

This is a repository copy of *Crime*, security, and illegal wildlife trade: political ecologies of international conservation.

White Rose Research Online URL for this paper: https://eprints.whiterose.ac.uk/187065/

Version: Accepted Version

#### Article:

Duffy, R. orcid.org/0000-0002-6779-7240 (2022) Crime, security, and illegal wildlife trade: political ecologies of international conservation. Global Environmental Politics, 22 (2). pp. 23-44. ISSN 1526-3800

https://doi.org/10.1162/glep a 00645

© 2021 by the Massachusetts Institute of Technology. This is an author-produced version of a paper subsequently published in Global Environmental Politics. Uploaded in accordance with the publisher's self-archiving policy.

#### Reuse

Items deposited in White Rose Research Online are protected by copyright, with all rights reserved unless indicated otherwise. They may be downloaded and/or printed for private study, or other acts as permitted by national copyright laws. The publisher or other rights holders may allow further reproduction and re-use of the full text version. This is indicated by the licence information on the White Rose Research Online record for the item.

#### **Takedown**

If you consider content in White Rose Research Online to be in breach of UK law, please notify us by emailing eprints@whiterose.ac.uk including the URL of the record and the reason for the withdrawal request.



# Crime, Security and illegal wildlife trade: Political ecologies of international conservation

Professor Rosaleen Duffy \*

\* The research for this paper was funded by an ERC Advanced Investigator Award, grant number 694995. I thank the BIOSEC Project team for their support during the research and for commenting on the work as it developed; I am very grateful to Prof Jan Selby, Prof Dan Brockington, the Political Ecology Reading Group at the University of Sheffield and three anonymous reviewers for comments on previous drafts.

## **Abstract**

This paper takes a political ecology approach to understanding the integration of conservation with security in tackling the illegal wildlife trade. It builds on and develops the debate in political ecology on green militarization (Lunstrum, 2014) by connecting it to the dynamics of global environmental politics. To date political ecologists have largely focused on the effects in specific places, (Büscher and Ramutsindela, 2016; Weldemichel, 2020; Ashaba, 2020; Büscher and Fletcher, 2018; Massé 2018; Dutta, 2020; Duffy et al, 2019; Marijnen, 2017; Verweijen, 2020); however, this paper places these specific dynamics in the wider global context of discursive and material support from donors, governments and conservation NGOs. The combined effects of a highly competitive funding environment and security concerns of governments has produced a context in which NGOs strategically invoke the idea of the illegal wildlife trade as a security threat. In turn, for donors and governments tackling the illegal wildlife trade can be regarded as a means through which they can address security threats. However, this has material outcomes for marginalized peoples living with wildlife, including militarization, human rights abuses, enhanced surveillance and law enforcement. Using political ecology, this paper teases out the connections between green militarization and its wider international context, which has supported a shift in conservation towards more forceful and security-oriented approaches.

## Introduction

In the last ten years, meetings on the illegal wildlife trade between representatives of conservation NGOs, international donors, intelligence and security services, parks and wildlife departments, private military companies and law enforcement agencies have become commonplace. The concerns of these disparate interests have converged around a key set of questions: can saving elephants and rhinos from poachers also contribute to national and global stability, assist in dismantling organized crime networks and remove funding sources from international terrorism networks? The convergence of these interests has developed and extended more security-oriented conservation practices, especially enhanced forms of law enforcement, surveillance and militarization. This has, and continues to have, material effects on the ground, especially for communities that experience the 'hard edge' of greater law enforcement and militarization. In this paper I use a political ecology approach to examine how and why this shift towards more security-oriented approaches happened, how it is shaping, and could continue to shape, wildlife conservation practice, with far reaching consequences for marginalized communities living with wildlife.

The illegal wildlife trade has risen to international prominence in recent years. Following the global ivory trade ban in 1989, under the Convention on the International Trade in Endangered Species (CITES), wildlife poaching and trafficking dropped out of most news for around two decades (for further discussion of CITES see Gaffney and Evensen, 2020). This changed in 2008, with sudden rises in poaching. The world 'rediscovered CITES' as, John Scanlon, the then Director General put it. However, the world rediscovered CITES through the lens of poaching and trafficking as a serious and organized form of crime, and a threat to global and national security. This signalled an important shift in global politics of biodiversity conservation – which fostered, supported and deepened its integration with concerns about security. This is the combined effect of a highly competitive funding environment for conservation NGOs, a poaching crisis and the fears of certain states about the potentially destabilizing effects of global terrorism and organized crime.

Political ecology is especially useful for analysing this shift because it highlights the inequalities and power asymmetries in socio-ecological relations. Political ecologists have developed a substantial body of literature on the politics of conservation, and especially on the intersections of conservation, militarization and violence. To date political ecologists have focused on explaining the effects of militarization in specific places, and on marginalized communities. The purpose of this paper is to explain the drivers at the international level that support use of force, militarization, human rights abuses, exclusion and dispossession. In this paper I bring together political ecology and global environmental politics scholarship to highlight the ways that global elites shape and sustain global agendas, which can have negative consequences for marginalized peoples living with wildlife. In order to do this, I pick apart and analyze the power asymmetries in global policy to tackle illegal wildlife trade. To date this has not been a core theme of global environmental politics scholarship, which has, according to Dauvergne and Clapp (2016), increasingly focused on climate change

<sup>1</sup> https://cites.org/eng/news/sg/early-reflections-on-eight-years-as-sg-of-cites-2010-2018 0604208 (accessed July 6, 2020).

and on analysing market based instruments of governance, thereby obscuring other environmental issues. First I outline existing political ecology scholarship on green militarization; second I examine how security and conservation are increasingly integrated, especially in tackling the illegal wildlife trade; third I give an overview of the changing patterns of funding available from key; fourth I set out the ways that the trade is presented as linked to international terrorism and armed groups; and finally, I examine how the trade is explained as a facet of organized crime, and therefore a threat to the rule of law.

# Political Ecology, Security and Militarization of Conservation

This paper uses a political ecology lens to understand current shifts in conservation, such that it has become more integrated with security concerns. This security approach is supported by international donors and national governments, with significant (and sometimes fatal) consequences for marginalized communities living with wildlife (Verweijen, 2020; Marijnen and Verweijen 2016). Dauvergne and Clapp (2016) point out that much existing scholarship in global environmental politics does not treat the environment itself as the central focus of research; rather it is used to illustrate debates about the nature of governance arrangements. In contrast, political ecologists focus much more fully on socio-ecological relations, and have developed important debates about the intersections between the environment, violence and conflict (especially in the arena of wildlife conservation).

Political ecology combines insights from ecology and political economy (Blaikie and Brookfield, 1987; Robbins 2012; Sultana 2020). Joan Martinez-Alier (2003) classically defines political ecology as the study of ecological distribution conflicts. Further, Robbins (2012) identifies five major areas of political ecology: environmental conflicts, degradation and marginalization, conservation and control, environmental identity, and social movements. While its foundations lie in political economy and ecology, political ecology has incorporated insights from other fields to build post-structuralist and feminist political ecologies (Sultana, 2020). Despite the common concerns, scholars of the broad fields of political ecology and global environmental politics rarely engage with each other (for notable exceptions see Duffy, 2016; Le Billon and Duffy, 2018; Holmes, 2011; Marijnen and Verweijen, 2016; Verweijen, 2020; Lunstrum, 2018; Lunstrum and Ybarra, 2018; Ybarra, 2017).

Given the focus on the shift towards security approaches, securitization theory is useful for exploring how particular issues become discursively constructed by elite actors as security challenges, which facilitate the introduction of new emergency measures beyond the realm of normal politics (Buzan et al, 1998; Booth, 1991; Floyd, 2011; Dalby, 2009; MacDonald, 2018; Oels 2012; Warner and Boas, 2019). However, its application for understanding the illegal wildlife trade is limited. Securitization theory is concerned with how social practices become securitized, indicating distinct phases before and after securitization (see Neocleous, 2008 for a wider critique). This makes it difficult to understand securitization as an on-going process and it is not well-placed to capture fast-paced changes in the illegal wildlife trade, in which framings and practices are involved dynamic interactions. Moreover, there have been recent criticisms of the roots of securitization as obscuring or overlooking race and gender (Howell and Richter-Montpetit, 2020). Securitization theory can provide useful points of reference on thinking about the discursive framing of illegal wildlife trade as a security issue, but a political ecology approach demonstrates how these

framings play out materially, and violently, on the ground for people and wildlife. There is greater engagement between political ecologists and critical geographers concerned with exploring environmental geopolitics. The literatures on critical geopolitics (Dalby, 2009, 2020) and environmental geopolitics (O'Lear, 2018) is particularly useful because it can help us understand the ways that global debates can ultimately shape policy interventions on the ground. In line with this, I discuss how the ways that global level donors and conservation actors frame the illegal wildlife trade as a security threat can have deeply problematic and material effects, especially for already marginalized peoples.

To date political ecologists' have not fully addressed the intersections between green militarization and global security concerns. Thus far, political ecologists have focused on developing critiques of the environmental security approach, especially for its neomalthusianism, its methods and failure to address local level complexities that produce conflict (Peluso and Vandergeest, 2011; Peluso and Watts, 2001; Le Billon and Duffy, 2018; Benjaminsen et al, 2012). Political ecologists have also examined the interplay between resources, conflicts and environmental change (Peluso and Watts, 2001; Le Billon 2012; Bocarejo and Ojeda, 2018) and highlighted the growing intersections between the environment and the military (Biggar and Neimark, 2017; Massé, Lunstrum and Holterman, 2018; also see Colgan, 2018).

Political ecologists have lead in debates on 'green militarization,' defined by Lunstrum (2014: 817) as the use of military and paramilitary (military-like) actors, techniques, technologies, and partnerships in the pursuit of conservation (also see Lunstrum, 2015; Ashaba, 2020; Büscher and Ramutsindela, 2016; Büscher and Fletcher, 2018; Massé 2018; Dutta, 2020; Weldemichel, 2020; Duffy, 2014; Ybarra, 2017; Marijnen, 2017). The current phase of militarization builds on a long history of forceful approaches to conservation to maintain artificial separation of people and wildlife; often referred to as 'fortress conservation', it has resulted in violent eviction, exclusion and dispossession (Neumann, 2004; Avant, 2004; Peluso and Vandergeest, 2011; Dowie, 2009). More militarized responses in conservation have also tended to be justified via appeals to the urgent need to prevent the loss of important species for the whole world (Duffy, 2014; Marijnen and Verweijen, 2016; Büscher and Ramutsindela, 2016; Annecke and Masubelele, 2016; Barbora, 2017). While many of the high profile examples of militarization are focused on protecting charismatic species in Sub-Saharan Africa, more forceful responses are a feature of a much wider range of conservation initiatives. For example, in Nigeria armed rangers are used to protect forests designated for global climate change mitigation schemes (Asiyanbi, 2016) as well as in forest conservation in India (Dutta, 2020). In the borderlands between Mexico and Guatemala, conservation narratives are used to justify the use of force in the Maya Biosphere Reserve and have prevented the return of Internally Displaced Peoples following the end of civil war (Ybarra 2017; Millner, 2020; Devine, 2014). Similar dynamics are discernible in the protection of ecotourism sites in Colombia (Bocarejo and Ojeda, 2016) and in fisheries protection in India (Muralidharan and Rai, 2020). Therefore, while my analysis focuses on illegal wildlife trade, it has much wider application in debates about how to respond to the impacts of global environmental change. In this paper I focus on the wider international context of these responses.

## Methods

This research was conducted as part of a larger project, funded by the European Research Council.<sup>2</sup> I took a qualitative and iterative approach, drawing on official documents, knowledge exchange workshops, participant observation in high-level meetings and semi structured interviews with key informants. Interviewees were invited to participate in the research project based on their expertise and involvement in tackling the illegal wildlife trade between 2014 and 2020. The 43 interviewees were drawn from conservation NGOs (eight), military trainers working in conservation (five), international donors (thirteen) and relevant national government agencies in the US and UK (seven) as key actors in funding and publicly campaigning about the need to tackle illegal wildlife trade (discussed more fully below). Interviewees were informed of the purposes of the research, all comments were fully anonymised and participants were given the opportunity to review and amend the full transcript of the interview. This paper was also informed by discussions at three knowledge exchange workshops with conservation professionals from the NGO sector, held in 2017 (Oxford 25 participants, Cambridge 10 participants) and 2018 (Geneva 10 participants); the workshops were held under rules of confidentiality and anonymity, discussions were summarised and participants were assured that no comments would be quoted or be directly attributable. Anonymization and confidentiality in the interviews and workshops allowed for candid and open conversation. This paper also draws on the authors' participation in several high-level meetings and conferences linked to tackling the illegal wildlife trade, notably the 2018 London Illegal Wildlife Trade Conference (the fourth and biggest meeting on the issue convened at the initiative of the UK Government) (see Massé et al. 2020).<sup>3</sup> It is important to develop a greater understanding of security-oriented approaches, how they are debated, funded and extended by global elites. The substantial body of scholarship on political ecologies of militarization of conservation to date has largely focused on dynamics and impacts in single cases studies, offering rich and detailed analyses of local impacts, responses and resistances; however, there is a need for greater reflection on the common patterns between cases (Duffy et al. 2019). The purpose of this paper is to place these dynamics in their international context, building on political ecology work that specifically analyses elite discourses and practices via ethnographies of the powerful (Massé et al, 2020; Campbell et al, 2014). Developing our understandings of this is a vital part of producing more socially just forms of conservation. Bringing political ecology into conversation with global environmental politics scholarship is one route for achieving this.

## Responding to the Illegal Wildlife Trade

Until the rises in poaching and trafficking from 2008 conservation NGOs, law enforcement agencies, and international organizations working on the illegal wildlife trade struggled to gain the attention of governments; but this has changed and there is a greater degree of interest from a wider variety of sectors (Gore, 2017; Massé and Margulies, 2020; Felbab-Brown, 2017, p10; Elliot, 2016; Gaffney and Evenses, 2020).

From the mid 2000s rates of poaching grew, especially of elephants and rhinos. In South Africa alone, rhino poaching rates leapt from 13 rhinos in 2007, to 1215

<sup>&</sup>lt;sup>2</sup> European Research Council grant number 694995, BIOSEC Project

<sup>&</sup>lt;sup>3</sup> I was also involved in advising the civil service team on the development of the conferences during 2016-2018; and sat on the UK Government Illegal Wildlife Trade Challenge Fund Advisory Board 2014-2016.

poached in 2014, reducing to 1028 in 2017.<sup>4</sup> Equally the Monitoring of Illegal Killing of Elephants (MIKE) database of CITES shows that elephant poaching across Africa increased from 2003, peaked in 2011 at 10% of elephants and has shown a slight downward trend to 4% since then, but still 10-15,000 elephants are poached each year.<sup>5</sup> Therefore, the calls for urgent action were the result of genuine concern about declines. This sense of urgency facilitated the redefinition and articulation of the illegal wildlife trade as a global security threat.

The articulation of illegal wildlife trade as an issue of security and crime has translated into a conservation policy landscape that increasingly promotes and privileges responses such as legal and judicial reform, criminal investigations, intelligence gathering, law enforcement technologies and informant networks (Massé et al, 2020). First there is the argument that illegal wildlife trade is extremely lucrative and funds organized crime and armed groups, therefore it undermines the rule of law and can contribute to destabilization. Second, there is the argument that the illegal wildlife trade is an organized criminal activity, and therefore requires greater levels of law enforcement (Wyatt, van Uhm and Nurse, 2020; Lynch, Stretesky and Long, 2017), including the use of intelligence gathering, informant networks and more active forms of policing (Massé et al, 2020). Second, in areas of armed conflict, conservationists can feel they have no other option but to defend themselves via security-oriented approaches (Marijnen and Verweijen, 2016; Lombard, 2016; Lombard and Tubiana, 2020; Marijnen, De Vries and Duffy, 2021). Third, there is the argument that poachers are becoming more heavily armed and organized, and therefore a more forceful response is required, including arming rangers (Mogomotsi and Madigele, 2017). Fourth, proponents of militarized conservation often present forceful approaches as a noble or heroic quest to save species for future generations (McClanahan and Wall, 2016; Marijnen and Verweijen, 2016). In the next section I set out how this has shaped funding priorities for conservation from major donors.

## **International Funding for Tackling the Illegal Wildlife Trade**

The redefinition of illegal wildlife trade as a security threat has produced shifts in the levels and types of funding available for tackling it. Conservation NGOs have strategically leveraged concerns about security to gain attention and funding from key global actors. This is the combined result of the highly competitive funding environment and pre-existing security fears about armed groups and organized crime networks. Security-oriented strategies require substantial financial resources to implement and maintain, and can exclude other options such as focusing on alternative livelihoods and demand reduction; further it does not tackle the underlying drivers of poaching and trafficking (Lynch, Stretesky and Long, 2017).

The Nature Conservancy recently estimated that global spending on biodiversity conservation was between US\$124 and US\$143 billion per year; this includes finance from donors, biodiversity offsets, nature based solutions and carbon markets, philanthrophy and conservation NGOs, with the largest percentage (57%) from domestic state budgets and taxes (Deutz et al, 2020, p13). OECD estimated that global biodiversity expenditure 2015-2017 totalled an average of US\$78 - 91 billion

<sup>&</sup>lt;sup>4</sup> https://www.traffic.org/what-we-do/species/rhinos/ (accessed March 19, 2021)

<sup>&</sup>lt;sup>5</sup> https://cites.org/eng/MIKE PIKE Trends report elephants CITES 16112020 (accessed March 19, 2021)

per year (Perry and Karousakis, p3). The growing interest in illegal wildlife trade has meant more funding to tackle it. A review by GEF in 2016 found that a total of US\$1.3 billion was committed to specifically tackling the illegal wildlife trade by 24 international donors between 2010 and June 2016. Of these funds 46% supported protected area management, while 19% went to law enforcement including intelligence-led operations and transnational coordination, 15% for sustainable use and alternative livelihoods, 8% for policy and legislation, 6% for research and assessment, and 6% for communication and awareness raising (Wright, et al., 2016, p9). So there is a clear skew of funding towards management of protected areas and law enforcement, with much smaller portions for livelihoods and awareness raising. Of course protected area management can also include activities like community engagement and education, but nonetheless, the GEF figures indicate that there was a shift in funding priorities globally. The top five donors were the Global Environment Facility (GEF), Germany, the United States, the European Commission, and the World Bank Group, who together contributed US\$1.1 billion of the total funding (86%) analyzed (Wright et al, 2016, p14). In 2018 the GEF announced it had committed a further US\$168 million over its new funding cycle (the GEF-7) from 2018 to 2022, an increase on the US\$131 million it had already committed in 2015-2018.6 In the first round, the GEF mobilized an additional US\$704 million in cofinancing from governments, donors, private foundations, private sector and civil society all for specifically tackling the illegal wildlife trade.<sup>7</sup>

Funding from US Fish and Wildlife Service (USFWS) also reveals similar patterns. According to Massé and Margulies (2020) between 2002 and 2018, the USFWS Division of International Affairs provided assistance to 4142 projects across 106 countries worth over USD \$301 million. In that time an increasing portion of foreign assistance for biodiversity conservation was allocated to tackling illegal wildlife trade. In 2014 US Congress, and specifically the Sub-Committee on Department of State, Foreign Operations, and Related Programs allocated US\$45 million in the foreign assistance biodiversity budget to tackle wildlife trafficking, which increased to US\$55 million in 2015, US\$80 million in 2016, and almost US\$91 million in each of 2017, 2018, and 2019, at the expense of other conservation priorities.

Similarly, the UK Government has committed to tackling the illegal wildlife trade. The Illegal Wildlife Trade Challenge Fund was established in 2013, and by 2019 it had allocated just over £23 million to 75 projects. The relative balance of projects spread across the three themes of sustainable livelihoods (6 funded projects), strengthening law enforcement and the role of the criminal justice system (62 funded projects) and demand reduction (7 funded projects). The disparity is clear: many more projects were funded that were associated with law enforcement and the criminal justice system than the other two priority areas. The geographical breakdown of funded projects also indicates there were more projects in certain regions: Africa (40), Asia (25), South America (4), Europe (0), North America (0), Middle East (0),

<sup>&</sup>lt;sup>6</sup> Global Environment Facility, "Funding to combat illegal wildlife trade," dated October 9, 2018, accessed September 19, 2020, <a href="https://www.thegef.org/news/gef-increases-funding-combat-illegal-wildlife-trade">https://www.thegef.org/news/gef-increases-funding-combat-illegal-wildlife-trade</a>

<sup>&</sup>lt;sup>7</sup> Global Environment Facility, "Funding to combat illegal wildlife trade," dated October 9, 2018, accessed September 19, 2020, <a href="https://www.thegef.org/news/gef-increases-funding-combat-illegal-wildlife-trade">https://www.thegef.org/news/gef-increases-funding-combat-illegal-wildlife-trade</a>

Central Asia (3), Oceania (0), mixture of Asia and Africa (3). This shift in funding has been a central source of material support for the extension of more forceful and militarized forms of implementing conservation policy on the ground. It is important to understand the different kinds of international support for the current shift towards more security-oriented approaches; using a political ecology lens allows an examination of the asymmetric power dynamics between global elites and often marginalized communities that experience the uneven effects of these policy shifts on the ground.

# Illegal Wildlife Trade, Terrorism and Destabilization

The value of the illegal wildlife trade is often given as evidence for its attractiveness to armed groups and organized crime. The Financial Action Task Force estimates the value of illegal wildlife trade as between USD7-23 billion per year (FATF, 2020, p13). However, it is difficult to quantify the value of the trade accurately, and estimates vary; the End Wildlife Crime campaign states that transnational wildlife crime is valued at USD199 billion per annum – a much bigger figure because it includes more than illegal wildlife trade; the campaign also estimates that wildlife crime deprives governments of USD7-12 billion in revenues annually. In addition, while international organizations, conservation organizations, and law enforcement agencies clearly want to draw attention to the value of the trade and its role in financing illicit networks, they do not state exactly how much profit is made overall by organized crime, armed groups and terrorist networks (Duffy, in press 2022). Instead figures are only provided for specific consignments or examples of trades by particular groups (such as Al-Shabaab, discussed below).

The articulation of illegal wildlife trade as a security threat is an important part of the justification for allocating funding to more security—oriented approaches in conservation. This framing has been central to several conservation NGO campaigns to attract the attention of the public, governments, international organizations, donors and the private sector, WWF-International, Wildlife Conservation Society, United for Wildlife, Elephant Action League, Environmental Investigation Agency and International Fund for Animal Welfare, amongst others. For example, Conservation International states:

'Money from wildlife poaching and trafficking is directly linked to the funding of dangerous rebel organizations and terrorist networks, including the Janjaweed militia in Darfur and the Lord's Resistance Army in Uganda.'<sup>11</sup>

Similarly when Wildlife Conservation Society launched its 96 Elephants campaign in 2016, it stated that poachers were not motivated by poverty, but instead were part of larger criminal and terrorist networks. One of the campaign 'pillars' was entitled *Terror and Ivory* which stated:

<sup>&</sup>lt;sup>8</sup> DEFRA, Illegal Wildlife Trade Challenge Project funding <a href="https://assets.publishing.service.gov.uk/government/uploads/system/uploads/attachment\_data/file/811381/iwt-project-list-2019.pdf">https://assets.publishing.service.gov.uk/government/uploads/system/uploads/attachment\_data/file/811381/iwt-project-list-2019.pdf</a> accessed June 05, 2020.

<sup>&</sup>lt;sup>9</sup> Wildlife crime is wider than illegal wildlife trade alone and can include illegal fishing, logging, poisoning of raptors, hare coursing, badger baiting, amongst other criminal activities.

<sup>10</sup> <a href="https://endwildlifecrime.org/">https://endwildlifecrime.org/</a> (accessed June 24, 2021).

<sup>11</sup> https://www.conservation.org/priorities/global-stability (accessed July 10, 2020)

'How They Kill: Brutal and sophisticated. Both words describe the armed militants poaching Africa's elephants. The killers use helicopters, GPS equipment, night-vision goggles, and automatic weapons to find and mow down elephants, then hack their tusks out with an axe—an atrocity often committed while the animal is still alive.<sup>12</sup>

As political ecologists have argued, this characterization of poachers is used to justify more interventionist and security-oriented responses to save wildlife (Marijnen and Verweijen, 2016; Asiyanbi, 2016; Dutta, 2020; Massé et al, 2020; Verweijen, 2020). NGOs make these links to draw attention to threats to wildlife and to drive fundraising efforts (Somerville, 2016, p113; Duffy, 2016). While conservation NGOs have been at the forefront of arguing that the illegal wildlife trade generates finance for armed groups, this rationale has been rendered more powerful because it has been taken up by states and donors as well. As political ecology analyses show, such approaches do little to address the structural conditions that draw people into the poaching economy in the first place (Lunstrum and Givá, 2020; Lubilo and Hebink, 2019; Lynch, Stretesky and Long, 2017).

The argument that the illegal wildlife trade is funding armed groups and terrorist networks is central to debates in policy networks, especially in US Government circles; this translated into greater attention, support and funding for tackling the trade as a threat to US interests. US President Barack Obama issued Executive Order 13648 on Combating Wildlife Trafficking in July 2013, which is indicative of how seriously the Administration took the illegal wildlife trade, <sup>13</sup> and this did not diminish under the Trump Administration (discussed later in this paper). The 2016 Intelligence Authorization Act, the U.S. House of Representatives also mandated the Director of National Intelligence to report on wildlife trafficking networks and targets for disruption (Felbab-Brown, 2017, p11). A senior US government official suggested that the illegal wildlife trade can flourish,

'when countries are lawless and not really well monitored then that is the cradle of destabilizing. It can be considered jihad ... They function best in very unstable, and very disorganized, and ungoverned spaces, so their actions I believe are deliberately oriented to maintaining the anarchy in which they can thrive.' 14

This new interest elevated the illegal wildlife trade to a much greater level of importance, and with that came more attention, funding, and policy commitments from the US Government. Indeed, one Washington DC based conservationist pointed out that

'The State Department under Obama was really dedicated to cracking down on the illegal ivory trade. One of the Under Secretaries of State made it her personal mission'.<sup>15</sup>

<sup>&</sup>lt;sup>12</sup> Wildlife Conservation Society Terror and Ivory 96 elephants campaign homepage, accessed March 24, 2017 <a href="http://www.96elephants.org/chapter-2">http://www.96elephants.org/chapter-2</a>

<sup>&</sup>lt;sup>13</sup> White House (Obama Administration), "Combating Wildlife Trafficking," Executive Order 13648 of July 1, 2013, Federal Register 78(129), July 05, 2013, pp. 40621-40623.

<sup>&</sup>lt;sup>14</sup> Interview with 2017\_07\_18 WP 1.6a (c)

<sup>15</sup> Interview 2017\_07\_17 WP 1.4

From the perspective of a USFWS official, although their office had worked on wildlife trafficking issues for 25-30 years, they had noticed an increase in attention and funding; they stated that

'in the past 5 years, doubly since 2013, with the Executive Order from Obama we saw this huge upswing in interest. Here having a Presidential Executive Order gave everyone license to bring it up at a high level. If you are in an Embassy you can say, look this is what our President said, this is important. It came up at the G20.'<sup>16</sup>

A high level representative from a donor organization explained the US focus on illegal wildlife trade thus:

'the interest from the US was that, for reasons which were never entirely clear to the outside world, a very strong focus on certain armed groups, or certain armed movements. Obviously, for security reasons, but possibly for economic reasons as well.... the American approach was, basically a security-based approach, which was, let's throw Special Forces at these and see what happens. But it became more sophisticated and by the end of the Obama administration I think all of us who are involved in these issues were having a dialogue which involved not just the military and intelligence, but also conservation, park management, civil society organizations, because in a lot of the places where these armed groups operate and where they do wildlife trafficking, basically there is no government.'17

The critical moment in redefining the illegal wildlife trade as a global security threat was in 2013, when poorly evidenced claims emerged that ivory was a central source of funding for Al Shabaab were later taken up by the media and then NGOs and policy makers (Duffy, 2016; Somerville, 2016; Maguire and Haeinlein, 2015). The Al Shabaab link is now discredited, yet the argument persists that while the Al Shabaab link might not be true, other armed groups and terrorist networks (such as Boko Haram and Lords Resistance Army) are involved in wildlife trafficking and this just needs proving (Pennaz et al. 2018; Titeca and Edmund 2019). One US based conservationist explained the sticking power of these stories,

'One of the reasons it's pushed quite hard, about this link between terrorism and wildlife crime is, particularly ivory, particularly in the US.... there is always an interest, and in other countries worldwide, if there is a link to terrorism then they will look at it.'18

Using a political ecology lens allows us to examine how arguments that illegal wildlife trade is a security threat rely on blunt characterizations, of the trade and the people involved in it. As Marijnen and Verweijen (2016) point out, poachers are presented as criminals while rangers are elevated to the status of heroes. In line with this political ecology perspective one Washington DC based conservationist commented, conservationists were presenting reductive caricatures of organized crime

<sup>&</sup>lt;sup>16</sup> Interview 2017\_07\_18 WP 1.6a (e).

<sup>&</sup>lt;sup>17</sup> Interview with 2019\_11\_12 WP1.19.

<sup>&</sup>lt;sup>18</sup> Interview 2017 07 17 WP1.5 c

networks, security threats and terrorists: 'Right now we are dealing with the cartoon version.' 19

Despite these complexities, defining the illegal wildlife trade as a global security threat is regarded in some policy circles as the most effective for gaining attention and generating funding and policy commitments. This reveals the complexity of thinking about illegal wildlife trade as a security issue. It is seen as a dangerous threat, but a useful one because of the political effects it could leverage. While the specific argument that ivory funds terrorism was less prominent in UK Government circles,<sup>20</sup> the idea that the illegal wildlife trade was a security issue remained because it was strategically useful. For example, one senior UK civil servant commented:

'Hopefully if we move it [IWT] up the agenda of political attention, that is partly about collecting data and pulling it together. If people aren't looking for it then they won't spot it ... I am absolutely convinced it is the right way to talk about it, it is really helpful, but security means different things to different people.'<sup>21</sup>

Another senior UK civil servant commented 'we need to keep looking for links whether it is terrorism or something else.' This is a clear example of framings driving data collection, and has been used to justify security-oriented approaches to conservation (Duffy, 2016; Maguire and Haenlein, 2015; Somerville, 2016).

The European Commission is one of the main donors for tackling the illegal wildlife trade, and it has highlighted the need to integrate conservation with security. A 2019 report on the intersections between wildlife conservation in Africa stated that the complexity of the illegal wildlife trade and its impacts on security demonstrated 'the necessity to expand and increase investments in conservation-security-development programs in priority protected area landscapes of sub-Saharan Africa in order to achieve sustained global, regional and local security and stabilization objectives.' (European Commission, 2019, p27).

Moreover, an MEP commented that destabilization and conflict in Libya and Sudan were contributory factors in elephant poaching,

'you see these guns that are around that came from military activity or wherever there is destabilization, these poor animals are trying to walk through this mess that the humans keep doing.'<sup>23</sup>

In short, many conservation NGOs, government agencies and donors promote the idea of a security threat from illegal wildlife trade because it is in their interests to do so. As one Washington DC based conservationist suggested,

'the conservation community has not really expressed a whole lot of scepticism because it is driving money their way. This is a political economy of

<sup>&</sup>lt;sup>19</sup> Interview 2017 07 17 WP1.3

<sup>&</sup>lt;sup>20</sup> Interviews with 2017\_11\_ 13 WP 1.13 c; 2017\_11\_ 13 WP 1.13 b

<sup>&</sup>lt;sup>21</sup> Interview with 2017\_11\_ 13 WP 1.13 (c)

<sup>&</sup>lt;sup>22</sup> Interview 2017\_11\_20 WP.1.12a.

<sup>&</sup>lt;sup>23</sup> Interview with 2017 11 20 WP1.12

conservation. Bad news drives donations so there is some manipulation of the truth there too.'24

The arguments about terrorism and illegal wildlife trade tap into a pre-existing and deep-seated global fears about terrorism post 9/11. As Dalby (2009, 2020) and O'Lear (2018) indicate, the framing of environmental change shapes policy responses to it. Since NGOs need to compete for funds, it makes financial sense to link conservation and security concerns together. As political ecologists have amply shown, the consequences of this are heavier levels of enforcement, militarization and violence at the hands of conservation authorities, coupled with the uneven effects of the extension of trafficking networks and activities in the same spaces (Büscher and Ramutsindela, 2016; Massé 2018; Dutta, 2020; Weldemichel, 2020; Ybarra, 2017).

## Illegal Wildlife Trade as Wildlife Crime

The presentation of the illegal wildlife trade as a security threat is also articulated via the idea that it constitutes a wildlife crime. This means drawing links to corruption, the involvement of organized crime networks, and its relationship with other illicit trades (Felbab-Brown 2017, pp38-40; Moreto, 2018; Van Uhm and Moreto, 2018). The illegal wildlife trade is attractive to organized crime networks because it can be low risk/high reward; the profits can be significant but the chances of getting caught are lower than for other illicit trades (Elliot, 2016). The United Nations Convention against Transnational Organized Crime (UNTOC) defines an organized criminal group as 'a structured group of three or more persons, existing for a period of time and acting in concert with the aim of committing one or more serious crimes or offences established in accordance with this Convention, in order to obtain, directly or indirectly, a financial or other material benefit.' 25 This encompasses a range of different kinds of actors and not just the more well known networks such as mafias, triads, and the UNODC determines that nearly all transnational wildlife trafficking fulfils these criteria (UNODC, 2016, p23). The framing of the trade as wildlife crime is important in current shifts in approaches to saving species; it is used to justify the use of emergency, and often extra-legal and violent, measures in conservation.

A very wide range of organizations link organized crime and illegal wildlife trade, including the EUROPOL Serious and Organized Crime Threat Assessment (SOCTA)<sup>26</sup> and the United Nations Convention Against Transnational Organized Crime (UNTOC). The United Nations Office on Drugs and Crime (UNODC supports member states in addressing environmental crimes, but its initiatives around wildlife crime are still in their infancy. From 2012 all activities to address wildlife and forest crime were brought under the first UNODC Global Program on Combating Wildlife and Forest Crime, managed by the UNODC headquarters in Vienna. As part of that UNODC produced its first *Global Wildlife Crime Assessment* in 2016, and the second in 2020. This was because there was a concern that illegal wildlife trade was becoming recognised as an area of specialism for organized crime and because the trade itself threatened the survival of several species (UNODC, 2016, 2020; also see

<sup>&</sup>lt;sup>24</sup> Interview 2017\_07\_17 WP1.3

<sup>&</sup>lt;sup>25</sup> <a href="https://www.unodc.org/unodc/en/organized-crime/intro/UNTOC.html#Fulltext">https://www.unodc.org/unodc/en/organized-crime/intro/UNTOC.html#Fulltext</a>, accessed April 29, 2020

<sup>&</sup>lt;sup>26</sup> EUROPOL, "Threat Assessment," accessed March 08, 2019 <a href="https://www.europol.europa.eu/activities-services/main-reports/serious-and-organized-crime-threat-assessment">https://www.europol.europa.eu/activities-services/main-reports/serious-and-organized-crime-threat-assessment</a>

Massé et al, 2020). Conservation NGOs such as United for Wildlife, Conservation International, Wildlife Conservation Society, The Nature Conservancy, and many others also make the connection. For example, WWF-International states

'[i]ncreasingly involving large-scale, transnational organized crime, the current unprecedented spike in illegal wildlife trade poses a growing threat not only to wildlife but also to security, rule of law, sustainable development, and the well being of local communities.'<sup>27</sup>

The US Government has articulated of illegal wildlife trade as linked to organized crime, pointing to its convergence with much longer-standing drug trafficking networks. In 2015, the U.S. House of Representatives passed the Global Anti-Poaching Act, which gave illegal wildlife trade the same criminal status as drug and gun smuggling. This increased penalties because it made wildlife trafficking a liable offence for money laundering and racketeering. In 2015 wildlife crime was added to the definition of transnational organized criminal networks in the US National Defense Authorization Act.<sup>28</sup> One US Government official noted that

'there is a clear and present danger to governments and their ability to govern, posed by a very lucrative and very powerful and very connected industries, which show a great deal of convergence between wildlife trade and other forms of illegal trafficking.'<sup>29</sup>

There were concerns that such high profile US support would diminish with the Trump Presidency; the END Wildlife Trafficking Act<sup>30</sup> was passed late in the Obama Administration in 2016, and there were fears that the Trump Administration would not implement it. Therefore, once President Trump entered the White House several conservation organizations coordinated efforts to persuade the new administration to continue with support. The cross party appeal of both wildlife conservation and national security assisted this, plus conservation causes also benefit from support from the powerful bipartisan International Conservation Caucus (ICC) (Corson 2016). As one member of a Washington DC based conservation NGO remarked after Trump was elected,

'the nice thing about this is, and its rare in the US, wildlife trafficking is not a partisan issue .... every single law maker we talked to, Republican and Democrat reconfirmed their belief in the importance of The END Wildlife Trafficking Act. So at least it is still is on their radar'.<sup>31</sup>

In February 2017, conservationists in NGOs and US Government Departments welcomed the fact that the illegal wildlife trade was specifically mentioned in Trump's Presidential Executive Order on Enforcing Federal Law with Respect to

https://www.congress.gov/114/plaws/publ231/PLAW-114publ231.pdf accessed May 14, 2019.

<sup>27</sup> 

http://wwf.panda.org/what we do/how we work/our global goals/species programme/wildlife trade /wildlife crime initiative/index.cfm accessed March 14, 2020

<sup>&</sup>lt;sup>28</sup> Congress, "Bill," <a href="https://www.congress.gov/bill/114th-congress/house-bill/1735/text">https://www.congress.gov/bill/114th-congress/house-bill/1735/text</a> accessed April 18, 2019.

<sup>&</sup>lt;sup>29</sup> Interview with 2017\_07\_18 WP 1.6a (e).

<sup>&</sup>lt;sup>30</sup> Full text of the END Wildlife Trafficking Act 2016 is available on

<sup>&</sup>lt;sup>31</sup> Interview 2017 07 17 WP 1.4.

Transnational Criminal Organizations and Preventing International Trafficking.<sup>32</sup> The Executive Order identifies it as a specific category of organized and transnational criminal activity and a threat to US National Security. This places wildlife trafficking on a par with other serious threats to national security, which allows for much greater levels of cooperation and information exchange between different US Government departments, international law enforcement agencies, and international institutions working in security, intelligence and environmental issues. Therefore, the identification of the illegal wildlife trade as a threat to US national security in the Executive Order is indicative of, and a reason for, its rise in priority among global issues. As political ecologists demonstrate, the consequences of these elite decisions are often the growing enforcement of protected areas, often via militarization of conservation (Büscher and Ramutsindela, 2016; Büscher and Fletcher, 2018; Dutta, 2020; Weldemichel, 2020; Ybarra, 2017; Marijnen, 2017).

Gore (2017) argues that the rise in interest from global policy makers is because there is growing agreement that wildlife losses have produced a *convergence* of threats to ecosystems, geopolitical stability, national security, human health, well-being, and future generations (also see OECD, 2016; Felbab-Brown, 2017, pp19-26; Massé, 2020; Moreto, 2018; Van Uhm and Moreto, 2018). This is reflected in the thinking of conservation NGO staff working on tackling the illegal wildlife trade. One member of a conservation NGO expressed that criminal networks are not necessarily specialists in one illegal trade but rather they opportunistically switch between trafficking vehicles, weapons, people, drugs, counterfeit goods and wildlife. <sup>33</sup> One MEP commented

'a lot of these are the same gangs, same groups, same processes, money getting moved around in the same ways. In fact it got a lot easier to do wildlife trafficking, they moved into human trafficking because drugs were getting too difficult and dangerous and court sanctions were getting too big..... It's a lot easier to give someone in a village 50 Euros and say go out and shoot an elephant and move it out.'<sup>34</sup>

Crime convergence was highlighted by a 2019 European Commission report on the links between wildlife and security in Africa, which states (in relation to South Sudan) that

"Wildlife crime helps drive insecurity with armed rebel groups surviving in remote areas and living off wildlife (bush meat). Groups and individuals engaged in poaching are often also involved in other activities that create insecurity, such as banditry, robbery and child abduction. The violence and pillaging destabilizes local communities and undermines development opportunities." (European Commission, 2019, p20).

However, while much of the attention is focused on the role of organized crime, the illegal wildlife trade is also carried out by disorganized, eclectic, and temporary

<sup>&</sup>lt;sup>32</sup> White House, "Executive order," <a href="https://www.whitehouse.gov/the-press-office/2017/02/09/presidential-executive-order-enforcing-federal-law-respect-transnational">https://www.whitehouse.gov/the-press-office/2017/02/09/presidential-executive-order-enforcing-federal-law-respect-transnational</a> accessed September 19, 2020.

<sup>&</sup>lt;sup>33</sup> Interview with 2017\_11\_27 WP1.13.

<sup>&</sup>lt;sup>34</sup> Interview with 2017 11 20 WP1.12

networks, which are often overlooked; these networks can be engaged in a range of illicit trades (including drugs, arms, people and vehicles) based on what is available, moveable and most profitable at any given time (Wyatt, 2016, 2013; Felbab-Brown, 2017, pp40-45; Titeca, 2018). This somewhat complicates the story that the illegal wildlife trade is carried out by highly organized crime networks and is a security threat. Moreover, the focus on transnational organized crime is a more readily intelligible and acceptable way of explaining the persistence, scale and value of the illegal wildlife trade at international fora; identifying shadowy organized crime networks as responsible for poaching and trafficking can be less politically sensitive than placing the blame on corrupt elites, corporations or a fluid unorganized network.

## **Conclusion**

The rising rates of poaching of some of the worlds most iconic species since 2008 catapulted tackling the illegal wildlife trade to the forefront of global debates about biodiversity conservation and the effects of environmental change. The genuine concerns that poaching and trafficking could drive some species to extinction has combined, powerfully, with the fears of governments, donors and international organizations about threats to global stability; in the arena of tackling the illegal wildlife trade these threats are clearly presented as armed groups and organized crime networks.

In this article, I teased out the connections between militarization of conservation and its wider international context; it is clear that there has been a shift in conservation towards more forceful and security-oriented approaches, supported by enhanced levels of funding available for these strategies. To date political ecologists have concentrated on highlighting and analysing its impacts on the ground, including human rights abuses, violence by conservation authorities, exclusion and dispossession (Verweijen, 2020; Duffy et al, 2019; Büscher and Ramutsindela, 2016; Dutta, 2020; Ashaba, 2020; Weldemichel, 2020). However, integrating this with global environmental politics scholarship adds a much-needed international dimension to these political ecology debates. It is important to understand how and why conservation has turned towards security oriented approaches to tackle the illegal wildlife trade. The shift is the result of the combined sense of urgency about poaching, concerns about organized networks, the interests of some of the world's most powerful actors and the highly competitive funding environment for conservation NGOs. This article provides a missing part of the puzzle for understanding the expansion of more security-oriented practices in conservation; it explains the international level drivers for the development of more militarized and violent practices on the ground and thus it builds on and further develops debates in political ecology on green militarization (Lunstrum, 2014, 2015; Büscher and Ramutsindela, 2016; Büscher and Fletcher, 2018; Massé 2018; Dutta, 2020; Weldemichel, 2020; Duffy, 2014; Ybarra, 2017; Marijnen, 2017) by connecting it with the broader international context that supports and extends these more forceful and security-oriented practices. A key contribution of political ecology is its focus on documenting and highlighting the struggles of marginalized peoples. This paper fills an important gap in analyses, it brings together a global environmental politics perspective with political ecology to excavate what is debated and decided at international level when those voices are absent; this is vitally important because these power asymmetries powerfully shape the everyday experiences of people engaged in both the enforcement of conservation and those who live with the negative

effects of that enforcement and of trafficking networks. As a result conservation is being powerfully reshaped in ways that will continue to define and circumscribe it in the future.

## **Biography**

Rosaleen Duffy is Professor of International Politics at the University of Sheffield. Her research focuses on the political ecologies of the international politics of conservation, the intersections between capitalism and conservation as well as the dynamics of the illegal wildlife trade. She is author of *Nature Crime* (Yale, 2010) and *Biodiversity and Security* (Yale, 2022). During 2016-2020 she was PI of the BIOSEC Project, funded by a EUR1.8m grant from ERC, and in 2021-2023 she is PI of a £1m ESRC funded project 'Beastly Business' on the illegal trade in European wildlife.

#### References

Annecke, Wendy and Mmoto Masubelele. 2016. A Review of the impact of militarization: The case of rhino poaching in Kruger National Park, South Africa. *Conservation and Society*, 14(3): 195-204.

Ashaba, Ivan. 2020 Historical Roots of Militarized Conservation: The case of Uganda. *Review of African Political Economy*. 48(168): 1-13

Asiyanbi, Adeniyi. 2016. A political ecology of REDD+: Property rights, militarized protectionism, and carbonised exclusion in Cross River. *Geoforum*, 77: 146-156.

Avant, Deborah. 2004. Conserving Nature in the State of Nature: The politics of INGO policy implementation. *Review of International Studies* 30 (3): 361–82.

Barbora, Sanjay. 2017. Riding the Rhino: Conservation, conflicts, and militarization of Kaziranga National Park in Assam. *Antipode*, 49(5):1145-1163.

Benjaminsen, Tor A, Koffi. Alinon, Halvard Buhaug, and Jill Tove Buseth. 2012. Does Climate Change Drive Land-use Conflicts in the Sahel? *Journal of Peace Research*, 49: 97-111.

Bigger, Patrick and Ben D. Neimark. 2017. Weaponizing Nature: The geopolitical ecology of the US Navy's biofuel program. *Political Geography*. 60: 13-22.

Blaikie, Piers and Harold Brookfield. 1987. *Land Degradation and Society*. London: Routledge.

Bocarejo, Diana and Diana Ojeda. 2016. Violence and Conservation: Beyond unintended consequences and unfortunate coincidences. *Geoforum*, 69, 176-183.

Booth, Kenneth. 1991. Security and Emancipation. *Review of International Studies*, 17:313–26.

Büscher, Bram and Robert Fletcher. 2018. Under Pressure: Conceptualizing Political Ecologies of Green Wars. *Conservation and Society*, 16(2): 105-113.

Büscher, Bram and Maano Ramutsindela. 2016. Green Violence: Rhino poaching and the war to save Southern Africa's Peace Parks. *African Affairs*, 115(458): 1-22.

Buzan, Barry, Ole Waever and Jaap de Wilde. 1998. Security: A New Framework for Analysis. London: Lynne Rienner.

Campbell, Lisa M., Catherine Corson, Noella J. Gray, Ken I. MacDonald and J.Peter Brosius. 2014. Studying Global Environment Meetings to Understand Global Environmental Governance: Collaborative event ethnography at the tenth confernce of the parties to the Convention on Biological Diversity. *Global Environmental Politics* 14 (3): 1-20.

Colgan, Jeff D. 2018. Climate Change and the Politics of Military Bases. *Global Environmental Politics*, 18 (1): 33-51

Corson, Catherine. 2016 Corridors of Power: The Politics of Environmental Aid to Madagascar. New Haven: Yale University Press.

Dalby Simon. 2020. Anthropocene Geopolitics: Globalization, Security, Sustainability. Ottawa: University of Ottawa Press.

Dalby Simon. 2009 Security and Environmental Change. Cambridge: Polity.

Dauvergne, Peter and Jennifer Clapp. 2016. Researching Global Environmental Politics in the 21<sup>st</sup> Century. *Global Environmental Politics*, 16(1): 1-12

Deutz, A., Heal, G. M., Niu, R., Swanson, E., Townshend, T., Zhu, L., Delmar,

A., Meghji, A., Sethi, S. A., and Tobin- de la Puente, J. (2020) Financing Nature:

Closing the global biodiversity financing gap. (The Paulson Institute, The Nature

Conservancy, and the Cornell Atkinson Center for Sustainability).

Devine, Jennifer. 2014. Counterinsurgency Ecotourism in Guatemala's Maya Biosphere Reserve. *Environment and Planning D-Society & Space*. 32(6): 984-1001.

Dowie, Mark. 2009. Conservation Refugees: The hundred year conflict between global conservation and native peoples. Cambridge, MA: MIT Press.

Duffy, Rosaleen, Francis Massé F, Emile Smidt, Esther Marijnen, Bram Büscher, Judith Verweijen, Maano Ramutsindela, Trishant Simlai, Laure Joanny and Elizabeth Lunstrum. 2019. Why We Must Question the Militarization of Conservation. *Biological Conservation*, 232: 66-73.

Duffy, Rosaleen. In Press 2022. *Biodiversity and Security: The International Politics of the Illegal Wildlife Trade*. New Haven, Yale University Press).

Duffy, Rosaleen. 2016. War by Conservation. Geoforum, 69: 238-248.

Duffy, Rosaleen. 2014. Waging a Waging a War to War to Save Biodiversity: The Rise of Militarized Conservation. *International Affairs*, 90 (4): 819-834.

Dutta, Anwesha. 2020. Forest Becomes Frontline: Conservation and counter-insurgency in a space of violent conflict in Assam, Northeast India. *Political Geography*, 77. 102117

Elliott, Lorraine. 2016. Criminal Networks and Illicit Chains of Custody in Transnational Environmental Crime. In *Handbook of Transnational Environmental Crime*. edited by Lorraine Elliott and William H. Schaedla. Pp.24-44. Northampton, MA: Edward Elgar.

European Commission. 2019. Study on the Interaction Between Security and Wildlife Conservation in Sub-Saharan Africa. Brussels, European Commission- DG DEVCO.

FATF. 2020. Money Laundering and the Illegal Wildlife Trade. Paris, FATF.

Felbab-Brown, Vanda. 2017. *The Extinction Market: Wildlife Trafficking and How to Counter It.* Washington DC: Brookings Institute.

Floyd, Rita. 2011. Can Securitization Theory be used in Normative Analysis? Towards a Just Securitization Theory. *Security Dialogue*, 42 (4-5): 427-439.

Gaffney, Alfie C.B and Darrick Evensen. 2020. Addressing the Elephant in the Room: Learning from CITES CoP17' *Global Environmental Politics*, 20(10).

Gore, Meredith. 2017. Global Risks, Conservation and Criminology. In Meredith Gore(ed) *Conservation Criminology*. Pp. 1-23, Oxford: Wiley-Blackwell.

Holmes, George. 2011. Conservation's Friends in High Places: Neoliberalism, Networks, and the Transnational Conservation Elite. *Global Environmental Politics* 11(4): 1-21.

Howell, Alison and Melanie Richter-Montpetit. 2020. Is Securitization Theory Racist? Civilizationism, methodological whiteness, and antiblack thought in the Copenhagen School. *Security Dialogue*, 51(1): 3-22.

Le Billon, Philippe. 2012 Wars of Plunder: Conflicts, Profits and the Politics of Resources. London, New York: Hurst and Columbia University Press.

Le Billon, Philippe and Rosaleen Duffy. 2018. Conflict Ecologies: Connecting political ecology and peace and conflict studies. *Journal of Political Ecology*, 25(1): 239-260.

Lombard, Louisa. 2016. Threat Economies and Armed Conservation in Northeastern Central African Republic. *Geoforum* 69: 218-26.

Lombard, Louisa and Jérōme Tubiana. 2020. Bringing the Tracker-Guards Back In: Arms-carrying markets and quests for status in conservation at war. *Political Geography*, 77.

Lubilo, Rodgers and Paul Hebink. 2019. 'Local Hunting' and Community-Based Natural Resource Management in Namibia: Contestations and Livelihoods. *Geoforum*, 101: 62-75.

Lunstrum, Elizabeth. 2014. Green Militarization: Anti-Poaching Efforts and the Spatial Contours of Kruger National Park. *Annals of the Association of American Geographers*, 104: 816–832.

Lunstrum, Elizabeth. 2015. Conservation Meets Militarization in Kruger National Park: Historical Encounters and Complex Legacies. *Conservation and Society* 13(4): 356-369.

Lunstrum, Elizabeth. 2018. Capitalism, Wealth, and Conservation in the Age of Security: The Vitalization of the State. *Annals of the American Association of Geographers*, 108(4): 1022-1037.

Lunstrum, Elizabeth, and Nicia Givá. 2020. What Drives Commercial Poaching? From Poverty to Economic Inequality. *Biological Conservation* 245

Lunstrum, Elizabeth and Megan Ybarra. 2018. Deploying Difference: Security Threat Narratives and State Displacement from Protected Areas. *Conservation and Society* 16(2): 114-124.

Lynch, Michael J., Paul Stretesky and Michael Long. 2017. Blaming the Poor for Biodiversity Loss: A political economic critique of the study of poaching and wildlife trafficking. *Journal of Poverty and Social Justice*, 25(3): 263-275.

MacDonald, Matt. 2018. Climate Change and Security: Towards an Ecological Security Discourse? *International Theory*, 10(2): 153-180.

Maguire, Tom and Cathy Haenlein. 2015. An Illusion of Complicity: Terrorism and the Illegal Ivory Trade in East Africa. *RUSI Occasional Paper series*. London: RUSI.

Marijnen, Esther. 2017. The "Green Militarization" of Development Aid: The European Commission and the Virunga National Park, DR Congo. *Third World Quarterly* 38(7): 1566–1582.

Marijnen, Esther and Judith Verweijen. 2016. Selling Green Militarization: The discursive (re)production of militarized conservation in the Virunga National Park, Democratic Republic of the Congo. *Geoforum*, 75: 274–285.

Marijnen, Esther, Lotje De Vries and Rosaleen Duffy. 2021. Conservation in Violent Environments. *Political Geography*, 87.

Martinez-Alier, Joan. 2003. *The Environmentalism of the Poor: A Study of Ecological Conflicts and Valuation*. Cheltenham, Edward Elgar Publishing.

Massé, Francis. 2019. Anti-poaching's Politics of (In) Visibility: Representing nature and conservation amidst a poaching crisis. *Geoforum*, 98: 1-14.

Massé, Francis. 2018. Topographies of Security and the Multiple Spatialities of (Conservation) Power: Verticality, surveillance, and space-time compression in the bush. *Political Geography*, 67: 56-64.

Massé, Francis, Elizabeth Lunstrum and Devin Holterman. 2018. Linking Green Militarization and Critical Military Studies. *Critical Military Studies* 4 (2): 201-121.

Massé, Francis and Jared Margulies. 2020. The Geopolitical Ecology of Conservation: The emergence of illegal wildlife trade as national security interest and the re-shaping of US foreign conservation assistance.' *World Development*, 132.

Massé, Francis, Hannah Dickinson, Jared Margulies, Laure Joanny, Teresa Lappe-Osthege and Rosaleen Duffy. 2020. Conservation and Crime Convergence? Situating the 2018 London Illegal Wildlife Trade Conference. *Journal of Political Ecology*, 27: 23-42.

McClanahan, Bill, and Tyler Wall. 2016. Do Some Anti-Poaching, Kill Some Bad Guys, and Do Some Good': Manhunting, accumulation, and pacification in African conservation." in Garry R. Potter, Angus Nurse & Matthew Hall (Eds.), *The Geography of Environmental Crime: Conservation, Wildlife Crime and Environmental Activism.* pp.121-147. London: Palgrave.

Millner, Naomi. 2020 'As the Drone Flies: Configuring a vertical politics of contestation within forest conservation.' *Political Geography* 80.

Mogomotsi, Goemeone E.J. and Patricia.K. Madigele. 2017. Live by the Gun, Die by the Gun: Botswana's' shoot-to-kill' policy as an anti-poaching strategy.' *South Africa Crime Quarterly*, 60: 51-59.

Moreto, William D. 2018. Wildlife Crime: Politics, People, and Prevention. *Global Environmental Politics*, 18(4): 127-131.

Muralidharan, Rahul and Nitin Rai. 2020. Violent Maritime Spaces: Conservation and Security in Gulf of Mannar Marine National Park, India. *Political Geography*, 80. Neumann, Roderick P. 2004. Moral and Discursive Geographies in the War for Biodiversity in Africa. *Political Geography*, 23(7): 813-837.

OECD. 2016. Illicit Trade: Converging Criminal Networks. Paris: OECD.

Neocleous, Mark. 2008. Critique of Security. Edinburgh: Edinburgh University Press.

Oels, Angela. 2012. From 'Securitization' of Climate Change to 'Climatization 'of the Security Field: Comparing three theoretical perspectives.' in J. Scheffran,

M. Brzoska, H.G. Brauch, P.M. Link and J. Schilling *Climate Change, Human Security and Violent Conflict*, Pp.185-205, New York: Springer.

O'Lear, Shannon. 2018. *Environmental Geopolitics*. Lanham, MD: Rowman & Littlefield.

Peluso, Nancy L. and Peter Vandergeest. 2011. Political Ecologies of War and Forests: Counterinsurgencies and the Making of National Natures. *Annals of the Association of American Geographers*, 101(3): 587-608.

Peluso, Nancy L. and Michael Watts (eds). 2001. *Violent Environments*. Ithaca, NY and London: Cornell University Press.

Pennaz, Alice. K., Mouadjamou Ahmadou, Mark Moritz and Paul Scholte. 2018 'Not Seeing the Cattle for the Elephants: The Implications of Discursive Linkages between Boko Haram and Wildlife Poaching in Waza National Park, Cameroon.'

*Conservation & Society* 16(2); 125-135.

Perry, Edward and Katia Karousakis. 2020. A Comprehensive Overview of Global Biodiversity Finance. Paris: OECD.

Robbins, Paul. 2012, *Political Ecology: A Critical Introduction*. 2<sup>nd</sup> ed. Oxford, John Wiley & Sons.

Somerville, Keith. 2017. Ivory: Power and Poaching in Africa. London: Hurst.

Spapens, Toine, Rob White, Daan Van Uhm, and Wim Huisman (eds). 2018. *Green Crimes and Dirty Money*. Abingdon: Routledge.

Sultana, Farhana. 2020. Political Ecology from Margins to Centre. *Progress in Human Geography* 37(4): 486–504.

Titeca, Kristof. 2018. Understanding the Illegal Ivory Trade and Traders: Evidence from Uganda.' *International Affairs*, 94 (5): 1077-1099.

Titeca, Kristof and Patrick Edmond. 2019. Outside the Frame: Looking Beyond the Myth of Garamba's LRA Ivory-Terrorism Nexus. *Conservation & Society*, 17(3): 258-269.

UNODC. 2016, World Wildlife Crime Report: Trafficking in Protected Species. Vienna: UNODC.

van Uhm, Daan and William D. Moreto. 2018. Corruption Within the Illegal Wildlife Trade: A Symbiotic and Antithetical Enterprise. *British Journal of Criminology* 58: 864–885.

Verweijen, Judith. 2020 'A Microdynamics Approach to Geographies of Violence: Mapping the Kill Chain in Militarized Conservation Areas. *Political Geography*, 79: 102-153.

Warner, Jeroen and Ingrid Boas. 2019. Securitization of climate change: How invoking global dangers for instrumental ends can backfire. *Environment and Planning C: Politics and Space*, 37 (8): 1471-1488.

Wright, Elisson, Hasita Bhammar, Ana Maria González-Velosa, and Claudia Sobrevila. 2016. *Analysis of International Funding to Tackle Illegal Wildlife Trade*. Washington, DC: World Bank.

Wyatt, Tanya. 2016. The Uncharismatic and Unorganized Side to Wildlife Smuggling. In *Handbook of Transnational Environmental Crime*, edited by Lorraine Elliot and William H. Schaedla, pp.129-145. Northampton, MA: Edward Elgar.

Wyatt, Tanya. 2013. Wildlife Trafficking: A Deconstruction of The Crime, The Victims and The Offenders. Basingstoke: Palgrave.

Wyatt, Tanya, Daan van Uhm and Angus Nurse. 2020. Differentiating Criminal Networks in the Illegal Wildlife Trade: Organized, corporate and disorganized crime. *Trends in Organized Crime*,

Ybarra, Megan. 2017. *Green Wars: Conservation and Decolonization in the Maya Forest*. Berkeley: University of California Press.