022: 23–24). Conflict mitigation strategies are one strategy for enhancing wildlife management and promoting its value in society. Minimizing animal harms in society is part of promoting its overall net value to communities.

Negative attitudes towards, and retaliatory killing of animals is also connected with the key issue of "value". Research in the social sciences suggest that socio-economic values have a fundamental influence on the way we perceive and interact with nature (Dietsch et al., 2019; Manfredo, 2008; Manfredo et al., 2021) and these socio-economic values are shaped by several factors (Marowa & Matanzima, 2023). If an animal is always causing uncompensated problems such as livestock depredation, loss of lives and injuries and damages to property, communities may see no value in protecting it or living side-by-side with it and hence may easily call for its extermination. The animal will be bringing problems to the people and not any value. However, values are not static, can change over time especially "when there is significant alteration in the social-ecological context" (Dietsch et al., 2019: 22). Effective problem animal controls, fair compensation of losses, benefit sharing of revenue from trophy hunting and wildlife trade and awareness campaigns can help cultivate positive attitudes and values towards animals in communities. Values are important because they are fundamental motivational goals that influence human thought and, ultimately, human behaviour (Dietsch et al., 2019: 21). Values also significantly shape conflict and coexistence outcomes more broadly.

Protracted and escalating negative relations between people and animals has led to some scholars critique the very notion of human wildlife conflict often relabeling it to human conflicts over wildlife (Matanzima & Marowa, 2022; Redpath et al., 2015).

Human Conflicts Over Wildlife

It has been argued that the continued use of the term human-wildlife conflict (HWC) can constrain problem definition, exacerbate conflict and hinder resolution (Dayer et al., 2019; Jani et al., 2020; Redpath et al., 2015). Largely, because some incidents referred to as HWC are conflicts between people over wildlife (Fisher, 2016), thus we are urged to clearly distinguish between human- wildlife and human–human conflict (Dayer et al., 2019). Different stakeholders within specific regions hold different conflicting views, interests, goals, opinions, feelings, and values towards animals, and this is a source of human conflicts over wildlife (Manfredo & Dayer, 2004; Marowa & Matanzima, 2023).

These conflicts also emanate from different interests, trusts and communication about how to protect and conserve wildlife and ensure the wellbeing of people at the same time" (Bhatia et al., 2017; Conover & Conover, 2022). More often than not, animals are implicated within these heated and deep-rooted debates (Dayer et al., 2019). For example, if communities feel that their needs and priorities are overlooked by conservationists and wildlife managers within conservation debates and decisions, they direct their anger towards animals. While this may be framed as HWC, the root cause of it is actually conflict among humans themselves. In such instances, policies would target solving human wildlife conflicts rather than mitigating long standing quarrels between communities and conservationists.

As Fisher (2016) pointed out, HWC it is a misleading shorthand in conservation. The term HWC:

> simultaneously embrace interactions that are direct and indirect, intended and unintended, [negative or positive] and implicitly suggest both sides are consciously intent on interfering in the life of the other and that the various conflicts are amenable to a single, universal resolution. (Fisher, 2016: 377)

In addition, the term HWC blurs the prevalence of co-existence component within the interaction between people and animals (Pooley, 2021). Young et al. (2010) suggests distinguishing the three components of HWC: (a) the impacts caused by wildlife on humans, (b) the conflicts between those defending pro-wildlife positions and those defending other positions, and (c) the impacts caused by humans on wildlife. Because we may apply good solutions to the wrong problems which ultimately yield no result. Whereas effective solutions to human–human conflict would probably involve building trust and fostering dialogue, solutions proposed to address human–wildlife conflict are typically technical (Young et al., 2010). In most cases, conservationists have to solve the first component by introducing:

> Lethal and non-lethal wildlife management measures, technical fixes for preventing damage such as building fences, as well as financial instruments to offset the direct impact of wildlife on humans. (Frank & Glikman, 2019: 7)

While the second component has largely remained a "conservation's blind spot" (Madden & McQuinn, 2014: 97) that remains unresolved. Conflict do not only prevail between conservationists and communities, but among communities as well, where different cultural interpretations of animals and their behaviour may induce conflict. In such complex situations, technical measures for reducing HWCs are inapplicable in contexts where these are caused by human–human contestations. For example, such efforts are not effective in solving human-lion conflicts in Mola, Zambezi Valley where it is believed that lions are being sent by ancestors to attack people as a form of punishment. Ancestors are angry that the Chief and his subjects are always quarrelling on issues regarding ritual engagement (Matanzima, 2024).

In Zimbabwe, emerging literature is now distinguishing between HWCs and human conflicts over wildlife (Dhliwayo et al., 2023; Jani et al., 2020; Marowa & Matanzima, 2023), though the majority still consider the later as HWC. More so, several chapters in this volume make a distinction between the two by arguing that the perpetuation of each certain type of conflict culminates into the other or exacerbates another. Chapters show that human conflicts over wildlife are inducing HWCs and vice versa. Understanding and identifying these complexities is crucial in as far as managing conflicts and promoting conservation is concerned (Fisher, 2016). Animals need to be protected because they provide benefits to communities in the categories of physical utility, monetary, recreational, ecological, existence and historic values (Conover & Conover, 2022: 11).

Human Wildlife Coexistence

The term coexistence is widely used in conservation science, but its meaning remains unclear (Bhatia, 2021; Frank & Glikman, 2019; Pooley et al., 2021), "little is known about it and how to study it" (Pooley et al., 2021: 784). The concept is applied differently by and in different communities and jurisdictions. Owing to its plasticity in everyday use, the application of the concept is very subjective (Frank & Glikman, 2019; Pooley, 2021). However, attempts have been made to define the term, and these definitions offer a viable entry point of understanding the associated complexities. "Conservationists generally conceive of coexistence as more than tolerance; it is regarded as something more like stewardship, implying notions of care" (Pooley, 2021: 02). According to Frank (2016: 739) "coexistence takes place when the interests of humans and wildlife are both satisfied, or when a compromise is negotiated to allow the existence of both humans and wildlife together". Be that as it may, the common denominator of all definitions is the issues of promoting mutual relationship between people and animal, advancing the common phrase "in harmony with nature". However, researchers and conservationists should bear in mind that prospects for promoting coexistence differ from society to society, in some cases can be successful and in others can fail. Challenges in defining coexistence culminated in the understudying of the topic, and little (or no) empirical cases on this topic exist. Most researchers tend to define it by what it is not—for example, *the absence of conflict* or *retaliation* (Nyhus, 2016 as cited in Bhatia, 2021: 1) or a complete shift from *conflict to coexistence* (Frank & Glikman, 2019). Yet coexistence is not simply about the absence of conflict or retaliation. Actually, it includes the tolerance of conflict to produce a two-dimensional co-adaptive state or praxis involving negative and positive interactions (Bhatia, 2021).

In the past decade, research on human wildlife coexistence is emerging. Coexistence research is opposed to human-wildlife conflict research that has dominated conservation science since the 1990s (Pooley, 2021). This dominant research focused on negative relationships blurring opportunities for coexistence. As well, it was based on biological interpretations of the problem rather than the social. In contrast, coexistence paradigm brings communities with their cultures, economics and politics within conservation rhetoric and praxis. Coexistence is essential because humans and animals are increasingly sharing landscapes and waterscapes, as mentioned earlier on. As Simon Pooley aptly puts it across "coexistence concerns itself with "land sharing rather land sparing" (Pooley, 2021: 2). As well, in reality, most animals live outsides parks and protected areas. Animals roam around urban areas in most of the developing world causing problems. Clearly, if human-wildlife conflicts are to be resolved, better pathways for promoting coexistence must be found (Conover & Conover, 2022).

Coexistence work goes beyond transforming conflicts related to species of wildlife regarded as priority species by conservationists. It considers more holistically challenges (and opportunities) of living with wildlife of all kinds, in all kinds of places. The work is conceptual and descriptive but also action oriented. More awareness on

the value of living with wildlife is required in societies. This would be one positive step in the direction of promoting wildlife conservation. It has been argued that “considering the positive […] values of wildlife is necessary if we are going to [effectively] manage wildlife” (Conover & Conover, 2022: 11). Coexistence is becoming more relevant to conservation today due to increased anthropic threats to wildlife survival that may result in extinction. However, at the same time human needs are taken into account within the equation. There is a tension present in studies on human-wildlife interactions, regarding how to balance the desire to acknowledge and protect the rights of the natural world with the need to uphold equity and recognize the traditional ways of local and Indigenous communities in their relationship with the natural world. Embracing the concept of coexisting with wildlife presents an opportunity to tackle this apparent contradiction address this conflicting situation (Pooley, 2021).

The idea of co-existence considers human as not only part of the problem, but also part of the solution (Frank & Glikman, 2019). Such a concept is essential, if adequately understood and applied and may assist in solving many conservation challenges (Pooley, 2021). This inclusion of co-existence in HWC fosters conservationists to acknowledge that wildlife can thrive in human landscapes, and that most of the time people do live with wildlife and experience impacts or compete for space without calling such interactions conflicts (Frank & Glikman, 2019). At the heart of co-existence is the belief that—if humans cause many environmental changes, they can also become the solution to such problems (Fisher, 2016). An emphasis on coexistence does not imply the entire elimination of conflict per se, but rather to minimize them. It should be a situation whereby humans do not call for the elimination of animals even though they are impacted by them. As such, the positive values of living with animals together with their negative must be clearly communicated to people (Conover & Conover, 2022). Thus, people should willingly welcome the idea of coexistence and not having it imposed upon them (Pooley & Redpath, 2018).

The issue of trust is important when it comes to promoting coexistence in communities. As well, it is important to include communities in coexistence strategy formulation and implementation as to avoid colonial way of doing things, where new conservation ideas are spearheaded and implemented by the scientist in the absence of the communities living side by side with animals. The conservation sector “has a long history (and continuing legacy) of colonial interference with local livelihoods and relations with wildlife, and displacement of locals in the name of caring for wildlife” (Pooley, 2021: 2). Benefits for coexistence need to be clearly communicated to communities by conservationist. Where trust is lacking it may be impossible to achieve coexistence. In countries like Zimbabwe, coexistence will be introduced in historical contexts of conflict and mistrust between communities and conservationists and various regimes of authority. How is coexistence to be fostered where it does not exist? Even where land sharing is the favoured option, the usual approach in conservation has been for biologists to study the requirements of priority species to survive, make recommendations on how human behaviour should be modified to accommodate these needs (with co-benefits where possible), and social scientists,

policymakers, and local managers are then tasked with making this happen (Pooley, 2021).

In addition, researchers realizing the colonial and power imbalances that co-existence might reinforce have asked the question: Coexistence for whom? (Bhatia, 2021; Pooley, 2021). The idea might result in the conservationists and the elites running safaris and conservancies achieving their goals at the expense of the communities. How, then, can we come up with a unified idea of coexistence that is mutually [and beneficial] acceptable to most, if not all groups? (Bhatia, 2021). For example, the deprivation of communities to interact with animals for cultural purposes in the name of coexistence, tend to benefit the conservationist and not the communities. There are communities whose cultural enactments involve interacting with wildlife negatively. For example, the *Masabe* or *Mashabe* (Alien) spirits ceremony performed among the Shona and Tonga of Zimbabwe often include people inflicted by hunting spirits. For such spirits to be pacified, the possessed person has to hunt an animal at night that would be consumed by attendees as part of the ritual (Matanzima & Saidi, 2022), which can be against the ideologies of coexistence. Such practices are banned to the detriment of communities, but conservationists have benefitted. Therefore, the coexistence paradigm may perpetuate the colonial character of previous conservation strategies. It may be "old wine in new bottles" as Pooley (2021: 02) puts it across. These cultural dimensions of wildlife need to be fully recognized within the field of coexistence. Similar to negative coexistence practices such as killing for subsistence, trophy hunting or sport (Bhatia, 2021).

Aspects of Wildlife Conservation in Zimbabwe

In this section, we provide a brief history of conservation in Zimbabwe, that has significantly shaped that the ways in which HWCs occurred or occur in the country. Conservation methods determine the occurrence and magnitude of HWCs, as illustrated in this section In both colonial and postcolonial Zimbabwe, various conservation policies and laws have perpetuated, minimized, and worsened human-wildlife conflicts. Additionally, discriminatory conservation practices were another reason why rural residents resisted colonial rule during the Second Chimurenga. As part of the anti-colonial struggle, nationalists and guerrillas utilized the concept of decolonizing conservation as a tactic to recruit guerrillas from the impacted rural regions.

Replacement of traditional forms of conservation by western conservation models

It has been argued that westernized models of conservation, not just for animals, but for natural resources in general overlooked traditional forms of conservation that long predates colonization and science. The coming in of Europeans on the African continent, saw the introduction of protected areas which was a strategy to demarcate humans and wildlife species, with the aim to control poaching and promoting the conservation of animals. Such a separation introduced under colonialism "often

represents the root cause of human-wildlife conflicts" (Frank & Glikman, 2019: 3). Likewise, physical and figurative boundaries that separate people from animals also lay groundwork for conflicts over wildlife among different actors and regimes of authority (Frank & Glikman, 2019; Marowa & Matanzima, 2023).

Under colonialism, western models of conservation were also introduced in Zimbabwe. These were introduced in disregard of the traditional forms of conservation that existed among Africans (Chigonda, 2018; Matanzima & Marowa, 2022; Muposhi et al., 2017). Colonialist in Zimbabwe never promoted meaningful grassroots participation in conservation programs (Hill, 1991). Yet, African communities had long held traditional forms of conservation that protected wildlife from extinction. For example, taboos against consuming certain animals or hunting in certain defined periods were crucial in conserving wildlife. As well, concepts such as *mupiro* (gift), *manenji* (bad omen), and *marambakutemwa/dambakurimwa* (no till area) were traditionally used to control the indiscriminate cutting down of trees and killing of animals (Mashapa et al., 2019). While in precolonial Zimbabwe, people conserved animals through different cultural norms and taboos, they also killed animals for cultural and religious purposes. As well, human animal relations in the past were more positive than negative. For example, in countless interviews with the Tonga people, Matanzima (2022) was informed that conflicts between people and animals were less often than they are today. In the past, people had different ways of defending themselves from animal attacks that they do not have today (Gandiwa et al., 2021; Langely, 2007). Some of these methods were illegalized under colonialism.

The establishment of the settler colony by Cecil Rhodes' British South Africa Company in 1890, saw the displacement of the African population from their land into cluttered and marginalized reserves. The first reserves to be created in Zimbabwe were Gwai and Shangani. Europeans needed land for large scale commercial farming and the creation of protected areas. As such communities living nearer or on targeted areas to be converted to protected areas were also displaced. Zimbabwe's first state protected areas were established in the early 1900s soon after European settlement, and eventually about 13% of the country was put under state wildlife protection.

Settlers introduced several land and wildlife laws throughout the colonial period that curbed or criminalized Indigenous people's use of wildlife [see Chigonda (2018) for a fuller historiography and discussion of these laws]. From the early colonial law, the 1893 Game Law Amendment Ordinance (that made it illegal to sell, barter, or hawk game without license) to the late colonial laws including the Parks and Wildlife Act of 1975 (which devolved responsibility for wildlife to private landowners without giving conferring ownership to them as it was considered the state's property), indigenous people were not incorporated in animal conservation (Chigonda, 2018; Hill, 1991).

Throughout coloniality, Africans were prohibited from hunting wildlife in lands that were allocated to them and from protected areas. People were also prohibited from killing animals (such as elephants and buffaloes) which threatened their crops. Thus, "rural farmers had to suffer the consequences of living with wildlife while reaping no benefits from them, and having no say in their management" (Hill, 1991: 23). Africans were considered poachers rather than managers of wildlife; whereas

"whites" were considered conservative (IUCN, 1988). Hunting of Wildlife was only allowed after seeking a permit under the Game Preservation Ordinance Act of 1899, and Africans did not understand this legislation. White landowners had access to these permits and could shoot as many animals as they deem fit to protect their agricultural interests (Gandiwa et al., 2021). Thus, white farmers had means to protect their crops from animals, whereas Africans lacked such means. Veterinary officials also killed hundreds of thousands of animals to eradicate livestock diseases, such as trypanosomiasis, which together with earlier shooting of game for agricultural interests contributed to the decline of wildlife population in the country (Gandiwa et al., 2021; Hill, 1991). Such a negative trend was only reversed in the late 1950s with the onset of private game ranching but their numbers increased rapidly after the promulgation of the Parks and Wildlife Act of 1975 (Gandiwa et al., 2021).

The Parks and Wildlife Act of 1975 marked a change in government policy towards ownership of wildlife resources, but it did not bring much change in terms of increasing the participation of Africans into conservation and wildlife management. It recognized that wildlife was the property of those who lived on the land with it. This gave European settlers more power over wildlife as they controlled all protected areas and ranches in the country. In this regard, rural communities had negative attitudes towards animals as they had no control over them and were bearing the brunt of sharing space with them. Such negative attitudes motivated rural communities to resist colonial forms of conservation during the Second Chimurenga (Hill, 1991; Ranger, 1985). Nationalist movements of ZANU and ZAPU also openly campaigned among rural farmers to resist the implementation of wildlife conservation policies (Hill, 1991).

Community Based Natural Resources Management: Operation Windfall and the CAMPFIRE program in Zimbabwe.

During the early postcolonial era, the Wildlife Industries New Development for All (WINDFALL) project was a major step in including African on wildlife matters. The primary objective of WINDFALL was to model the success registered in commercial wildlife ranching to communal areas and to reduce human-wildlife conflicts that were becoming common. This program that began in 1981 required that revenue derived from hunting in the communal lands or in the Safari areas near these lands be plowed back into development projects in the Affected Areas (Hill, 1991). As well, under WINDFALL, meat was returned to surrounding villages from elephant culling (Chigonda, 2018). However, this experiential project failed mainly because of local community marginalization, ambiguity, negative perceptions, and retention of revenue by government agencies including the Department of National Parks and Wildlife Management (DNPWLM) and Rural District Council.

These western models of conservation championed biological and science in the management of wildlife, and conflicts between people and animals. However, it has been noted that biological science alone does not provide a complete understanding of, or solutions to, human wildlife conflicts. In reality, half of the challenge of addressing the conflict is in understanding the human dimensions with this social, cultural, political, economic and legal complexities. A complaint often

heard from local communities—that the government cares more for wildlife than the people—is an indication that conservation is not purely a matter of biological science (Conover & Conover, 2022: 23). In the 1980s, CAMPFIRE was introduced to promote the involvement of communities in conservation in Zimbabwe, and other Southern African countries, alike. CAMPFIRE recognized the human dimensions of wildlife through giving communities stewardship of wildlife resources.

The introduction of CAMPIRE in the late 1980s had benefits for many communities in the 1990s. Some of the benefits included; devolution of rights to manage, use, dispose of, and benefit from wildlife resources, accrual of revenue and income to local individuals, at the household level, to raise their interest in resource management and conservation. It led to development of infrastructure at community level e.g. clinics, boreholes, schools and employment opportunities and nutrition through bush meat provision (Musiwa & Mhlanga, 2020). However, during the turn of the twenty-first century, the programme started facing many challenges that were worsened by the economic crises bedeviling Zimbabwe. The "inclusionary" vision of CAMPFIRE has been reversed in most communities (Matanzima & Marowa, 2022) as communities no longer benefit or have any say under the program. Communities no longer trust CAMPFIRE, and this is one of the challenges facing conservation practices. It has been argued that fostering communication and trust positively impacts the attitudes and actions of people in conflict with wildlife (Conover & Conover, 2022). People feel cheated by the CAMPFIRE program.

The original idea about CAMPFIRE was to empower communities, however, research in some parts of Zimbabwe (including in cases presented in this book) indicates that, in fact, communities were disempowered. Jani (2022), for example, provides an illustration of the Doma people of northern Zimbabwe, whose way of life was based on hunting, gathering, making clay pots and using traditional medicines was impeded by the introduction of CAMPFIRE in the region. The main disadvantages of CAMPFIRE, besides the non-fulfilled principle of devolution of power, included the opaque distribution of the benefits of wildlife exploitation. Local authorities, safari operators and conservancies benefitted more than communities affected and co-existing with wildlife. Communities were encouraged to participate in conserving wildlife without much benefit in the long-term. Top-down wildlife management with minimal inclusion of locals in management structures led to high levels of mistrust, disenchantment and disillusionment with CAMPFIRE. Overreliance on donor agencies for funding of operations and setting up of structures led to the ultimate collapse of CAMPFIRE across Zimbabwe especially after the land reform programme of 2002 which led to massive withdrawal of funding by donor agencies and collapse of wildlife infrastructure. In areas where CAMPFIRE has survived there has been extensive involvement of the local authorities and citizens e.g. in Mbire (Musiwa & Mhlanga, 2020).