

# 1

## Ecoviolence Studies and Human Security

PETER STOETT AND DELON ALAIN OMROW

### 1.1 Introduction

Building on a recent publication (Stoett & Omrow, 2021) this edited volume is intended primarily as a contribution to the evolving field that we will refer to as ecoviolence studies. The field covers a wide variety of themes, challenges, questions, issues, policy designs, and theoretical implications. While the term ecoviolence had gained some popularity in a limited fashion in the 1980s and 1990s, referring primarily to violence that erupts over conflicts related to natural resources – in particular, access to resources contested along sectarian grounds – we use it in much broader fashion and argue that its resurgence as a field of social science is as timely as it is unfortunate. The threats to planetary health that animate activists and state diplomats alike today – the interconnected climate, biodiversity, and pollution crises, amongst other manifestations of modern capitalism and colonial histories as well as contemporary paths to violence – are violent affairs.

Readers will find an eclectic collection of chapters that contribute to a contemporary discussion of ecoviolence as an impactful aspect of agential and structural violence. The claim for ecoviolence studies as a distinct area of scholarship is deliberately provocative: we acknowledge that some of the issues dealt with in this book draw upon related green criminology scholarship but hold that this subfield of criminology can also be constructively conceived as a subfield of Ecoviolence Studies. Importantly, all of the chapters that follow can also be situated within a broadly conceived human security framework, one that focuses on the emancipatory project of freeing the individuals and communities from systemic oppression and structural violence. We readily embrace the significance of human–human exploitation in the overall conception of ecoviolence. Many would argue exploitation (and, in the case of some Marxist analyses, [super]exploitation) is the driving cause of scarcity, hunger, and anger in the world today. In line with ecofeminist analysis, we see entwined forms of exploitation (class, racial, and

gender amongst them) as central to the environmental harm perpetrated by both market forces and the state today.

This introductory chapter begins with an exposé of the field of Ecoviolence Studies and then discusses the volume to follow.

## 1.2 Ecoviolence Studies Revisited

Ecoviolence is conceived here as the confluence of both *agential and structural violence* associated with environmental harm (in its most harmful form, ecocide) and human–human (super)exploitation. We affix the term *studies* to indicate a multidisciplinary field of inquiry, which covers a wide range of thematic issues, linked by the commonality of ecoviolence; many of these themes are also explored under the rubric of other specializations. We are not making the ambitious claim that ecoviolence studies have or will transcend multidisciplinary to achieve interdisciplinarity or, even more ambitiously, transdisciplinarity, though this is an enticing possibility. But as the diversity of the authors assembled for this edited volume suggests, it is a theme that brings together scholars from a wide variety of disciplines and professions.

Agential violence is perhaps most easily represented by the World Health Organization's definition: violence is "[t]he intentional use of physical force or power, threatened or actual, against oneself, another person, or against a group or community, that either results in or has a high likelihood of resulting in injury, death, psychological harm, maldevelopment or deprivation" (WHO, 2002). We move toward structural violence at the end of the WHO definition. However, intentionality aside, much of the "slow violence" (Nixon, 2011) experienced by vulnerable populations is beyond the will of any individual. Agential violence is deliberately inflicted by an agent, be that a person or a government or a corporation; it is usually conceived as violence against a human but it can also be violence against the environment, such as warfare-related ecocide, ecological sabotage, environmental crime, and the deliberate harm and neglect of animals (according to some animal rights advocates, all forms of farming, for example, are violent).

Structural violence, a term championed by Johan Galtung (1990) and many others, suggests a much more intractable source of harm: sociopolitical structures that are passed on from generation to generation, that not only ensure millions of humans live in suboptimal conditions, but that perpetuate unsustainable resource use and pollution in the process. Some scholars such as Kurtz (2021) have revisited Galtung's triangular model of violence (comprising direct, structural, and cultural violence), calling for researchers to tear down the disciplinary silos so that Galtung's triangle can be transformed into a diamond with the addition of ecoviolence as a field of study. Kelkar (1992, p. 21) suggests that violence includes

“exploitation, discrimination, unequal economic and social structures, the creation of an atmosphere of religiocultural and political violence,” including gender-based violence against women, reinforcing its structural nature.

The distinction between agential and structural violence is all the more complicated when we consider the links between ecocidal and suicidal (an issue further explored in Chapter 5). The World Health Organization has explored the benefits of “greenness” on reducing suicide mortality rates and the data is quite clear: where we live can affect our mental health and exposure to “green spaces” is often limited to many as a result of nature being perceived, accessed, and used differently by people of different socioeconomic, ethnic, racial, and cultural backgrounds. Suicide, therefore, should be studied from a social, historical, and ecological standpoint (Widger, 2018). If neoliberal, free trade policy is also considered, the distinction between agential and structural violence is further exacerbated. One need only reflect on the proliferation of Western biotechnology in India and the increase of suicides among farmers as a direct result of Monsanto’s commercialization of GM seeds; patent control; terminator technology; high-interest loans; and increased production costs for local farmers. Thomas & De Tavernier (2017) argue that there is a link between the economic factors associated with biotechnology cultivation and farmer suicide, as the country has witnessed approximately 300,000 farmer suicides over the past two decades (Mishra, 2014; Philpott, 2015). Critics of biotechnology have dubbed these genetically modified organisms “Seeds of Suicide, Seeds of Slavery, and Seeds of Despair” (Shiva & Jalees, 2006; Shiva, 2013).

In 2017, an Atayal farmer in Taiwan violated the country’s Soil and Water Conservation Act by excavating a piece of land and was forced to pay a fine of NT\$140,000 (approximately \$4,700 USD). Faced with economic hardship and poor physical health, the farmer committed suicide – a practice which is widespread among Indigenous communities in Taiwan. Singer (2016) argues that the relationship the Atayal have with nature is based on what he refers to as “pluralea interactions,” which are interactions based on a dynamic system of interwoven environmental crises and their effects on human health. With the Indigenous people of Taiwan being consigned to the margins of society during the country’s rapid economic growth and Han-owned corporations embezzling their land, “pluralea interactions” help explain the correlation between the usurpation of Atayal dwelling sites and habitats and suicidality among the local communities (Chen et al., 2008).

Chantal Persad’s (2017) analysis of the suicide crisis and state of emergency in the Attawapiskat First Nations community in Ontario, Canada, engages in a critical theoretical discussion of the neoliberal political economy and suicidality among teenagers in Attawapiskat. For Persad, the link between settler-colonial violence (ecocide) and suicide is clearly delineated through the legitimization of neoliberal,

settler-colonial strategies of land theft and dispossession in Canada. Even more, the media's coverage of the tragedy reveals how humanitarian efforts and governance perpetuates tropes of settler colonialism through the pathologization of Indigenous peoples' lived experiences of "trauma" and "mental illness" (Persad, 2017). Murdocca (2020), similarly, examines the political genealogy of humanitarian governance in White settler colonialism, and reveals how racial colonial violence is (re)produced in public and media discourse, with the state ignoring its obligations under the Truth and Reconciliation Commission and the 94 Calls to Action.

Is the violence resulting from the ecocidal–suicidal nexus agential or structural? Westra (2008) offers a thoughtful articulation of the intersections between the "cultural integrity model" and the "self-determination model" (Anaya, 2004; Metcalf, 2004) in her book *Environmental Justice and The Rights of Indigenous Peoples*. Westra revisits both models, asserting that scant attention has been paid to another model which is foundational to the rights of First Nations: "the biological/ecological integrity model." This model addresses the right to life, health and normal functions. In other words, "cultural integrity" and "self-determination," both of which are pivotal in safeguarding Indigenous peoples' inalienable rights, are contingent on the sustainability of "biological/ecological integrity" which aims to bring an end to the (super)exploitation of Indigenous peoples. As the research above demonstrates, "biological/ecological integrity" is impacted by the ecocidal/suicidal nexus and must be integrated into a comprehensive, and intersectional, analysis of Indigenous peoples' connection to land and, more broadly, the geopolitical environment.

The preceding discussion of the ecocidal–suicidal nexus serves to remind us how complicated it is to branch out from more typical perspectives on ecoviolence, even if they were centered to some degree on human security concerns. Obviously, we consider human–human exploitation a form of violence, though of course there are remarkably differing perspectives on just how violent this is. Marxists, for example, remind us that capitalism itself is based on the acceptance of exploitation as the foundation of an entire mode of production. Marxist thought has also undergone many transformations, resulting in nonlinear critiques of capitalism through structural Marxism, neoMarxism, feminist Marxism and postMarxism. Scholars such as Bonds & Inwood (2016), Bosworth (2018), and McCreary & Turner (2018), offer an uncompromising analysis of the relationship between race and capitalism. How might racialized difference and capital accumulation engender ecoviolence, especially in historical and contemporary frameworks of analysis? Ecoviolence studies offers theoretical and political promise to better understand (super)exploitation and its undeniably egregious connotations. Such frameworks denote abject harm; in short, threats to human security, another theme we will return to soon.

In the recent past, ecoviolence referred more generally to conflicts that erupt in protracted violent episodes largely over the distribution of natural resources. This particular form of ecoviolence was seen primarily as a function of scarcity, inept or corrupt governance, and violent cultural trends. Homer-Dixon and Blitt's book (1998) *Ecoviolence: Links Among Environment, Population and Security*, was a clear example – it explored links between environmental scarcities of key renewable resources such as cropland, fresh water, and forests, and violent rebellions, insurgencies, and ethnic clashes in developing countries. Detailed contemporary studies of civil violence in Chiapas, Gaza, South Africa, Pakistan, and Rwanda demonstrated how environmental scarcity has played a limited to significant role in causing social instability in each of these contexts. Indeed, as we write these pages, a real-time catastrophe is unfolding in Sudan, where years of climate change-induced flooding have ravaged rural regions and a near-civil war is breaking out between military factions during the tumultuous climb toward democracy. No doubt there are links between environmental change and conflict and violence that need to be explored if humanitarian efforts are to be based on factual understandings of context.

However, the early Homer-Dixon research (sometimes referred to as the “Toronto School”) also demonstrated that the causal relationships between the environment and societal unrest are considerably more complex than is widely presumed, opening new avenues of interrogation into ecoviolence, exploitation, and human security. No doubt natural resources can be the heart of what Le Billon termed the “political ecology of war” (Le Billon, 2001). Yet Conca and Wallace suggest that “much of the eco-conflict literature has invoked ‘scarcity’ without paying attention to how social relations create the condition for resource capture or other forms of social scarcity . . . the precise mechanisms by which resource wealth may induce or sustain violence remain disputed” (Conca & Wallace, 2009, p. 488; see also Gleditsch & Urdal, 2002). Ezenwa (2022) echoes the nuanced complexities of harm by suggesting that ecoviolence serves as umbrella terminology to gain greater insight into “conflicts in which competition for water and agricultural resources occurs within or between social groups or state actors, often resulting in mass murder and destruction of the environment and properties; such conflicts are exacerbated by the states’ failure to address resource redistribution challenges, institutional failures, and environmental and social injustice.” According to such an expanded definition, ecoviolence encompasses myriad dimensions of conflict and shifts our focus from the identities of warring social groups to the structural drivers of this type of violence: *state-initiated* and *state-facilitated* forms of state–corporate crime; insecurity, climate change challenges, and “resource captures” – to name a few. This expanded definition forces researchers to consider the links between ecoviolent behavior and mass murder, human displacement, sexual

exploitation, ecological destruction, and social injustice. However, lest we conflate “the state” with governments, we should recall that other actors are also agential. For example, the role of multinational corporations investing in deforestation is depressingly widespread. Even small-time criminals are part of the equation; for example, as discussed in Chapter 3 the increased violence against women perpetrated during natural disasters is largely at the hands of human traffickers. This is not to deny the centrality of the state, as a mechanism of power and control and site of contestation, but to argue that other institutions or even individual agents are often as complicit, and that the pursuit of human security will need to include them in the overall assessment of related praxeology.

Ecoviolence studies as conceived here is animated by concepts and processes that inform policy and galvanize justice-demanding action, but as a multidisciplinary field it also explores explanations of root causes including physical, structural, and cultural forms of harm. Though lessons from historical cases and structures are vital, we are generally concerned with the present situation, and given the urgencies involved (human suffering and ecosystem collapse) it is no surprise that those engaged will seek strategies to prevent, end, and transform ecoviolence, and to present approaches to promote structural, ideological and institutional change at the local, national, and global level. Micro (individual) and macro (state/corporate-centric) ecoviolence warrant a new analytic lens for theorizing ecocide and (super)exploitation.

We borrow liberally from criminology, not only because environmental crime is a foremost form of ecoviolence but because the state–corporate nexus is so prevalent in large scale environmental harm. The most harmful (or in this case, ecoviolent) acts are committed through the exercise of economic, political, or cultural power; even when criminalized, those responsible receive less severe sanctions than “criminals” from less powerful groups (Michalowski, 2018). Michalowski & Kramer’s (2007) groundbreaking work on state–corporate crime (or state-facilitated corporate crime) explore how unlawful acts were redefined as permissible ones so that corporate and political actors could threaten the health, well-being, and natural development of both humans and ecosystems. Whether it is through regulatory rollbacks which seek to minimize the regulation of harmful corporate behavior or powerful transnational corporations exercising pressure over nations seeking foreign investment so that they can engage in environmental degradation and forms of labor exploitation, the concept of state–corporate crime serves as an analytic framework for studying violence resulting from the intersection of political and business interests (Michalowski & Brown, 2020). Relatedly, Aulette & Michalowski (1993) highlight instances where government omissions lead to private businesses perpetuating forms of violence – most of which end up fulfilling state policies. Over the years, the concept of state–corporate crime has included both *state-initiated* and *state-facilitated* forms of state–corporate crime, a promising development for explaining micro/macro ecoviolence.

Indeed, extant green criminology scholarship, pioneered by Rob White and others (see White & Heckenberg, 2014) offers fertile ground for developing a framework for ecoviolence studies. For example, Brisman & South (2018) explore the “Anthropocene” and ways in which we understand the relationship between humans and nature. For them, the anthropocentric acceleration of the exploitation and appropriation of the environment must be seen as criminogenic, with implications for what this may mean for the idea of “security”. How might this exploitation extend to humans, too? How might an analysis of agential and structural violence aid our theory of the “Anthropocene”? Holley & Shearing (2018) also provide an overview of criminology’s contribution to the analysis and debate that flows from the Anthropocene, discussing ecocide in the context of climate change. Drawing on green criminology and regulatory studies, the authors reflect on what the criminalization of business conduct that breaches ecological limits would look like.

Crook et al. (2018) adopt a green criminology lens to explore parallel processes of exploitation and injustice in relation to nonhuman species and/or aspects of the natural environment. Specifically, the authors examine how ecocide, genocide, capitalism, and colonialism impact Indigenous peoples and on local and global (“glocal”) ecosystems. However, the structural violence of colonialism and capitalism are not explored, obfuscating historical systems of governance and economic systems have led to systemic harm and inequality. Givens et al. (2019) review the theory of ecologically unequal exchange and its relevance for global environmental injustice, paying particular attention to international trade and how it shapes the unequal distribution of environmental harms and human development. Such a world-systems analysis, however, neglects the human–human (super)exploitation embedded in the ecological unequal exchange theory. Banzhaf et al. (2019) document the correlation between pollution and race and poverty, identifying inequitable exposure to environmental hazards and the implications of modeling choices as they relate to spatial relationships between polluters and residents. Undoubtedly, this type of work is situated in the realm of environmental justice and green criminology; however, the authors do not address the agential and structural violence of disproportionate siting of Black, Indigenous and racialized households, market-like coordination of such zoning, or discriminatory politics and/or enforcement.

Kramer (2020) pursued research on “carbon criminals” from a green criminological perspective. The author asserts that the criminal nature of environmental harms resulting from the release of greenhouse gas demands greater accountability in the fossil fuel industry, but also the US government, and the international political community. One facet of research that Kramer does not engage is an exploration of how agential and structural violence occurs when considering

state–corporate climate crimes, or continued extraction of fossil fuels and the political omission (failure) related to the mitigation of these emissions. Lastly, Nurse (2022) argues that green criminology allows for the study of criminal laws and environmental criminality – including widespread environmental harm and the exploitation of nature. While environmental crimes (and overall harm) produce long-lasting and irreversible effects, the effectiveness of environmental enforcement is brought into question, especially in global neoliberal markets. The author contends that profit-driven economies and anthropocentric attitudes toward the environment lead to the exploitation of natural resources, but does comment on human–human (super)exploitation – an issue we believe to be tied to ecoviolence during the Anthropocene. Indeed, we humans are part of the “earth-system” as a whole and *agential and structural violence* by the hands of a few impacts not only the environment, but millions of peoples across the globe.

On a more theoretical plain, ecoviolence can be linked to different forms of colonial oppression, as evidenced in Agozino’s (2005) analysis of colonial legacies in West Africa. Violence in West Africa, along with militarization and social control over people and resources, is a function of the consequences of imperialism in the colonial and postcolonial eras. Parsons & Fisher (2022), on the other hand, examine the history of settler-colonialism and how settler-colonial-led policies and projects led to environmental injustices in New Zealand. Environmental transformation efforts to remove native vegetation, drain wetlands, introduce exotic biota, and re-engineer waterways contribute to intensifying incidence of floods; and while flood risk management regimes were introduced to mitigate floods, the Maori interpret such interventions as far more destructive (socially, economically, and spiritually) than flood events. In fact, the authors argue that the reconfiguration of rivers (and of people) in accordance with settler values and imagined geographies constitute acts of ecoviolence.

In a recent publication, we explored several of what we termed the “spheres of transnational ecoviolence” centered on criminal and noncriminal acts of aggression against the environment that also have a pronounced human exploitation component (Stoett & Omrow, 2021). The book focused mainly on the illegal wildlife trade (animals and plants, two quite diverse fields), toxic waste dumping, oceanic crimes, and climate crimes as examples of transnational ecoviolence; transnational because these acts usually entailed the crossing of borders in the modern international state system. To quote briefly from that book, “transnational ecoviolence is not sporadic or spontaneous; it is agential, but driven by the structural political economy of global markets; it is deliberate and designed and generally profitable with low risk of punishment and it is facilitated by the structural violence of inequity, racism, sustained conflict, and other forms of human insecurity” (Stoett & Omrow, 2021, p. 24). We also looked into various possible responses to transnational ecoviolence,

ranging from state intervention and regulation, militarized responses (the new “green militarization”) (Lunstrum, 2014), represented by the “anti-poaching arms race” (Duffy, 2010, 2014) – clearly, human security must be a priority if we are to avoid making a bad situation worse for vulnerable groups caught in the web of transnational ecoviolence (see Duffy et al., 2019); high tech responses, which are often portrayed as the most promising but present their own problems. We also discuss the role of international courts (real, and imagined), and Earth jurisprudence as an emerging approach with an old pedigree. This volume contains case studies that will raise many of these possible coordinated responses, but it is readily apparent that there is no single answer to the multifaceted task of reducing or eliminating ecoviolence in the human future.

While there is no shortage of literature and investigative journalism that examines environmental harm, and similarly there is ample evidence of human rights abuses in all regions of the world today (with the exception perhaps of Antarctica), there are limited efforts to bring these two phenomena together, to explore the intersection between human exploitation and the deliberate harm resulting from illegal ecosystem exploitation, taking place on a transnational scale. And yet it is increasingly obvious that this is a tremendously deleterious and common intersection, and that efforts to stem the tide of climate change, for example, need to consider environmental crime and illicit activity as well as formally registered greenhouse gas emissions. Everyone’s human security is therefore threatened by ecoviolence, though some are more directly threatened than others, especially those trapped in cycles of ecoviolence, or in slave or bonded labor on land or sea, or living in Indigenous communities whose way of life is threatened by invasive alien species, resource extraction, overfishing, sea level rise, and other existential threats. Framing this intersection explicitly as a place of violence helps the reader understand both the gravity of the situation, as well as the need to pursue a new green/blue human security in order to achieve transformative change.

Beyond the eco-conflict literature discussed earlier, several strands of inquiry already exist that examine aspects of the ecocide–exploitation confluence. These include forced migration/environmental refugees (see McNamara, Bronen, Fernando, & Klepp, 2018; Afifi & Jager, 2019); human trafficking (Dung & Avwunudiogba, 2021); human rights abuses related to conflict over resources (Oluduro, 2014); gendered violence related to environmental scarcity and forced labour, such as coerced sex work (Kempadoo, 1999); illegal, unreported, unregulated fishing, and sea slavery (Field, 2014; Urbina, 2019); more general patterns of slavery in mining, agriculture, and other industries (Mol, 2017); and toxic waste dumping by organized crime that also exploits local citizens and exposes them to unusual hazards (Kitt, 1995; Peluso, 2016). No doubt, this list of terrors can go on for quite some length before we have exhausted the possibilities.

Bales (2016) may have written one of the more arresting treatments of ecoviolence through his contention that ecocide and slavery are hand-in-hand, contributing vastly to climate change. His book explores how environmental destruction denies people traditional livelihoods, opening them to exploitation. The author outlines a pattern: where slavery exists, so does massive, unchecked environmental destruction. Documenting the lives of modern-day slaves along the global supply chain, the author lays bare lawless zones of activity which perpetuate human exploitation: unfree labor via illegal tropical logging, wildcat mining for gold and other minerals, reckless fishing, etc. Some critics have accused Bales of presenting “naked guesswork” when ascribing 40 percent of global deforestation to slave labor; and he’s been (unfairly, as he does not do this) criticized for publicizing the assumption that if modern slavery disappeared, deforestation and other environmental destruction would also end. Nonetheless, the historical and current links between slavery and environmental destruction are a powerful place to start the study of ecoviolence.

Ecoviolence can also include the use of violence by governments or corporations to suppress environmental activism or opposition to environmentally damaging policies or practices. This can take the form of physical violence against activists, harassment, intimidation, or legal action designed to silence dissent. Omrow alludes to this state-led oppression of Indigenous groups opposed to Guyana’s current path toward a burgeoning mining economy in Chapter 5 in this volume, and we also stressed this in our co-authored volume (Stoett & Omrow, 2021). The international NGO Global Witness reveals that there is a positive correlation between the climate crisis and violence against those protecting their land. In 2020 alone, 227 lethal attacks were documented in the form of intimidation, surveillance, sexual violence, and criminalization. Colombia, Mexico and the Philippines are overrepresented in the data, with almost 30 percent of the attacks being linked to resource exploitation (logging, mining and large-scale agribusiness), and other development projects (Global Witness, 2021).

This trend shows no signs of abating, unfortunately. According to a 2023 report by Global Witness entitled *Standing Firm: The Land and Environmental Defenders on the Frontlines of the Climate Crisis*, at least 177 defenders were murdered in 2022. This brings the total number of documented killings to 1,910 since 2012, the year the organization started to investigate this matter. What is more unnerving is the fact that 1,390 of these murders occurred during the time the Paris Agreement was adopted and the end of 2022. When we disaggregate the data through an intersectional lens, women were subjected to 11 percent of the reported attacks, while 36 percent of those murdered were Indigenous peoples. Seven percent were Afro-descendants and more than 22 percent were small-scale farmers. Lastly, at

least five children were murdered last year, highlighting the dastardly acts of the perpetrators.

As of 2023, Columbia remains particularly concerning, as the country accounted for 88 percent of these murders. The data reveals that Indigenous peoples, Afro-descendant communities, small-scale farmers and environmental activists are disproportionately targeted by organized crime groups and land invaders. Mexico, on the other hand, remains an anomic state, with 31 murders recorded in 2022, 16 of which included Indigenous peoples, and four lawyers (Global Witness, 2023). In Brazil, land defenders face hostility from former president Jair Bolsonaro's government and the administration's neoliberal policies which have accelerated the exploitation and destruction of the Amazon rainforest. In fact, more than one in five of the 177 killings recorded in 2022 happened in the Amazon. In particular, Pará is the most violent state for land defenders in Brazil. This is, undoubtedly, due to the legacy of destructive mining since the late 1970s. According to Global Witness (2023), illegal mining in the Brazilian Amazon alone has increased by 1,271 percent over the last 35 years. Bolsonaro's platform and geopolitics have weakened environmental inspection bodies, incentivising international mining operations on Indigenous territories. The most coveted resource in the Amazon is gold: companies from Switzerland, Italy, South Korea, and the United Kingdom have gone so far to finance improvised airports in exclusive mining areas, eluding regulatory agencies (Global Witness, 2023).

The Observatory for the Defence of Life (ODEVIDA) and the Inter-American Commission on Human Rights (IACHR) also document the murder of land defenders, calling on local governments to consult with defenders of the Amazon so that decision- and policy-making can be guided by principles of free, prior and informed consent (FPIC). Recommendations have also been made to improve monitoring and governance mechanisms aimed at detecting illegal miners and narco-trafficking agents. Lastly, Global Witness is pushing for countries that are part of the Amazon region to ratify the Escazú Agreement, leveraging this international treaty to advance more transparency, and access to information on issues pertaining to environmental justice (Global Witness, 2023).

The unfortunate fate of land defenders seems to be shared with journalists, as demonstrated in the murder of Percival Mabasa, an outspoken radio broadcaster in the Philippines in 2022. Mabasa, who hosted his broadcasts under the pseudonym Percy Lapid, voiced concern over former president Rodrigo Duterte's administration, especially "red-tagging" (a practice of the government publicly labeling protesters and journalists as communists). The Philippines is one of the world's most dangerous countries for journalists, according to the 2022 edition of Reporters Without Borders' World Press Freedom Index (Ore, 2022) and forces us to think about how ecoviolence studies can serve as a theoretical cornerstone of violence.

Another factor that should be kept in mind is that there is a price – perhaps best conceived as an ecoviolent one – for the rising “green” tide. Labeling forested areas as “protected” is hardly progressive if it means Indigenous peoples and local communities dependent on the biodiversity there are denied access. Rare earth minerals and other necessities that are helping drive the technological change necessary to break from our dependence on fossil fuels can in fact be the cause of significant problems as a new form of “green colonialism” takes effect. In fact, during the 22nd United Nations Permanent Forum on Indigenous Issues, Indigenous leaders lamented that the latest climate strategy presented by the West presents grave risks to Indigenous peoples’ territories, and resources. The march towards a greener economy perpetuates a *frontier logic* as countries attempt to uphold pledges to keep global warming to 1.5C (2.7F) above pre-industrial levels by 2030 (Monet, 2023). Concomitantly, environmentally driven projects end up violating Indigenous peoples’ rights to Free, Prior and Informed Consent (FPIC), a cornerstone of the UN Declaration on the Rights of Indigenous Peoples. Whether it is through mass lithium extraction efforts to supply countries’ net-zero strategy to create a domestic supply of electric vehicles, or mining for nickel and cobalt for rechargeable batteries, conflicts in tribal communities in the United States and around the world will ensue. What is more, mining for these minerals can just as easily involve slave and child labor as is entailed in the infamous acquisition of blood diamonds. Deforestation to produce pellets to be fed into distant biofuel plants is hardly a serious improvement over fracking or other forms of extraction.

Perhaps the most glaring example of “green colonialism” and the Western world’s wanton violation of FPIC can be found within the historic “loss and damage” fund for vulnerable countries reached at COP27 in Egypt. Indigenous peoples were not referenced in the agreement, despite many world leaders purporting to include Indigenous peoples in mitigation and adaptation climate change initiatives (Monet, 2023). While progress seems to be on the horizon – notably, the creation of the Local Communities and Indigenous Peoples’ Platform (LCIPP) in 2019 – some remain skeptical about the impact the LCIPP will have on the “green” tide. It is certain that actions to mitigate and adapt to climate change are welcome, but a steadfast vigilance is necessary lest these actions themselves constitute further acts of ecoviolence.

### 1.3 The Structure of This Book

This book was inspired by a conference we hosted at Ontario Tech University in 2021, entitled *Partners in Crime: A Virtual Conference to Explore the Intersections Between Human Exploitation and Environmental Crime*. Most of the chapters were presented in a very preliminary form at that conference, but all of them contribute to the growing body of literature on ecoviolence, demonstrating clear links between

human–human exploitation and ecological degradation and/or climate change. While the conceptual and analytical contours of ecoviolence vary in the chapters of this book, what brings these works together is an expansion on the broad perspective of environmental harm (ecocide) and human–human (super)exploitation, developing the concept within their own case studies. Michelle Anagnostou and Daan van Uhm open with their discussion of the illegal wildlife trade. Scholars have suggested that the high profitability and low risk of detection for participating in the illegal wildlife trade is increasingly attracting the involvement of transnational organized crime groups that previously specialized in other crime types. They conducted a global literature review to understand the various convergences that link the global illegal wildlife trade to multiple forms of human exploitation according to academic and gray literature publications over the past two decades. They found that the illegal wildlife trade is linked to human exploitation in a number of ways, and that convergences have occurred at multiple stages of the human trafficking process across a variety of taxa and wildlife products, including abalone, elephant ivory, rhino horn, tigers, birds, gorillas, and fish, including shark fins, totoaba, and caviar. The types of convergences that link human exploitation and wildlife trafficking include shared smuggling routes, parallel trafficking, geographic convergences, diversification of organized crime groups, forced and bonded labor, common fixers, and shared enabling crimes. They also discuss a number of general similarities between the two types of illegal activities, such as the structures of the organized crime groups involved, and conclude by outlining the implications of the possible growing convergence of human and environmental exploitation.

Ben Greer turns our attention to yet another devastating impact of climate change: the links between natural disasters (some of which are increasing with climate change) and sexual exploitation. Natural disasters create an environment whereby human traffickers may seek to exploit chaos and vulnerability. Traffickers have proven likely to exploit the victims of disaster and/or profit from recovery efforts. In the wake of Hurricane Harvey, the United States Department of Health and Human Services began identifying emergency management personnel as uniquely positioned to identify and report potential human trafficking and trafficking-related suspicious behavior. This chapter seeks to summarize the existing research on this nexus, articulate how traffickers may attempt to exploit displaced persons, and exploit the US and Canadian disaster recovery framework. The chapter concludes by proposing three concrete steps the US and Canadian emergency management agencies can take during the preparedness and response phases of a disaster to increase emergency response system resiliency and mitigate exploitation of those affected.

Matilda Petersson and Sofia Käll address the issue of sea slavery in their chapter. In recent years, slave-like working conditions have been detected in the fishing

industry, and scholars have found empirical evidence linking forced labor to illegal, unregulated and unreported (IUU) fishing. These revelations have triggered debates within the sustainable seafood movement and increased public pressure on retailers, fishing companies, governments, and environmental non-governmental organizations (ENGOS) to address the nexus between IUU fishing and forced labor. In this context, it is commonly argued that private governance institutions, such as certification schemes and voluntary initiatives, should address these socially complex problems as part of their efforts to incentivize sustainable fisheries. In this chapter, we focus on two prominent examples of private governance institutions, the Marine Stewardship Council (MSC) and Fishery Improvement Projects (FIPs). We explore the extent to which these institutions have addressed recent concerns with forced labor and compare it to their already existing efforts to combat IUU fishing. We find that both institutions have had a reactive response to address increasing concerns of forced labor, and that their response oftentimes is linked to their efforts to combat IUU fishing. At the same time, these institutions are only beginning to address these problems, and the procedures for doing so are still under development and have so far been met with criticisms from both ENGOS and the fishing industry. They end by discussing their findings in the context of ongoing debates in the fisheries governance literature on the nexus between IUU fishing and forced labor and how to most effectively tackle these problems.

Next, co-editor Delon Alain Omrow offers an analysis of frontier (neo)colonialism with his look into events unfolding in Guyana. Frontier logic refers to a genealogy of multiple and heterogeneous cycles of colonization and dispossession and this chapter will explore the return of a neoliberal frontier logic in Guyana via mining extractivism, and the acceleration of the ecoviolent removal of non-renewable raw materials such as metals and minerals, worsening gender inequalities in the form of (super)exploitation. Human suffering and misery becomes more nuanced through an intersectional approach to understanding the experiences of Indigenous women, children and displaced persons crossing the border between Venezuela and Guyana. The frontier (neo)colonialism framework opens new vistas of inquiry into how *frontierism* can be used to illuminate entrenched neo-colonial conditions and how they intersect, animate, and propagate capitalist logics of extractivism and gender-based violence, both of which constitute ecoviolence in Guyana.

Julius Kaka, who works in Africa with the Global Initiative Against Transnational Organized Crime, describes the struggle of Uganda's gold mining sector to formalize and structure Artisanal and Small-Scale Miners (ASM) society, paving way for contentious politics in the industry, and constant disputes between ASM and mining companies and government. Incoherent approaches by the government to legitimize and organize ASM pose challenges to the rights and dignity

of artisanal miners. Further, the informal nature of ASM and the context of informality of government in governing gold mining activities exposes artisan miners' communities to wide fronts of exploitation and forced labor. The country's mining laws (albeit with weaknesses) provide comprehensive guidelines on the environmental and occupational safety of miners; yet its implementation and enforcement are lacking. This is also true with labor issues, rights and regulation of mining impacts. Regulations and statutory arrangements should meaningfully provide for better protection against clandestine exploitation and adverse effects of the unfair gold market. Nevertheless, labor exploitation and abuse of rights in the gold mining sector continues to hamper sustainable growth of the gold production sector. This study undertakes to answer two main questions: what are the hindrances to labor and rights among artisanal miners in Uganda; and how significant can a rights based approach be in remedying exploitation in the gold mining sector? In answering these questions, the study employs a multidisciplinary approach by using data from extensive fieldwork and reviews of secondary literature.

Ascensión García Ruiz presents the visible consequences of ecocide and eco-migration, i.e. migration owing to disparate environmental factors. They may be indirectly produced and at times be due to environmental practices by transnational corporations or distinct issues closely related to disorganisation and inequality on accessing natural resources. The international criminal justice system does not include detrimental effects of ecocide or of social harm resulting in forced migration flows as a genuine crime capable of being prosecuted. However, a recent landmark United Nations Human Rights Committee decision claims that people should not be returned to their place of origin if climate change appears to constitute a threat. The United Nations Refugee Agency also welcomes such a pioneering ruling since it lays the ground for potentially effective international protection. This work examines the contemporary loophole regarding eco-displacements and ecocide and clamours for both legal and criminological international conceptualisation at ensuring the rights of eco-migrants, considering the future number of eco-migrants is unforeseeable. The 2020s may well be remembered as the decade when the international community resigned itself to live with what can only be described as a permanent refugee crisis, where refugees are used for political ends, drown as overloaded boats capsize into the Mediterranean and other waters (including the Saint Lawrence Seaway), and are easy victims of sexual and other forms of abuse. The climate crisis is exacerbating this, even if it is not the sole cause of undocumented migration.

In chapter eight, renowned green criminologist Rob White, one of the true originators of green criminology, turns his sights on climate crime as the ultimate form of ecocide. The causes of climate change are largely due to the activities and omissions by nation-states and transnational corporations that

foster ongoing carbon emissions. This chapter re-casts these crimes of the powerful as ecocide insofar as they contribute to global warming. In addition to exploring the contours of ecocide as a crime against peace, the chapter deals with issues pertaining to contrarianism and the securitisation of natural resources, both of which protect and sustain sectional interests rather than the majority public interest. He argues that needed social transformations must go beyond “speaking truth to power” to actually confront the powerful. How this might be accomplished is examined via consideration of mechanisms for corporate accountability, the movement toward just transitions, the idea of a Green New Deal, and the importance of transformational nationalization. Combatting the violence of ecocide fundamentally requires root and branch change in the global political economy. It is fitting that we include a chapter that retracts the lens and focuses our attention on the bigger picture, even if many readers will be reluctant to accept White’s conclusions.

In chapter nine, Francisco Cuamea and Delon Alain Omrow tease apart ecoviolence studies by analyzing the violence along the Sea of Cortez and the Mexican cartels’ decades-long monopoly of the illegal drug market. The authors reveal that this illicit economy draws upon the convergence of illegal waste dumping, the illegal wildlife trade, money laundering, and human smuggling. They also argue that the Sea of Cortez is a fascinating case study due to its geographic location as a historical hub for smuggling multiple commodities such as totoaba bladders, shark fins, drugs, diamonds, and precious metals, and that the smuggling of immigrants has now come under the purview of these criminal networks, expanding our understanding of ecoviolence.

Finally, in chapter ten, Lowri Cunningham Wynn challenges conventional notions of ecoviolence by reflecting on the impact of the climate crisis on y Gymraeg or the Welsh language. Is the death of a language an example of ecoviolence? Wynn certainly thinks so, arguing that coastal areas across the world run the risk of catastrophic language and cultural loss into the next century. This is certainly the case for Wales, a country already grappling with language loss according to recent UK Census data. From an environmental justice perspective, this invites us to consider how minority Language Death is an incidental consequence of ecoviolence – namely, climate breakdown due to forced migration and how the same forces driving ecological collapse are destroying cultures and languages around the world.

#### **1.4 Conclusion: Human Security as a Way Forward**

As this book goes to print, war rages across the globe. Most attention has been focused on the Russian invasion of Ukraine, a war with unspeakable harm for the

civilian population there; civil war rages in Khartoum and threatens to spread throughout Sudan; the Middle East continues along the path of reciprocal violence; Indigenous people around the globe are threatened and even murdered for defending their ancestral lands. To be blunt, human security, as both an empirically measured concept and as an explicit, nourished foreign policy design, and instrument and priority, has seen better days. But it could be at a point of resurrection, even in the midst of these ongoing assaults against physical security and human freedom. If we combine ecoviolence concerns with a genuine concern for human and nonhuman life, the pursuit of human security seems the most viable path forward.

Ecoviolence studies could well emerge as a permanent feature on the scholarly landscape, borrowing from and grafting material onto such diverse fields as environmental history, psychology, green criminology, peace and conflict, and others. We've made a similar argument elsewhere and won't belabor it here, but the main point is that when looking for ecoviolence we are inevitably also looking for threats to both human and environmental security and, as well, environmental justice (see Stoett, 2012). These terms are not separable; arguably, the study of ecoviolence brings them even closer together. Indeed, human and environmental security would seem the antithesis to ecoviolence. We believe that the chapters in this book will, essentially, make this clear. National security has been much more of a problem than a solution to the environmental crises we face. Deprivation of human rights demands a human security framework, one that centers the individual (or, in some cases, the family unit), but one that also recognizes the intricate, intimate relationship between human survival and that of the biosphere and the ecosystems that enable human life and liberty.

## References

- Afifi, T. & Jager, J. (Eds.). (2019). *Environment, Forced Migration and Social Vulnerability*. Springer.
- Agozino, B. (2005). Crime, criminology and post-colonial theory: criminological reflections on West Africa. *African Journal of Criminology and Justice Studies*, 1(2), 1–18.
- Anaya, S. J. (2004). *Indigenous Peoples in International Law*. Oxford University Press.
- Aulette, J. & Michalowski, R. (1993) A fire in hamlet: a case study of state–corporate crime. In K. Tunnell (Ed.), *Political Crime in Contemporary America* (pp. 200–205). Garland.
- Bales, K. (2016). *Blood and Earth: Modern Slavery, Ecocide, and the Secret to Saving the World*. Random House.
- Banzhaf, S., Ma, L. & Timmins, C. (2019). Environmental justice: the economics of race, place, and pollution. *Journal of Economic Perspectives*, 33(1), 185–208.
- Beck, U. (1992). *Risk Society: Towards a New Modernity*. Sage.
- Bonds, A. & Inwood, J. (2016). Beyond white privilege: geographies of white supremacy and settler colonialism. *Progress in Human Geography*, 40(6), 715–733.

- Bosworth, K. (2018). "They're treating us like Indians!": political ecologies of property and race in North American pipeline populism. *Antipode*, 53(3), 665–685.
- Brisman A. & South N. (2018). Autosarcophagy in the anthropocene and the obscenity of an epoch. In Holley, C. & Shearing, C. (Eds.), *Criminology and the Anthropocene* (pp. 25–50). Routledge.
- Chen, C., Yang, M., Yang, M., Chang, S., Chueh, K., Su, Y., Yu, C. & Cheng, T. (2008). Suicidal thoughts among elderly Taiwanese aboriginal women. *International Journal of Geriatric Psychology*, 23(10), 1001–1006.
- Conca, K. & Wallace, J. (2009). Environment and peacebuilding in war-torn societies: lessons from the UNEP's experience with postconflict assessment. *Global Governance*, 15(4), 485–504.
- Crook, M., Short, D. & South, N. (2018). Ecocide, genocide, capitalism and colonialism: consequences for indigenous peoples and global ecosystems environments. *Theoretical Criminology*, 22(3), 298–317.
- Donald, D. (2009). The curricular problem of Indigenism: Colonial frontier logics, teacher resistances, and the acknowledgment of ethical space. In J. Nahachewsky & I. Johnston (Eds.), *Beyond "Presentism"* (pp. 23–41). Brill-Sense.
- Duffy, R. (2010). *Nature Crime: How We're Getting Conservation Wrong*. Yale University Press.
- Duffy, R. (2014). Waging a war to save biodiversity: the rise of militarised conservation. *International Affairs*, 90(4), 819–834.
- Duffy, R., Massé, F., Smidt, E., Marijnen, E., Büscher, B., Verweijen, J., Ramutsindela, M., Simlai, T., Joanny, L. & Lunstrum, E. (2019). Why we must question the militarization of conservation. *Biological Conservation*, 232(1), 66–73.
- Dung, E. & Avwunudiogba, A. (Eds.). (2021). *Human Trafficking: Global History and Perspectives*. Lexington Books.
- Ezenwa, O. (2022, July 15). What's in a Name? Making the Case for the Sahel Conflict as "Eco-violence." New Security Beat. [www.newsecuritybeat.org/2022/07/whats-name-making-case-sahel-conflict-eco-violence](http://www.newsecuritybeat.org/2022/07/whats-name-making-case-sahel-conflict-eco-violence).
- Field, M. (2014). *The Catch: How Fishing Companies Reinvented Slavery and Plunder the Oceans*. Awa Press.
- Galtung, J. (1990). Violence, peace and peace research. *Journal of Peace Research*, 6(3), 167–191.
- Givens, J., Huang, X. & Jorgenson, A. (2019). Ecologically unequal exchange: a theory of global environmental injustice. *Sociology Compass*, 13(5), 1–30.
- Gleditsch, N. & Urdal, H. (2002). Ecoviolence? Links between population growth, environmental scarcity and violent conflict on Thomas Homer-Dixon's work. *Journal of International Affairs*, 56(1), 283–302.
- Global Witness. (2021). *Last Line of Defence*. Global Witness.
- Global Witness. (2023). *Standing Firm: The Land and Environmental Defenders on the Frontlines of the Climate Crisis*. Global Witness.
- Holley, C. & Shearing, C. (2018). Thriving on a pale blue dot: criminology and the anthropocene. In Holley, C. & Shearing, C. (Eds.), *Criminology and the Anthropocene* (pp. 1–24). Routledge.
- Homer-Dixon, T. & Blitt, J. (1998). *Ecoviolence: Links Among Environment, Population and Security*. Rowman & Littlefield Publishers.
- Kelkar, G. (1992). Stopping the violence against women: fifteen years of activism. In Schuler, M. (Ed.), *Freedom from Violence*. UNIFEM, pp. 75–99.
- Kempadoo, K. (1999). *Sun, Sex, and Gold: Tourism and Sex Work in the Caribbean*. Rowman & Littlefield.

- Kitt, J. (1995). Waste exports to the developing world: a global response. *Georgetown International Law Review*, 7(1), 485–514.
- Kramer, R. (2020). *Carbon Criminals, Climate Crimes*. Rutgers University Press.
- Kurtz, L. (2021, June 4). *Uncovering the Four-Volume Encyclopedia of Violence, Peace, and Conflict*. George Mason University. <https://masonkorea.gmu.edu/articles/16089>.
- Le Billon, P. (2001). The political ecology of war: natural resources and armed conflicts. *Political Geography*, 20(5), 561–584.
- Lunstrum, E. (2014). Green militarization: anti-poaching efforts and the spatial contours of Kruger National Park. *Annals of the Association of American Geographers*, 104(4), 816–832.
- McCreary, T. & Turner, J. (2018). The contested scales of indigenous and settler jurisdiction: Unist’ot’en struggles with Canadian pipeline governance. *Studies in Political Economy*, 99(3), 223–245.
- McNamara, K., Bronen, R., Fernando, S. & Klepp, S. (2018). The complex decision-making of climate-induced relocation: adaptation and loss and damage. *Climate Policy*, 18(1), 111–117.
- Metcalf, C. (2004). Indigenous rights and the environment: evolving international law. *Ottawa Law Review*, 35(1), 101–140.
- Michalowski, R. (2018). Power, crime and enclosure: capital accumulation in the twilight of the neoliberal SSA. In Snider, L. & Bittle, S. (Eds.), *Crimes of the Powerful* (pp. 102–116). Routledge.
- Michalowski, R. & Brown, M. (2020). Poisoning for profit: regulatory rollbacks, public health, and state-facilitated corporate crime. *Journal of White Collar and Corporate Crime*, 1(2), 1–25.
- Michalowski, R. & Kramer, R. (2007). State-corporate crime and criminological inquiry. In: Pontell, H. N. & Geis, G. (Eds.), *International Handbook of White-Collar and Corporate Crime*. Springer.
- Middeldorp, N. & LeBillon, P. (2019). Deadly environmental governance: authoritarians, eco-populism, and the repression of environmental and land defenders. *Annals of the American Association of Geographers*, 109(1), 324–337.
- Mishra, S. (2014). *Farmers’ Suicides in India, 1995–2012: Measurement and Interpretation*. Asia Research Centre.
- Mol, H. (2017). *The Politics of Palm Oil Harm*. Palgrave Macmillan
- Monet, J. (2023, April 23). “Green colonialism”: Indigenous world leaders warn over west’s climate strategy. The Guardian. [www.theguardian.com/world/2023/apr/23/un-indigenous-peoples-forum-climate-strategy-warning](http://www.theguardian.com/world/2023/apr/23/un-indigenous-peoples-forum-climate-strategy-warning).
- Murdocca, C. (2020). “Let’s help our own”: humanitarian compassion as racial governance in settler colonialism”, *Oñati Socio-Legal Series*, 10(6), 1270–1288.
- Nixon, R. (2011). *Slow Violence and the Environmentalism of the Poor*. Harvard University Press.
- Nurse, A. (2022). Contemporary perspectives on environmental enforcement. *International Journal of Offender Therapy and Comparative Criminology*, 66(4), 327–344.
- Oluduro, O. (2014). *Oil exploitation and human rights violations in Nigeria’s oil producing communities*. Intersentia Publishing Ltd.
- Ore, J. (2022, October 5). *Journalists in the Philippines fear for their safety after popular commentator gunned down*. CBC News. [www.cbc.ca/radio/asithappens/journalists-in-the-philippines-fear-for-their-safety-after-popular-commentator-gunned-down-1.6607037](http://www.cbc.ca/radio/asithappens/journalists-in-the-philippines-fear-for-their-safety-after-popular-commentator-gunned-down-1.6607037).

- Parsons, M. & Fisher, K. (2022). Decolonising flooding and risk management: Indigenous peoples, settler colonialism, and memories of environmental injustices. *Sustainability*, 14(1), 1–27.
- Peluso, P. (2016). Organized crime and illegal waste disposal in Campania. In T. Spapens, R. White & W. Huisman (Eds.), *Environmental Crime in Transnational Context: Global Issues in Green Enforcement and Criminology* (pp. 25–40). Routledge.
- Peluso, N. & Watts, M. (Eds.). (2001). *Violent Environments*. Cornell University Press.
- Persad, C. (2017). “This is a continuation of genocide”: Examining the pathologization of Indigeneity in the 2016 suicide crisis and state of emergency in Attawapiskat First Nation. [Master’s Thesis, York University]. ProQuest Dissertations Publishing.
- Philpott, T. (2015, August 24). *No, GMOs Didn’t Create India’s Farmer Suicide Problem, But . . .*. Motherjones.com.
- Shiva, V. (2013). *Seed Freedom and Food Freedom in Times of Globalization*. Himal Books.
- Shiva, V. & Jalees, K. (2006). *Seeds of Suicide: The Ecological and Human Costs of Seed Monopolies and Globalisation of Agriculture*. Navdanya.
- Shover, N. & Routhe, A. (2005). Environmental Crime. *Crime and Justice*, 32(1), 321–371.
- Singer, M. (2016). *A Companion to the Anthropology of Environmental Health*. John Wiley & Sons.
- Stoett, P. (2000). *Human and Global Security: An Exploration of Terms*. University of Toronto Press.
- Stoett, P. (2012). What Are We Really Looking For? From Eco-violence to Environmental Justice. In M. Schnurr & L. Swatik, (Eds.), *Environmental Change, Natural Resources and Social Conflict: Rethinking Environmental Security in Theory and Practice* (pp. 15–32). Palgrave MacMillan.
- Stoett, P. (2019). *Global Ecopolitics: Crisis, Governance, and Justice*. University of Toronto Press.
- Stoett, P. and Omrow, D. (2021). *Spheres of Transnational Ecoviolence: Environmental Crime, Human Security and Justice*. Palgrave Macmillan.
- Thomas, G. & De Tavernier, J. (2017). Farmer-suicide in India: debating the role of biotechnology. *Life Sciences, Society and Policy*, 13(8), 1–32.
- Urbina, I. (2019). *The Outlaw Ocean: Journeys Across the last Untamed Frontier*. Vintage.
- Uvin, P. (1998). *Aiding Violence: The Development Enterprise in Rwanda*. Kumarian Press.
- Westra, L. (2004). *Ecoviolence and the Law: Supranormative Foundations of Ecocrime*. Transnational Publishers.
- Westra, L. (2008). *Environmental Justice and the Rights of Indigenous Peoples: International and Domestic Legal Perspectives*. Earthscan.
- White, R. & Heckenberg, D. 2014. *Green Criminology: An Introduction to the Study of Environmental Harm*. Routledge.
- Widger, T. (2018). Suicides, poisons and the materially possible: The positive ambivalence of means restriction and critical–critical global health. *Journal of Material Culture*, 23(4), 396–412.
- WHO. (2002). *World Report on Violence and Health: Summary*. <https://apps.who.int/iris/handle/10665/42512>.