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A harms-based political ecology: Understanding harms through the wildlife trade

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Abstract

In this article, we examine how political ecology can benefit from greater engagement with green criminology's focus on harms. We do so by developing a harms-based political ecology, which is a useful lens through which to analyze global environmental change. It is essential to understand how harms are produced and sustained, and what impacts they have on people and wildlife. This article examines the wildlife trade in Europe focusing on brown bears, European eels and songbirds. In particular, the article analyzes how harms are produced in the context of global capitalism, unequal power relations and interconnected global crises. Through this analysis the article develops the field of political ecology by encouraging approaches that fully address harms to non-human animals. This harms-based approach builds on current justice perspectives within green criminology that emphasize anthropocentric, biocentric, and ecocentric concepts of justice to expand concepts of victimhood and harm.

Keywords: harms, wildlife trade, green criminology, anthropocentrism, biocentrism, ecocentrism, political ecology

Résumé

Dans cet article, nous examinons comment l'écologie politique peut bénéficier d'un engagement accru envers l'approche de la criminologie verte axée sur les préjudices. Pour ce faire, nous proposons une écologie politique fondée sur les préjudices, qui permet d'analyser les changements environnementaux mondiaux. Il est essentiel de comprendre comment les préjudices sont produits et maintenus, ainsi que leurs impacts sur les populations et la faune sauvage. Nous examinons ici le commerce des espèces sauvages en Europe, en nous concentrant sur les ours bruns, les anguilles européennes et les oiseaux chanteurs. Il examine en particulier la manière dont les préjudices sont produits dans le contexte du capitalisme mondial, des relations de pouvoir inégales et des crises mondiales interconnectées. Par cette analyse, nous élargissons le domaine de l'écologie politique en encourageant des approches qui traitent pleinement des préjudices causés aux animaux non humains. Cette

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approche fondée sur les préjugés s'appuie sur les perspectives actuelles de la criminologie verte, qui mettent l'accent sur les concepts anthropocentriques, biocentriques et écocentriques de justice, afin d'élargir les notions de victimisation et de préjudice.

Mots-clés: préjugés, commerce d'espèces sauvages, criminologie verte, anthropocentrisme, biocentrisme, écocentrisme, écologie politique

Resumen

En este artículo, examinamos cómo la ecología política puede beneficiarse de un mayor compromiso con la perspectiva de la criminología verde sobre los daños. Para este propósito, hemos desarrollado una ecología política basada en los daños, que constituye una herramienta de análisis útil para estudiar el cambio medioambiental global. Es esencial comprender cómo se producen y mantienen los daños y qué repercusiones tienen sobre las personas y la vida salvaje. En este artículo, examinamos el comercio de especies silvestres en Europa, centrándonos en los osos pardos, las anguilas europeas y las aves canoras. En concreto, se analiza cómo se producen los daños en el contexto del capitalismo global, las relaciones de poder desiguales y las crisis globales interconectadas. A través de este análisis, el artículo contribuye al campo de la ecología política al fomentar enfoques que aborden plenamente los daños causados a los animales no humanos. Este enfoque se basa en las actuales perspectivas de justicia dentro de la criminología verde, que hacen hincapié en conceptos de justicia antropocéntricos, biocéntricos y ecocéntricos para ampliar los conceptos de víctima y daño.

Palabras clave: daños, comercio de fauna y flora silvestres, criminología verde, antropocentrismo, biocentrismo, ecocentrismo, ecología política

1. Introduction

This article develops our understanding of harms as a lens through which to analyze the dynamics of global environmental change. To do this, we examine how political ecology can benefit from engagement with green criminology's focus on harms. To date, political ecology has had some engagement with debates about harms and how they are produced and sustained (see Kallianos, Dunlap & Dalakoglou, 2023; Dunlap, 2023), but it has not specifically focused on the harms to both people and non-human animals. In this article, we develop a harms-based approach that can enhance existing understandings of how and why different benefits and disadvantages are distributed unequally. We frame our approach using three justice perspectives from green criminology — environmental, ecological, and species justice — to focus on harms to non-human animals (henceforth animals) and examine the social, political, and economic dynamics that converge to produce harms against all beings/(non)humans/nature. This approach enables us to situate harms within the broader context of global capitalism, unequal power dynamics in governance, and the emergence of increasingly unpredictable and interconnected global crises. Political ecologists have much to gain from engagement with green criminology because of the concerns shared by both fields, especially with regard to delving into the underlying structural drivers of environmental change (Iordachescu *et al.*, 2023).

Political ecology and green criminology often intersect around issues of justice. Just as political ecology has expanded and developed feminist and decolonial approaches, so has green criminology, which has encompassed strong feminist and Southern-informed perspectives (Carrington *et al.*, 2018; Goyes, 2019). Green criminologists have a keen interest in environmental justice, which aligns very clearly with political ecology's focus on social justice and the marginalization of vulnerable communities. Whilst political ecology focuses on social injustice, green criminology adds scope for thinking more clearly about multispecies and ecological injustices, which remain under-researched in political ecology. Engaging more fully with green criminology can develop the field of political ecology further.

First, we show how green criminology's focus on harms can develop fresh theoretical perspectives for political ecologists. Second, we examine how harms-based perspectives can render non-human animals more visible in political ecology analyses. Third, we set out three different perspectives: anthropocentrism, biocentrism and ecocentrism. These perspectives can inform ideas of environmental justice, species justice, and ecological justice, respectively, which shape how harm and victimhood are understood. To outline these perspectives, we provide specific examples of the myriad of harms experienced by brown bears in Europe,

European eels and songbirds in the illegal wildlife trade. Finally, we sketch out a series of areas for future research.

2. Political ecology

Political ecology is primarily concerned with understanding and highlighting socio-ecological struggles. As a result, there has been little focus on animals, despite increasing engagement with how political ecology can encompass understandings of the non-human, as explained further below (see Srinivasan & Kasturirangan, 2016; Margulies & Bersaglio, 2018; Fry, Marino & Nijhawan, 2022; Srinivasan, 2022). Political ecologists have long drawn attention to the importance of environmental justice and power dynamics, including to the structures that produce environmental change, structural and other violences, struggles over access to resources, resistances to powerful actors and the marginalization of peoples (Martinez-Alier, 2002; Martin *et al.*, 2016; Sultana, 2021b, 2023; Rougeon, Mota & Trad, 2023). Political ecology has a long-standing interest in excavating the nature of capitalism, including its interrelations with the neoliberalization of nature, degrowth and commodification; the depredations of, and resistances to, extractive industries; the impacts of biodiversity conservation; conflict and resistance; urban development and pollution; and environmental and/or social justice, including in relation to rural livelihoods and indigenous knowledge (Velicu, 2019; Collins, 2021; Corbera *et al.*, 2021; Espín, 2022; Mitchell, 2024). Recent research has shifted the geographic focus of political ecology scholarship and diversified debates in the field. Although socio-ecological struggles in the Global South have been a key focus, we now see greater engagement with society-environment relations in the Global North (Krasznai Kovacs, 2021; Brock, 2023). Similarly, a more diverse range of voices has begun to challenge the historical canon that, so far, has remained largely white and male (Sultana, 2021a; also see Corbera *et al.*, 2021).

To date, political ecology has lacked a thorough engagement with how animals fit into these core themes. This is understandable given its historical focus on research and activism around critical issues of social justice. However, the limited attention given to animals has produced key omissions, leading to criticisms that political ecology is underpinned by anthropocentrism (Srinivasan & Kasturirangan, 2016; Margulies & Bersaglio, 2018; Singh, 2018; De Silva & Srinivasan, 2019; Büscher, 2022; Fry, Marino & Nijhawan, 2022; Srinivasan, 2022). Despite recent scholarship that does address multispecies thinking (Ejsing, 2023), the field does not yet offer adequate intellectual tools for engaging with animals (Margulies & Bersaglio, 2018; Collard, 2020). This gap in political ecology can be addressed by drawing on the harms debate in green criminology, because it has a strong track record of specifically highlighting the interconnections between harms experienced by humans and non-humans. This differs from political ecology concerns to date, which have focused primarily on social justice.

3. Green criminology

In this section, we set out some of the key features of green criminology that can further develop political ecology. First, like political ecology, green criminology is a critical perspective that challenges conventional and universal definitions of crime. More specifically, Southern green criminology mirrors calls from Latin American scholars such as Aniyar de Castron and Rosa Del Omo, to examine social harms through the intersections of crime, criminal justice, and society. In particular, this field examines how the political-economic conditions of capitalism structure how crime is defined, thereby seeking to understand how social and economic contexts produce social and ecological damage, and environmental crimes and harms. More widely, Southern Criminology as a field has pressed for the need to address the realities of the Global South (see Goyes & South, 2017; Goyes, 2019, pp. 43-48 for a fuller discussion). Drawing on Global South worldviews, Indigenous ontologies and cosmovisions can further enrich our understanding of harms and what it means to victimize or exploit nature. Doing so provides a vital counter-narrative for decolonizing dominant anthropocentric, exploitative and capitalist ways of seeing nature. Although this article specifically focuses on European wildlife trade, drawing on Global South scholarship about harms enhances and sharpens our critical engagement.

Like political ecologists, green criminologists are attendant to the need to problematize what is understood as legal versus illegal. Political ecologists have pointed to the need to be sensitive to how certain activities become defined as criminal or illegal (Dickinson, 2022). A classic example is how some hunting

practices are legal (e.g., sport hunting) while others have become defined as criminal (poaching) (Kashwan *et al.*, 2021; also see Agnese *et al.*, 2022; Gutierrez & Duffy, 2024). Likewise, green criminologists have teased out the complexities of boundary-drawing between 'legal' and 'illegal' (Van Uhm, 2016; Alonso & Van Uhm, 2023). One way they have done so is to build on a social-harm based zemiological approach. This moves us away from the strict category of 'crime' to a critique of how harms are produced regardless of legal/illegal dualisms (Hillyard *et al.*, 2004; Goyes, 2019, p. 9; Canning & Tombs, 2021). By expanding the concept of harm, zemiology focuses on social harms, injury, and loss produced by nation states, corporate activities, and individuals. These harms are understood to be driven by social conformity, i.e., by everyday, state-condoned, socially accepted behaviors and processes, and routine regulatory actions and omissions (Tombs, 2018; Sollund & Goyes, 2021; Woodward, 2021; Hutchinson, Alonso & Pons-Hernandez, 2024). Furthermore, Goyes (2019, pp. 8-9) argues that North-South divides are a key driver of environmental harm; in the case of (il)legal wildlife trade this is evident in the ways in which wealthy Global North communities consume wildlife products from the Global South, producing social and environmental harms.

Green criminologists have further expanded harms-based perspectives to highlight a fuller range of environmental, social, non/human, and planetary injuries and injustices. Whilst a zemiological focus on harm interprets environmental harms through the lens of social conformity (with harms frequently tied to colonial and capitalist structures of exploitation, power inequalities, and marginalization), a green criminological approach also recognizes the role of anthropocentrism and human exceptionalism in driving deviant behaviors that contribute to environmental harms (Brisman & South, 2018). As Pons-Hernandez (2024) argues, human-centric perspectives overlook and obscure the suffering of individual animals. For example, Agnew (2020) connects the combined issues of speciesism (the discrimination of individuals based on species membership) and anthropocentrism (the prioritization of humans) to illustrate how socially accepted and ordinary acts, such as eating meat and exploiting animals, produce ecological harms that simultaneously subjugate and victimize non-human animals and ecosystems. Goyes (2021, 2023) builds on this framing to connect harms to ecosystems, and humans and non-human species to socio-environmental conflicts and inequalities brought by extractive (neo)colonial and imperialist practices. This broader harms-based perspective can inform how we think about justice in the context of systemic and chronic social, political and economic structures that sustain and normalize victimization across human, non-human, and environmental domains (Goyes & Sollund, 2018; Stephens-Griffin & Griffin, 2021). This approach shares foundations with critical animal geography and environmental victimology (see Flynn & Hall, 2017; Narayanan, 2023b) and enhances attention to the intersections of inequality, speciesism, and violence.

Another way to engage with broader harms and capture the complex ways that the Anthropocene has generated new forms of harm is through a 'harmscapes' approach (Berg & Shearing, 2018, 2024). This approach allows us to think through how activities that are legal, and not criminalized, produce wider harmscapes that require more fundamental and wider responses than are offered by more narrowly defined policing responses to crimes. For Berg and Shearing (2018), the proliferation of old and new harms associated with the Anthropocene does not respect fixed boundaries (temporal, spatial and conceptual). Harms that have been criminalized by law can be responded to via policing, but environmental change means that some harms, for example, those related to climate change, are not criminalized. Therefore, the idea of harmscapes opens up the possibility of thinking through different kinds of responses beyond standard forms of policing (Berg & Shearing, 2018; also see Holley, Mutongwizo & Shearing, 2020). Such a broad approach is especially relevant for understanding the illegal wildlife trade. Extensive harms, many of which are not criminalized, can be better understood through the lens of harmscapes than through criminalization.

Integrating understandings of harms from green criminology can help to render the non-human more visible in political ecology. The wildlife trade illustrates the value of integrating harms-based approaches to political ecology (Wyatt *et al.* 2022; Gutierrez & Duffy, 2024; Pons-Hernandez, 2024). Green criminologist Sollund (2016a, 2016b) argues that harms are *doxic*, that is they are everyday and commonplace in both the legal and illegal wildlife trades. Bringing forward the idea of harmscapes from green criminology (Berg & Shearing, 2018, 2014), we can examine how animals experience harms in both legal and illegal trades at source (trapping, hunting, killing), transport (crowding, dehydration, starvation, suffocation) and consumption stages (kept in inadequate conditions or killed for food and entertainment) (Sollund, 2016a, 2016b, 2022; Van Uhm,

2016, p. 52; Maher & Wyatt, 2017). Even when live animals are rescued, harms can continue; authorities rarely have adequate facilities to house animals, and many are killed because of a lack of facilities or for biosecurity reasons (Sollund & Maher, 2015, p. 22; also see Natali *et al.*, 2024, pp. 72-73). Although green criminology is concerned with what power dynamics are at play in producing harms against animals (Sollund, 2019), the field often narrowly focuses on the specific individuals or organizations that produce these harms in the context of the ways society defines 'animals', for example, as property rather than as victims of crime. As discussed below, the field of victimology is beginning to engage with understandings of animals as victims, arising from how they are valued (or not). This engagement has some parallels with one of the core contributions of political ecology debates on wildlife conservation, specifically how certain kinds of wildlife are so highly valued by conservationists that marginalized and vulnerable communities in the Global South are constructed and presented as somehow less important, as threats to wildlife, and thus are subject to militarized enforcement, including shoot-to-kill (see Duffy *et al.*, 2019; Verweijen, 2020).

4. Bringing a harms perspective to political ecology

Harms-based perspectives from green criminology have much in common with political ecologists' concerns about how states and corporations produce and unevenly distribute social injustices. However, the focus of green criminologists on how speciesism produces harms provides political ecologists with a key entry point for further developing analyses of how injustices are produced and unevenly experienced by both people and animals.

By moving from a crime-based perspective to one that is focused on harms or the wider idea of harmscapes, green criminology seeks to reconfigure systems that produce harm. Rather than relying on criminalization responses and increased regulatory structures, it instead seeks to remove sources of harm and restore justice (Berg & Shearing, 2018; Holley, Mutongwizo & Shearing, 2020; Sollund & Goyes, 2021). For example, Hübschle and Margulies (2024) integrate political ecology and green criminology to call for a socio-ecological harm reduction approach to tackling the illegal trade in plants from South Africa. They argue that the criminalization strategy used to address rhino poaching in South Africa has been ineffective, deepened existing harms and produced new harms through heavy-handed law enforcement and militarization. Yet, this same criminalization strategy was being rolled out by state authorities in response to other forms of poaching and trafficking, specifically of rare and valuable succulents. Instead of criminalization, they argue for a shift towards a socio-ecological harm reduction approach, which emphasizes community engagement, sustainable use and working with communities to co-design interventions that tackle illegal trade.

A shift from a strict focus on criminalization to harms and justice can be framed by three distinct stances on justice that shape how harm and victimhood are interpreted and understood: i) anthropocentrism and environmental justice; ii) ecocentrism and ecological justice; and iii) biocentrism and species justice (Goyes, 2019). However, it is important to note the criticisms of the focus on justice as a framing device offered by Goyes (2019), who argues that this approach can depend on (and reinforce) hierarchies between humans, and between humans and animals (Goyes, 2019, p. 25). Instead, he calls for greater engagement with Indigenous perspectives, such as Pachamama, to develop non-human-centric ways of understanding the world that are deeply interconnected, relational, and often more aligned with co-existence and harmony than their Western counterparts (also see Goyes *et al.*, 2021; Mitchell, 2024). This speaks directly to political ecologists' concerns to decolonize knowledge and bring the voices of hitherto marginalized communities to the fore. With this in mind, the following sections will introduce each of the core approaches to understanding justice and harm, illustrating these perspectives with examples from our research into the exploitation of brown bears, songbirds, and European eels. We will also reflect on the human-animal cultural relationships, values, and visions of justice that are formed in these spaces.

5. Research methods and approach

This article is part of the wider 'Beastly Business' research project on the illegal wildlife trade in European species (2021–2023). The research team's positionality is complex. The team comprised researchers who identify as Romanian (Iordachescu), Irish (Duffy), British (Hutchinson) and German (Lappe-Osthege), and

are diverse in class, gender and sexuality. Interviews were carried out in a range of ways: for example, in Romania, interviews were conducted in Romanian by a Romanian team member who has close personal and professional relations within the study area; in Cyprus, interviews were conducted in English by researchers who identify as German and as Irish. The power dynamics in interviews were also highly complex. The team members were acutely aware of their privileged position as researchers based at a University in the Global North; in some interviews, for example with fishers, the power dynamics were different to those experienced when interviewing people in senior positions in global conservation NGOs, international organizations or private businesses. These factors undoubtedly shaped the nature of interactions and information exchanged in interviews.

The team took a qualitative and iterative approach, and the material for this article is primarily drawn from semi-structured interviews with key informants, official documents and observations during fieldwork. During the project, the team conducted 76 interviews, undertook participant observation and archival research and attended several national and international meetings on hunting and wildlife trade. A breakdown of the number of interviews per category of respondent is given in Figure 1 below. The categories of interviewee were: hunting, enforcement, NGOs, Government staff, EU officials, international organizations (such as CITES and United Nations Office of Drugs and Crime), the tourism industry, protected area managers, bird watchers, academics and 'others' (such as independent consultants). The team also drew on methods from environmental humanities to develop animal biographies and storytelling to enrich the research. This was especially important in understanding the harms experienced by bears, as discussed in the final section of this article (see Iordachescu, 2025).

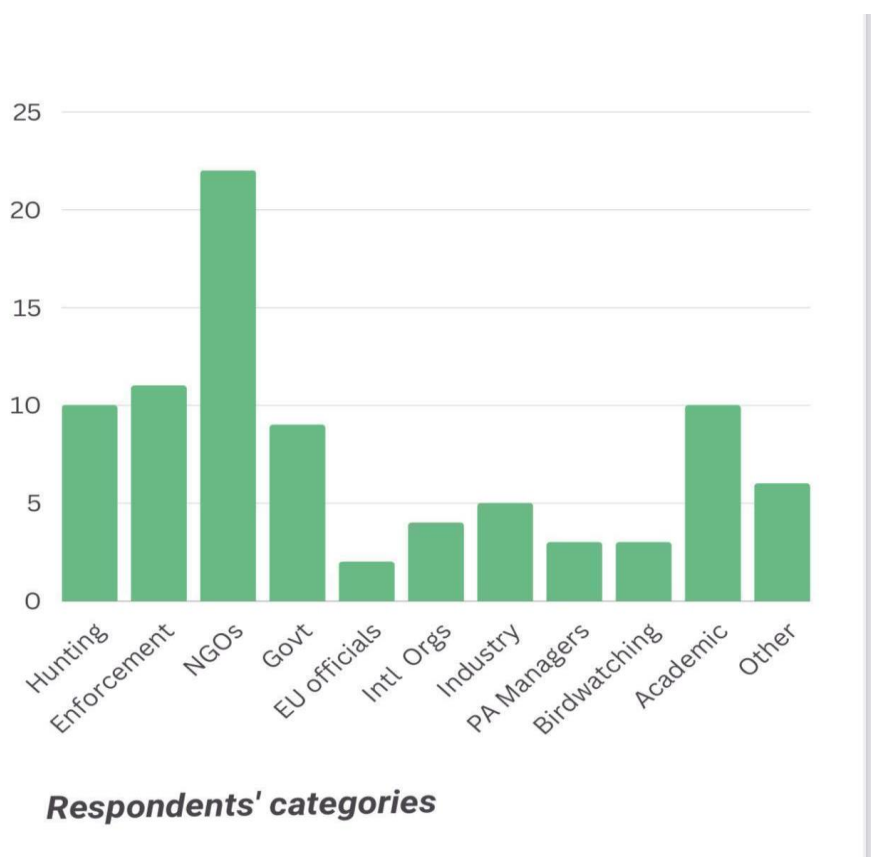


Figure 1: Categories of respondents for the semi-structured interviews done by the Beastly Business team.

Interviewees were invited to participate in the research project based on their expertise and knowledge of the illegal wildlife trade. Fieldwork was conducted between 2021 and 2023 in Belgium, Cyprus, Germany, Italy, Hungary, Romania, Slovakia, and the UK. Interviews were carried out online or in-person by the authors. Interviewees were informed of the purposes of the research, all comments were fully anonymized, and participants were allowed to review and amend the full interview transcript.

Research on illegal activity is ethically complex and poses significant safeguarding challenges. The research was subject to strict ethical protocols to ensure that neither participants nor researchers were exposed to risks and harms arising from the research. For that reason, the identity of all interviewees is anonymized, and all identifying information (including references to employers, countries of residence or work, etc.) has been redacted.

6. Anthropocentrism: Acknowledging social harms for environmental justice

Environmental justice is most closely aligned with the core focus in political ecology on the social impacts of environmental inequalities and differential access to natural resources (Martinez-Alier, 2002; Velicu, 2019). As such, an environmental justice perspective highlights the burden that environmental impacts can have on racialized minorities and other marginalized peoples (Bullard, 1994; Pellow, 2017; Goyes, 2019, p. 23; Narayanan, 2023a; Mitchell, 2024). For example, Rougeon, Mota and Trad (2023, p. 712) argue that using an environmental racism framing can bring forward the local struggles of historically violated communities. These concerns around environmental justice in green criminology (Goyes, 2019, p. 23) align clearly with the core concerns of political ecologists about the roles of inequality, race, class and global capitalism in producing environmental degradation.

The social dynamics and injustices of wildlife exploitation

The human use and exploitation of wildlife are central to communities and cultures worldwide. There is much that political ecologists and green criminologists can add to the discussion of the social, political, and power imbalances surrounding the motivations to exploit wildlife (legally or otherwise). Social harms running alongside wildlife exploitation are clear in the wildlife trade. For example, fishing for elvers (juvenile eels, also known as glass eels because they are transparent) is a practice spanning hundreds of years with a rich cultural history. However, nowadays the fishery is more synonymous with illegality. Following the departure of the UK from the European Union (EU), elver fisheries in the UK have been unable to legally trade with established markets in the EU, a move which has drastically reduced the size of the UK industry. Recently though, a non-detriment finding report has suggested that regulated trade in glass eels can be both sustainable and beneficial for conservation efforts (Fleming *et al.*, 2023). This may establish support for generating new trade connections with partners outside of the EU, such as the Russian Federation or countries in North Africa and Asia. Efforts to control fishing and trade are often met with calls for preserving rural livelihoods and tradition:

I've got another 10 years and I don't know what the hell to do with my life other than fishing, this is me. Like, it's either this or I die. So don't take my livelihood away...what else am I going to do? Lose my mind? (Interview WP3.02)

Those directly involved in exploitative wildlife industries are also frequently exposed to, or are victims of, social and economic injustices. For example, the process of capturing elvers – in remote locations and in the dark of night – lends itself to criminal exploitation. Alonso and Van Uhm (2023) demonstrate that eel trading is characterized by a complex continuum between legal and illegal trades, in which licit, semi-licit, and illicit economies constantly develop points of contact, common interests, and strategies. Whilst efforts to counteract illegal fishing have amplified because of increased scrutiny of the trade, opportunism and the relative ease of avoiding detection can be a strong motivator for fishers to operate outside of legal bounds. This criminogenic context heightens the vulnerability of legitimate fishers. In the UK, legitimate elver fishing has become highly competitive due to reduced legal markets, resulting in fishing rights and locations becoming fiercely defended

and protected by force. This was demonstrated during the 2023 elver fishing season; fishers appeared uneasy when spotting other unknown and potentially unfriendly fishers on the riverbank (author observation).



Figure 2: Elver fisher using a dip net while standing on a slippery, high concrete wall. Photo by Hutchinson

Whilst the social dynamics can lead to violence and harassment, the act of fishing in the dark, and in often harsh weather conditions, can also be treacherous (author observation). Standing on a slippery riverbank or high concrete wall whilst holding the elver net against the high spring current takes a lot of strength, practice, and care to avoid injury – to humans and eels alike (see Figure 2). Labor conditions are also complex. Many fishers will have full-time jobs during the day, often in the trades or be self-employed, and work through the night during elver season. Hours are long, conditions are poor, and whilst many elver fishers have a family tradition tying them to the fishery, the work attracts those living with financial instability (Interview WP3.07).

As with elver fishing, analyzing the illegal songbird trade can reveal the social dynamics around the exploitation of animals. For example, Cyprus has a long cultural history of hunting and consuming songbirds. The commercial capture and trade of illegally killed songbirds serves luxury demand for local delicacies such as *ambelopoulia*. Traditionally, songbirds have been trapped using sticks coated with natural glue made from Syrian plums and placed in shrubs to trap the birds when they land (Figure 3). Such traditional methods have now shifted, with greater use of synthetic glue (Interview WP2.03) and calling devices (Interview WP2.14). These shifts have expanded the number of people involved in trapping songbirds for the trade. As one interviewee stated:

...it became like a trade in the '90s. Some people were earning a lot of money. ... With the devices, other people from villages not near the beach, they started as well. They were getting them [birds] down with the devices (Interview WP2.14).

Trade is also linked to power dynamics and political ambitions in Cyprus. One interviewee explained that in Cyprus: "all the villages, all the people who are in this trade, they are voters and they are blackmailing

politicians. Not only that, a lot of politicians, they eat the songbirds" (Interview WP2.12). Furthermore, the profits from bird crime are considered 'easy money' (Interview WP2.06), with birds of higher quality selling for around €100 per dozen (Interview WP2.09).

Examining the harms experienced by animals can reveal important information about local and national power dynamics. One interviewee who frequently encountered poachers in Cyprus highlighted that:

...most of the poachers in Cyprus are not criminals. They're normal people. They're completely normal people. If you would see an average poacher, you would be thinking, in normal life, this would be your friend, or this would be your grandfather (Interview, WP2.06).



Figure 3: Limesticks used to trap songbirds in Cyprus. Photo by Duffy, 2022

These examples from elver fishing and songbird trapping demonstrate the cultural embeddedness of wildlife exploitation. They highlight how illegal activity intersects with socio-economic dynamics such as marginalization and labor precarity in specific local contexts. However, the anthropocentric position loses sight of the interconnectedness between humans and nature and maintains a hierarchical species-based bias (speciesism), whereby only humans are considered within the moral circle (Caviola *et al.*, 2019). Just like other forms of discrimination (racism, sexism, homophobia, ableism), speciesist perspectives assume that worth (value, status, rights, etc.) is based upon uniquely human qualities, and by doing so act to privilege humans over other species (Beirne, 1999, 2013; Goyes, 2019, p. 47; Sollund, 2019). This anthropocentric perspective projects a hierarchy of victims with humans being the 'most worthy victims' and animals and plants occupying the lower ranks as the 'least worthy victims' (see Wyatt *et al.*, 2022). This, in turn, leads to framing the legal and illegal wildlife trade in terms of its economic value, overlooking the levels of suffering and death of animals in the

trade (Sollund, 2019, p.9). In the next section, we address biocentrism as an alternative approach to conceptualizing harm.

7. Biocentrism: The rejection of speciesism for species justice

Biocentric (and ecocentric) perspectives expand upon the circle of moral consideration to consider harm and victimhood in a broader sense. Goyes (2019, p.24) argues that non-anthropocentric conceptions of justice, or ecological justice, are a central tenet of green criminology. By using this biocentric lens, green criminologists have examined how speciesism produces harms against animals, and how these harms are linked to other structural underpinnings of different forms of social injustices (van Uhm, 2016, p. 69, 2018). Indeed, Goyes (2019) argues that speciesism is produced and maintained by colonialist logics which separate humans from nature, and that it is essential to draw on Southern and Indigenous worldviews to develop non-humanistic understandings that break down the logics that perpetuate speciesism. By rejecting speciesism and adopting a species justice approach, a biocentric position acknowledges the rights and intrinsic value of animals (White & South, 2013). This allows animals to be viewed as the direct victims of their exploitation, and all forms of exploitation (legal or otherwise) to be viewed as harmful (Sollund, 2016b, 2019; Nurse & Wyatt, 2021). Building on this biocentric framing, Nurse (2017) suggests that justice systems need to do more than just consider anthropocentric notions of detection, apprehension and punishment; they should also consider how to provide protection and redress for other species and the environment (also see van Uhm, 2016, pp. 52-69; van Uhm, South & Wyatt, 2021; Narayanan, 2023a; Mitchell, 2024).

In essence, the harms perpetrated in the legal and illegal trades in wildlife are underpinned by speciesism, founded on the idea that animals have less value than humans (also see Flynn & Hall, 2017; Sollund, 2020). For Sollund (2022) the features of speciesism that legitimate animal oppression are i) difference: animals are physically different from the human animal; ii) distance: animals are often physically and socially apart from humans; and iii) denial: "animals do not suffer like humans" (Sollund, 2022). Indeed, it can be argued that the Convention on the International Trade in Endangered Species (CITES), which is the main global regulatory instrument for the wildlife trade, is itself underpinned by speciesism because it defines wildlife as resources that can be treated as whole animals or parts and derivatives (Sollund, 2011, 2022; Hutchinson, Stephens-Griffin & Wyatt, 2021; Wyatt, 2022). In Europe, speciesism in legal frameworks is clear if we consider how legal protections are applied within and between species. For example, while brown bears are granted stricter legal protection in several Eastern European countries, legal frameworks have failed to effectively address emerging human-bear conflicts, thereby pushing some people towards seeking their own ways to respond to what is perceived as an injustice perpetrated by the state:

We are finding bears killed every year by people. I don't know if they are 'problem bears' or if it is linked to the general public mood against bears. (...) some of them take justice into their hands and we find bears, you know, poisoned or agonizing in traps which is totally illegal (Interview WP1.10).

Whilst an anthropocentric position can help to tease out the social and political complexities that are creating conflicts between humans and brown bears, a biocentric perspective encourages a deeper reflection on the individual victimhood of these bears and the speciesist narratives that allow bears to be simultaneously protected by law and persecuted as 'problem' bears. This victimization of bears is rendered possible by Othering; they are defined as property or resources for human benefit or enjoyment (Sollund, 2016b). Take the example of bear Mariska, as shown in Figure 4, below. She ended up in a sanctuary after years of being used as a dancing bear. She is blinded and physically underdeveloped, despite old age. Through her story, we can understand how Othering supports the practice of dancing bears and also renders Mariska (and others) as commodities for tourism in petting zoos and other facilities that keep them captive.



Figure 4: Bear Mariska in her sanctuary. Photo by Iordachescu, 2023

In the case of songbirds, the lack of interest in addressing bird crime and low penalties for illegal activities can be partly explained by speciesism. One interviewee explained that a lack of political will poses a severe problem in addressing bird crime in Cyprus. For example, they argued that a reduction of the fines for trapping specific bird species in Cyprus meant that criminal activities continued: "It's illegal but they [the police and government] allow it to go on. They allow it to happen. That was proven at the beginning of last year [2020] when they reduced the fines" (Interview WP2.07).

Other interviewees pointed to the ways in which governments were not doing their part in addressing bird crime and failed to fulfil their obligations to implement international agreements (Interviews WP2.11, WP2.12, WP2.13, also see Natali *et al.*, 2024). They often cited a change that reduced fines to €200 (US\$234) for killing up to 50 birds from a list of 14 protected species and 17 non-game species, either with the use of limesticks or by shooting. Previously, the fine for killing even a single bird from this list was high, €2,000 (US\$2,340), to act as a deterrent. Moreover, these species are targeted by trappers and poachers for the *ambelopoulia* dish (Figure 5). Birdlife Cyprus (2023) argue that these two relaxations to the law represent a major step backwards regarding bird conservation in Cyprus, as they have created a subcategory of 'less protected' bird species.



Figure 5: Confiscated mist net used to trap songbirds in Cyprus. Photo by Duffy, 2022.

Recognizing animals as victims

Current debates about victimology are beginning to include animals in definitions of who is counted as a victim. In the wildlife trade, defining animals as property and as resources to be traded means that they are rarely regarded as victims. Usually, what is deemed as harmful is constructed within a framework of unrealized profit or lost opportunities for human consumption and valuation (Wyatt, 2022a; also see Goyes, 2019, p. 48). Fixating on the economic value of wildlife also leads to viewing animals at the species level, thereby rendering invisible the significant harms perpetrated against individual animals. A species justice position creates space to examine how harms are produced towards individual animals within a species, in part by highlighting how focusing on a species level can facilitate harms against individuals. For example, defining songbirds as resources that are hunted and traded, whether alive or dead, is an illustration of the ways that speciesism can produce harms. Some songbird species are protected under the Birds Directive in the EU. However, their flyways expand beyond the EU into neighboring non-member states and outside Europe where EU law has no effect. These legal disjunctions leave such species exposed to harms associated with complex forms of commodification and exploitation. Moreover, sometimes not even the species is acknowledged as a victim, but instead all-encompassing categories are used, such as 'songbirds.'

When shifting perspectives from resources to victims, the scale of harms can be clearly seen. The Successful Wildlife Crime Prosecution in Europe (SwiPE) project report from 2023 states that birds were by far the most targeted animals in wildlife crime in 7 of the 11 case study countries (Engel, 2023, p. 71). Flyways are important migration corridors for migratory bird species, which move between breeding and wintering grounds yearly (Boere & Stroud, 2006, pp. 40-47; Kirby, 2010). However, flyways can also be hotspots for the

illegal killing, taking and trading of birds. Brochet *et al.* (2016, p.12) estimate that between 11 and 36 million birds are killed in the Mediterranean region annually, with passerines (*Passeriformes*) disproportionately affected, although actual figures are likely much higher. Yet these birds are not commonly defined as victims. Instead they are reduced to bare numbers. Many are killed and trafficked as delicacies in the Mediterranean, for example, between the Western Balkans and Italy or Malta or within Cyprus (Schlingemann *et al.*, 2017; Engel, 2023, pp. 26-27, Lappe-Osthege, 2024). Exact trading routes are unknown, but they are highly adaptive. Brochet *et al.* (2016) argue that overexploitation is a main driver of bird extinction (also see Engel, 2023; Lappe-Osthege & Duffy, 2024). The scale of the killings is indicative of the harms perpetrated against animals in the illegal wildlife trade and shows how animals can be defined as victims of the trade.

As Maher and Wyatt (2017) point out, the legal and illegal wildlife trade is characterized by routine abuse, suffering and death, and is profound evidence of the victimization of animals (also see Van Uhm, 2016, p. 52, 2018; Sollund & Maher, 2015, pp. 20-22). To return to the example of brown bears, it is often the case that abused individuals are turned into archetypal victims. As recognized victims within extended public debates around animal welfare, some bears become symbols of wildlife sanctuaries and rehabilitation centers (Millions of Friends, 2019), while their histories of abuse make their full rehabilitation impossible: "Even if they get the best treatment in the sanctuary, they will never be able to live freely again" (Interview WP1.3). Using a critical green victimology approach draws attention to animals as victims (White, 2018a; Sollund, 2019). As Flynn and Hall (2017) suggest, since victimology has embraced concepts based on 'social harms' rather than strict legalistic categories, its rejection of non-human victims is no longer conceptually or philosophically justified. Drawing on a species justice approach to victimology, White draws attention to animals as victims (White, 2018a, p.241). Furthermore, linking in with political ecology's central concerns about power and capitalism, Mayer and Wyatt (2017) contend that economics and speciesism must be part of any explanation of harms; they are sustained by human interests that are evident in capitalist consumerism, notable examples being legal industries such as fishing and timber extraction (Wyatt *et al.*, 2022).

Recognizing speciesism in wildlife exploitation

Further building on a species justice perspective, it is possible to tease out how speciesism produces a hierarchy of perceived value between species (Sollund, 2011; Goyes, 2019, p. 28; Hutchinson, Stephens-Griffin & Wyatt, 2021). For instance, while some species are seen as more worthy of protection (e.g., charismatic megafauna), others are less favorably viewed (e.g., small, less charismatic species) (Wyatt, 2013; Beirne, 2018). Bears are firmly in the charismatic megafauna category in many societies, while the levels of charisma ascribed to songbirds and eels is much more complex and uncertain. Unlike songbirds, which may be brought into the home and regarded as pets, eels are primarily defined as fishery resources and understood as property for consumption (see also Hutchinson, Alonso & Pons-Hernandez, 2024). This introduces a hierarchical dynamic of speciesism and Othering. As a CITES Appendix II listed species, with additional European trade regulations (EU eel regulation), European eel exploitation is typically measured in terms of weight rather than of individuals exploited (Sanchez, 2023; also see Alonso & Van Uhm, 2023). This reporting approach masks the full extent of the scale of exploitation, which affects millions of individual eels (see Figure 6), and additionally opens avenues for further exploitation. One tonne of undersized elvers (juvenile eels, below minimum size requirements) contains more individual eels than one tonne of larger glass eels. This creates incentives to catch large quantities of smaller juvenile eels, which can be grown in holding facilities for greater profit per eel.

Unlike flocks of birds and swarms of eels where the number and scale of individuals impacted becomes an abstract measure of overall population size, it is far harder (for some) to consider brown bears in this way. In Europe (and elsewhere) bears fill imaginations and story books from a young age. They have presence within certain cultures and are often associated with displays of political power (Iordachescu, 2025). They are given names around which their identities form (Forsyth, 2016) in ways that are not comparable to eels or songbirds. This identity is double-edged. On the one hand, their charisma protects them from some harms and enables them to be identified as victims when illegally hunted or when their habitat gets destroyed. On the other hand, this very identity also feeds into a desire to contain, exploit, and/or hunt certain large charismatic individuals (Neagu, Manolache & Rozyłowicz, 2022). This is particularly the case for those individuals who are valued as

record trophies in various international evaluation systems. These trophies can bring to affluent, mostly western male hunters, undisputable recognition and significant sums of money.

The killing of Arthur, allegedly Romania's largest bear, is a case in point (Neagu, Manolache & Rozyłowicz, 2022). Contrary to the example of eels above, individual harm against bears is sometimes assessed as impacting the survival of the entire species. For example, the illegal killing of Amarena, a female Marsican brown bear who was shot in August 2023, could potentially jeopardize the future of the entire Marsican bear subspecies, which currently counts just over 50 individuals, all of which are located in the Central Abruzzo Mountains of Italy (Tomma, 2023). Similarly, selecting only the most imposing bear individuals for the trophy hunting industry impacts the genetic diversity of local brown bear populations and their overall ecology. As one bear conservation practitioner explained: "Trophy hunting targets alpha males, those responsible for species equilibrium and genetic diversity, on the pretext that hunters know best how to balance the species equilibrium, but Mother Nature doesn't need this kind of help" (Interview WP1.3)



Figure 6: A tray of captured juvenile elvers that are being held temporarily in a storage tank while decisions are made regarding potential trade or restocking efforts. Commercial catches of elvers are reported in kilograms, with one kilogram representing thousands of eels. Photo by Hutchinson, 2023.

In sum, a biocentric perspective can help to draw attention to particular forms of harms against non-human animals, and how there can be hierarchies of harm, underpinned by processes of speciesism and Othering, between different species. However, a biocentric perspective can reproduce unhelpful human-nature dualisms. We address this omission in the next section by explaining the value of an ecocentric perspective which rejects such dualisms.

8. Ecocentrism: Rejecting human-nature dualisms for ecological justice

An ecocentric philosophy recognizes the intrinsic value and interconnectedness between all living things, encompassing humans, other animals, plants, and the natural environment including rocks, rivers and soils (Brisman & South, 2018; Goyes, 2019; Narayanan, 2023a; Mitchell, 2024). This philosophy shifts toward an ecological justice perspective. Humans are considered equal to all other natural beings and both wildlife and the wider environment can be viewed as victims of harmful behavior (White, 2013b). Consequently, people are viewed as having an explicit moral responsibility to ensure that human impact on the environment does not exceed nature's capacity (Baxter, 2004; White, 2007, 2013a, 2013b; Nurse, 2017). This perspective shares conceptual ties with Southern and Indigenous perspectives that are attentive to alternate ways of knowing and understanding nature (Goyes, 2019; Narayanan, 2023a; Mitchell, 2024). It also aligns with an Earth Jurisprudence (Wild Law) philosophy, which recognizes the sacredness of all life and views everything within the Earth's community as having the same moral standing (Rühs & Jones, 2016).

An ecocentric approach, which seeks to dismantle the dualisms between humans, non-human animals, and ecosystems, can highlight the harms experienced by individual animals and the wider living community of which humans are also part. Understandings of these harms are often connected to how humans perceive and value non-human species and how we come to encounter and understand them in the world. Collard (2020, p. 5) contends that the capacity of certain animals to interact with humans augments their economic value, and hence, exposes them to further exploitation as sentient and encounterable beings. In a similar vein, the exploitation of each of our focus species is also intimately tied to their encounterability value; songbirds and eels are taken from the wild during their predictable annual migrations, and brown bears have huge encounterability potential thanks to their charismatic status and appeal for wildlife watching facilities, wildlife tracking tours, and different types of zoos. However, this encounterability may also foster ecocentric notions of care, albeit ones that still produce harm.

For example, keeping bears enclosed in petting zoos across Central and Eastern Europe facilitates an intimate connection with visitors, who are usually encouraged to feed them honey and fruit. While this may fulfil an ecocentric desire for care, for bears, this encounter is highly stressful and results in long-term trauma associated with captivity and radical changes in their behavior and social ties (Interview WP1.3). Other harms, such as habituation resulting from food conditioning, affect those bears who are under the constant gaze of tourists in wildlife observatories. As these businesses operate close to human settlements, the habituated bears usually return to the village in search of food as soon as the tourists leave. This prompts the authorities to label them as 'problem animals' that have to be culled or relocated to avoid augmenting already prevalent human-bear conflicts (Interview WP1.11). Such harms are irreversible and are often passed from sows to their cubs, indicating intergenerational harms. In this way, harmscapes become multidimensional (Berg & Searing, 2024), crossing spatial dimensions, temporal scales and power relations that ultimately change the ways harms are responded to. A green criminology approach can illuminate how harms to animals, in this case bears, and to humans, i.e., locals living near wildlife observatories, are inseparably linked within an exploitative industry that commodifies species' encounterability potential.

To genuinely move away from anthropocentrism and processes of Othering and speciesism, and to see animals as beings in their own right rather than as property and resources (Collard, 2020), an ecocentric justice position requires a meaningful reconsideration of how harms, whether to wildlife, ecosystems, or people, may be addressed, repaired, and proactively prevented (White, 2018a). One lens through which to better understand the full extent of harms experienced by wildlife and how these harms impact the human/non-human community could be the development of animal biographies. Many illustrative examples can be found across brown bear sanctuaries in Romania, Bulgaria or Hungary. The lives of bears in these sanctuaries or other facilities can provide a clear illustration of how wildlife exploitation can result in prolonged trauma, malnourishment, and behavioral problems resulting from years of physical and psychological abuse (see Figure 4, 7).



Figure 7: Brown bears at many wildlife observatories are conditioned with food to show up when tourists are visiting. Photo by Iordachescu, 2022.

9. Conclusion

This article offers a novel theoretical framework of a harms-based political ecology. We argue that it is essential to bring together green criminology and political ecology to explore the full range of dynamics and impacts of the legal and illegal wildlife trade. We elaborated this framework based on an analysis of the illegal wildlife trade in three European species: brown bears, songbirds and European eels. These three species were deliberately chosen to shift the focus of current debates on the illegal wildlife trade away from high profile and charismatic species such as elephants, tigers and rhinos. Focusing on illegal trades in Europe also challenges the prevalent idea in policy circles and academia that illegal wildlife trade is a 'problem' of Africa and Asia – thereby missing the role of Europe as a source, transit region and consumer of illegal wildlife products.

It is important to build on debates from green criminology around harmscapes, speciesism and victimhood to highlight how harms to animals in the wildlife trade (legal and illegal) can be rendered invisible. The concept of harmscapes (Berg & Shearing, 2018, 2024) offer a lens to examine how both legal and illegal activities produce harms in the wildlife trade. This lens can help uncover the entire range of harms experienced by animals throughout the wildlife trade, right from capture and storage to transport, keeping and killing.

We also explored differing approaches to justice, building on anthropocentric, biocentric and ecocentric perspectives, to demonstrate how these approaches can help render those harms to animals more visible. Anthropocentric understandings are critically important for drawing attention to social harms and injustices in the wildlife trade, while biocentric and ecocentric approaches excel at highlighting the harms to animals and to wider ecosystems. These approaches encourage political ecologists to think more clearly about multispecies and ecological injustices, which remain under-researched in the field. The integration of perspectives from green criminology develops political ecology further by expanding its scope to include animals more fully in thinking about justice. Drawing on these justice perspectives provides an opportunity to recognize non-human and environmental victims and highlight the significant harms caused to animals in both the legal and illegal wildlife trades. Acknowledging harms to animals enhances political ecology as a field, because it develops engagement with the non-human world, and specifically human-animal relations. Furthermore, building on green criminology to develop a harms-based political ecology allowed us to examine how harms are produced and sustained in the context of capitalism, unequal power relations and interconnected global crises.

This article is intended as a first step in developing a fuller analysis of how a harms-based approach can be used in theoretical and empirical research. More specifically, we have explored the idea of harms towards animals in the wildlife trade as an initial means of sharpening how we can develop more integrated ways of understanding social and ecological justice for humans and non-humans alike. A harms-based approach can also be usefully deployed to examine other key foci in political ecology, such as the harms produced by extractive industries, climate change, tourism development or water pollution, amongst others. Doing so can enhance political ecology's critique of global capitalism by highlighting the myriad of harms it produces via legal and illegal activity, whether relating to the actions of states, corporations, organized crime groups or other powerful global actors.

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