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Addendum

Should there be a legal duty to rewild to remedy ecocides of the past? The case fo the lost bears, wolves and lynxes of the United Kingdom

Yann Prisner-Levyne
Lecturer in Environmental Law and Public International Law, Edinburgh Napier University; PhD Candidate in anthrozoology, University of Exeter

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Should there be a legal duty to rewild to remedy ecocides of the past? The case fo the lost bears, wolves and lynxes of the United Kingdom**

di Yann Prisner-Levyne*

Abstract (Ita): Alla luce dell'attuale crisi ambientale, da diversi anni si valuta la possibilità di modificare l'articolo 5 dello Statuto di Roma della Corte penale internazionale, in modo da includere il crimine di ecocidio. Con questo obiettivo, nel 2021, un gruppo di esperti indipendenti ha formulato una definizione giuridica di ecocidio. L'iniziativa è stata accolta positivamente dagli studiosi del diritto, anche se questa definizione è stata oggetto di alcune critiche. Si sosterrà, rispettosamente, che qualsiasi riconoscimento legale dell'ecocidio, a prescindere dalla formulazione della definizione e sebbene si tratti di un progresso significativo, sarebbe comunque al di sotto delle aspettative. Il perseguimento dell'ecocidio può essere prospettato solo in base al principio di legalità e non può interessare gli ecocidi commessi in passato, i cui effetti sono avvertiti ancora oggi. Sebbene le prospettive del diritto si concentrino sulla prevenzione dell'ecocidio, la questione relativa agli ecocidi del passato, sotto forma di estinzione di specie, nonché i suoi possibili rimedi, rimane scarsamente affrontata. Polly Higgins, nella sua fondamentale opera sull'ecocidio, indica il ripristino come possibile rimedio. Dovrebbe esistere un obbligo legale per gli Stati di ripristinare la natura attraverso il rewilding, quando le specie native si sono estinte a causa dell'ecocidio? L'articolo utilizzerà il Regno Unito (UK) come caso di studio. Orsi, lupi e linci si sono estinti a causa della persecuzione umana nel Regno Unito: su questa base, sarebbe realistico prevedere l'introduzione nel Regno Unito, in aggiunta ad altri impegni internazionali, un ulteriore obbligo giuridico che, avendo alla base il concetto di ecocidio, possa reinserire le specie autoctone estinte? In ultima analisi, si solleva la seguente questione: l'ecocidio, nella sua forma di estinzione di specie, deve essere affrontato mediante uno strumento giuridico specifico che sia basata sulla semplice considerazione che gli animali sono esseri senzienti?

Abstract (Eng): In light of the ongoing environmental crisis, amending Article 5 of the Rome Statute of the International Criminal Court to include the crime of ecocide has been under consideration for a number of years. With this objective in mind, an Independent Expert Panel provided a legal definition of ecocide in 2021. The initiative was well received among legal scholars although some amount of criticism was levelled at the definition. It will be respectfully submitted that any legal recognition of ecocide regardless of the wording of the definition – albeit a significant progress – would still fall short of expectations. Prosecution of ecocide can only be prospective pursuant to the principle of legality and cannot cover past ecocides the effects of which can still be felt today. While legal efforts focus on the prevention of ecocide, issues of past ecocides in the form of extinction of species and possible remedies remain scarcely addressed. Polly Higgins in her seminal works on ecocide mentioned restoration as a possible remedy to ecocide. Should there be a legal obligation on states to restore nature through rewilding when native species have gone extinct through ecocide? The article will use the United Kingdom (UK) as a case study. Bears, wolves and lynx went extinct as a result of human persecution in the UK. Should there be an additional legal duty on the UK, on the ground of ecocide, to reintroduce extinct native species aside from other international legal commitments? Ultimately, this raises the question of whether ecocide in the form of extinction of species should not be covered under a dedicated legal instrument especially given the fact that animals are sentient beings.

Parole chiave: Ecocidio; Crisi ambientale; Estinzione di specie; Prevenzione; Reintroduzione TABLE OF CONTENTS: 1. Introduction; 2. A faculty rather than an obligation to restore wilderness or rewild under the current legal framework; 2.1. Convention on Biological Diversity: a legal ground for restoration; * This contribution has undergone a double blind review process

Keywords: Ecocide; Environmental crisis; Extinction of species; Prevention; Reintroduction

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* Lecturer in Environmental Law and Public International Law, Edinburgh Napier University; PhD Candidate in anthrozoology, University of Exeter

Sommario: 3. The Limited use of criminal law to deal with past ecocides in the form of eradication of species due to anthropogenic causes; 4. The quest for another legal ground for restoration of extinct species

1. Introduction

In the wake of the Independent Expert Panel (IEP) proposed amendments to the Rome Statute to introduce a new crime of ecocide in 2021, an Ecocide Bill was introduced before the United Kingdom (UK) Parliament on November 30, 2023. A proposal for a Bill to introduce the crime of ecocide into Scots law was also made by Monica Lennon on November 8, 2023. In all cases, some of the major objectives are deterrence and to hold perpetrators of severe environmental harms criminally accountable[1]. Both initiatives could not be timelier in light of the current environmental crisis. But an argument could be made that in the case of the UK, the topic has added relevance as the country has been suffering the consequences of ecocide through the eradication of its apex predators due to anthropogenic causes and factors. Bears and lynxes went extinct as a result of human persecution and habitat loss as early as the late Roman era; while the wolves managed to hold on until the Middle-Ages in England and the 18th century in Scotland[2]. Other charismatic species such as the elk (American moose), the aurochs, the wild boar went also extinct in the United Kingdom. All these species were keystone species the disappearance of which led to downgraded ecosystems and ecosystem services[3] in the UK. Past ecocides in the form of eradication of species represent a specific challenge. Although the actions which eventually caused a species to go extinct occurred in the past, the resulting harmful consequences are still being felt today. The removal of keystone species from a given ecosystem may significantly cripple delivery of ecosystem services on which both humans and non-humans rely on[4]. There is scientific evidence that it is especially the case with apex predators[5], the removal of which will disrupt trophic cascades[6]. Recent studies have even demonstrated that reintroducing wolves contributes to the fight against climate change as a combination of fear factor and active predation on deer

[1] Stop Ecocide International, UK 'ecocide bill' introduced in House of Lords. See also *Independent Expert Panel for the Legal Definition of Ecocide*, Commentary and Core Text, June 2021.
[2] The History of Wolves in the UK.
[3] S.B. Carroll, *The Serengeti Rules, the Quest to Discover how life works and why it matters*, Princeton, Princeton University Press, 2016, see also Role of Keystone Species in an Ecosystem.
[4] W.J. Ripple et al. *Status and Ecological Effects of the World's Largest Carnivores*, in *Science*, vol. 343, 6167, January 2014; R. Woodroffe, S. Thirgood, A. Rabinowitz, *The impact of human-wildlife conflict on natural* systems in R. Woodroffe, S. Thirgood, A. Rabinowitz (eds.), *People and Wildlife, Conflict or Coexistence?*, Cambridge, Cambridge University Press, 2005, p. 10.
[5] W.J. Ripple et al., *Trophic cascades from wolves to grizzly bears in Yellowstone*, in *Journal of Animal Ecology*, vol. 83, 1, 2014, pp. 223-233; C. Eisenberg, *The Wolf's Tooth: Keystone Predators, Trophic Cascades, and Biodiversity*, Washington, Island Press, 2010.
[6] Coined by Bob Paine in the 1960s, trophic cascades can be defined as «indirect species interactions that originate with predators and spread downward through food webs». See W.J. Ripple et al., *What is a Trophic Cascade?*, in *Trends in Ecology & Evolution*, 2016.
[7] D. V. Spracklen, P.J. Chapman, T. Fletcher, J.V.Lane, E.B. Nilsen, M. Perks, L. Schofield, C.E. Scott, *Wolf reintroduction to Scotland could support substantial native woodland expansion and associated sequestration, Ecological Solutions and Evidence*, vol. 6, 1, 2025.

uction of wolves remains highly debated and controversial in Scotland and the rest of the UK if not taboo. The words, «wolf», «lynx», or «bear» do not appear even once in the Scottish Biodiversity Strategy to 2045.

And yet, several studies have established that wolves alone do not only keep herbivore numbers down which is a serious problem in the UK but also have a positive effect on climate change and had an effect on rivers by slowing riverbank erosions and the regeneration of vegetation on riverbanks[8]. The Scottish Biodiversity Strategy to 2045 (SBS) has acknowledged that Scotland alone has retained just over half of its historic land-based biodiversity and still ranks in the bottom 25% of nations and that there is a need to address the biodiversity crisis[9]. In another report, it was acknowledged that the ability of Scotland's environment to provide benefits to people such as removing pollution from our air and water has declined with quantified evidence of deterioration going back to 1950[10]. The same report establishes that Scotland Biodiversity Intactness Index is 45% among the lowest of the 67 countries[11].

Against this backdrop, it appears that the conversation over the criminalization of ecocide could not be timelier both at the international and domestic level. Yet, the argument will be made that criminal law is an imperfect tool to deal with ecocide especially in the form of eradication of species. The prospective nature of international and criminal law in light of the principle of legality means that effects of past ecocides which are still felt today like in the United Kingdom will remain unaddressed. Identifying perpetrators will also prove problematic especially for eradication of species which took place over several centuries. Lack of adequate remedies for present and past ecocides and a narrow interpretation of victimhood make criminal law an inappropriate legal tool to tackle ecocide. Last but not least, the concept of ecocide lacks specificity. Within the framework of ecocide, the destruction of natural resources such as forests or marring of elements of ecosystem is put at the same level as the destruction of animals who are sentient beings. If efforts to end impunity through criminal law should nonetheless be sustained, an argument will be made that other legal grounds such environmental restorative justice should be another path to explore. It will be argued that environmental restorative justice may offer a better legal ground for rewilding and ecosystem restoration in the UK through species reintroduction. Environmental restorative justice may therefore complement UK's legal obligations under the Bern Convention as another legal ground to rewild to mend the effect of ecocides of the past. Perhaps more importantly, environmental restorative justice may offer a more constructive approach to ecocides of the past than the punishing regime of criminal law which may be associated with punitive ecology.

[8] How Wolves Change Rivers.
[9] Scottish Government Riaghaltas na h-Alba, Scottish Biodiversity Strategy to 2045, Tackling the Nature Emergency in Scotland, p. 6, pp. 17-20.
[10] State of Nature, Scotland, 2023, p. 3.
[11] State of Nature, op. cit.

2. A faculty rather than an obligation to restore wilderness or rewild under the current legal framework

2.1 Convention on Biological Diversity: a legal ground for restoration.

The legal framework pertaining to wildlife restoration or rewilding at the international, regional and domestic level sets weak obligations on the United Kingdom to rewild. At the international level, Article 8(f) the Convention on Biological Diversity offers a legal ground for restoration and rewilding efforts. Article 8(f) provides that:

«Each Contracting Party shall, as far as possible and as appropriate rehabilitate and restore degraded ecosystems and promote the recovery of threatened species, inter alia, through the development and implementation of plans or other management strategies.»

The provision is framed in the usual permissive language typical of international environmental law instruments. It seems that the provision sets out an obligation through the use of the words shall. However, the language of obligation is immediately watered down by the use of the terms «as far as possible» and «as appropriate» suggesting that it is only an obligation of means. The latter terms are the most problematic as it leaves wide amount of discretion to States to deny reintroduction of species which would otherwise be beneficial to all from an environmental perspective based solely on anthropocentric considerations.

In the Scottish Code for the Conservation Translocations & Best Practice Guidelines for Conservation Translocations in Scotland, it is provided that translocations involving top-level predators or species with major ecological impacts can result in conflict (or a perceived conflict) between the conservation goals, and the livelihoods or leisure or other stakeholder groups. Among the potential problems anticipated by the Scottish authorities are predation of pets, livestock or game, transmission of diseases, habitat modification which impact on the health and well-being of livestock or game or in some other way impact on the viability of rural economies such as farming, forestry, fishing and hunting, direct harms to humans. When there is potential for such harm, translocations should not proceed unless acceptable solutions can be developed which could include long-term compensation agreements to offset losses when it comes to depredations on livestock and game (grouse) which probably ranks among the highest risks in Scotland. Although the British and Scottish authorities never completely closed the door to reintroduce keystone species, should the consultation process with key stakeholders yield unsatisfactory results, this would probably be enough to justify the non-implementation of Article 8(f) on the ground that it is not appropriate as contrary to national interests. The use of terms «as far as possible» also leaves considerable discretion to states on how they want to implement this obligation based on their specific local circumstances.

Ancillary legal instruments taken within the framework of the Convention on Biological Diversity include the Aichi Biodiversity Target 14 aiming «by 2020 ecosystems that prov-

ide essential services, including services related to water, and contribute to health, livelihoods and well-being, are restored and safeguarded, taking into account the needs of women, indigenous and local communities, and the poor and vulnerable». Many decisions have been adopted by the Conference of Parties to the Convention on Biological Diversity[12] which translate a consensus at the international level on the need to restore but further confirm that it is an obligation of means and not an obligation of results. Decisions XI/16 on Ecosystem Restoration actually acknowledges that fully restoring an ecosystem to its original state is increasingly challenging and may not always be achievable. It nonetheless urges Parties and encourages Governments and relevant organizations to make concerted efforts to achieve Aichi Biodiversity Targets 14 and all the other Aichi Biodiversity Targets through ecosystem restoration through a range of activities. Decision XII 19 merely acknowledges the need to enhance support and cooperation to promote ecosystem restoration efforts in developing countries. It is also noteworthy that most decisions have a holistic approach with much emphasis on either ecosystem restoration as a whole (decision X/4) which include species or plants (decision X/17) but few are solely focused on fauna. Decisions COP XIII/5 also calls Parties to develop action plans and to provide on a voluntary basis information on their activities and results from the implementation of the action plan[13]. This further demonstrates that the obligation to restore is one of means rather than results.

Despite the number of decisions adopted by the Conference of Parties of the CBD based on Article 8(f) confirm that there is certainly a strong consensus at the international level on the need to restore ecosystems at the very minimum. This is further suggested by the United Nations Decade Ecosystem Restoration Initiatives[14] which again have an ecosystemic approach but do not specifically seek to restore species gone extinct. Yet, ecocide, to the best of our knowledge, is never considered as a possible rationale for restoration and there is no specific emphasis on the eradication of species.

2.2 The regional offshoots of the Biological Diversity Convention.

2.2.1 The non applicability of the binding EU regime to the UK.

Despite the permissive language in which Article 8(f) is framed, it had the merit to serve as a legal basis for the much more stringent and binding legal regime provided for by Regulation (EU) 2024/1991 of the European Parliament and of the Council. The latter seeks to set up a legally binding EU nature restoration regime by setting up targets designed to restore degraded ecosystems in a bid to fight against climate change and reduce the impact of natural disasters[15]. Similarly to the Biodiversity Convention, the approach taken is ecosystemic or holistic and there is little emphasis on wildlife. One of the few

[12] A. Trouwborst, J-C. Svenning, *Megafauna Restoration as a legal obligation: International biodiversity law and the rehabilitation of large mammals in Europe*, in *Review of European, Comparative & International Environmental Law*, 14 April 2022.
[13] CBD/COP/DEC/XIII/5 at paras. 5-6.
[14] New UN World Restoration Flagships.
[15] Regulation (EU) 2024/1991 of the European Parliament and of the Council of 24 June 2024 – Preamble at §§ 7-8.

times that wildlife is mentioned is in paragraph 22 of the Preamble where restoration of ecosystems coupled with reducing wildlife trade should help prevent resilience against diseases. The anthropocentric take is therefore still very pregnant and if restoration is to be encouraged it is never with the idea that we owe it to the species but rather for the interest of mankind. This is further confirmed by paragraph 27 also mentions that the aim is to maintain and restore a favourable conservation status for species wild fauna and flora of Union interest. This begs the question as to whether species holding no particular interest to the Union should be left to their fate.
Among the most salient provisions, is the restoration of terrestrial, coastal and freshwater ecosystems provided for under Article 4. Member States shall put in place restoration measures that are necessary to improve to good conditions areas of habitat types listed in Annex 1 which are not in good condition[16]. Under Article 4, restoration measures need to be adopted to reach specific but progressive targets set for 2030 and 2040 respectively. Article 4(7) especially provides that restoration measures should be taken to restore habitats of species listed in the Annex. Article 4(11) further provides that Member States shall put in place measures ensuring that areas subject to restoration measures show a continuous improvement in the condition of the habitat types listed in Annex I of the Regulations until good condition is reached, and a continuous improvement of the quality of the habitats of the species referred to in the paragraph. Articles 5, 8, 9, 11, 12 all provide for the restoration of marine, urban, natural connectivity of water systems, agricultural, forest ecosystems respectively. Article 14 lays an obligation on Member States to provide for national restoration plan which should indicate the area to be restored taking into account conservation measures, national biodiversity strategies and action plans. Article 20 provides for an obligation to monitor the areas subject to restoration measures including biodiversity indicators and populations of the common farmland bird species. The nature of the restoration measures is left to the discretion of the Member States and reintroduction of species is never expressly mentioned throughout the text. The approach is purely ecosystemic and holistic and assumes that restoring habitat should be enough to restore species. Yet, the Regulation does not provide that species which disappeared as a result of ecocide or human eradication should be restored. Even in Annex VII which sets out a list of examples of restoration measures, rewilding or restoration of extinct species is not provided for. The merit of the regulations lies in its binding nature. The United Kingdom being outside of the EU, it does not apply in the UK. Even though, the Regulations would still fall short when it comes into the restoration of ecosystem services in the UK through

[16] In good condition is defined under the Regulation as: a state where the key characteristics of the habitat type, in particular its structure, functions and typical species or typical species composition reflect the high level of ecological integrity, stability and resilience necessary to ensure its long-term maintenance and thus contribute to reaching or maintaining favourable conservation status for a habitat, where the habitat type concerned is listed in Annex 1 to Directive 92/43/EEC, and, in marine ecosystems, contribute to achieving or maintaining good environmental status.

the reintroduction of native species such as wolves, bears and lynxes as it lacks specificity on this matter.

2.2.2 Bern Convention and Habitats and Birds Directives' permissive legal regime pertaining to wildlife restoration and its implementation in the United Kingdom.

On the other hand, the Habitats and Birds Directives are part of retained EU law in the United Kingdom. The Habitat Directive calls for Member States to ensure the restoration or maintenance of natural habitats and species of Community interest at a favourable status and to designate special areas for this purpose. Its article 12 devoted to the Protection of Species does not directly call for restoration or reintroduction of species when they have become extinct. Article 22(a) of the Directive only requests that state study the desirability of re-introduction of species in Annex IV in which neither wolf, bear and lynx are listed. As pointed by Trouwborst none of the species which went extinct are listed in the annexes of the Habitats Directive as potential candidates for reintroductions[17]. The Directives are implemented under the Conservation Regulations of 1994 in Scotland and in England and Wales. Section 8(2) provides that the Secretary of State shall establish priorities for the designation of sites in the light of the importance of the sites for the maintenance or restoration at a favourable conservation status of a species in Annex II to the Directive which include bear, lynx and wolf. This article could form a strong basis for rewilding especially if read in conjunction with the Bern Convention to which the UK is still a party to.

Article 11(2) of the Bern Convention to which the United Kingdom is a party provides that

«Each Contracting Party undertakes to encourage the reintroduction of native species of wild flora and fauna when this would contribute to the conservation of an endangered species, provided that a study is first made in the light of the experiences of other Contracting Parties to establish that such reintroduction would be effective and acceptable».

The language used is once again permissive and certainly not binding. This is almost wishful thinking as Contracting Parties are only encouraged to reintroduce species with a caveat that they do not have to do so if a study establishes reintroductions from other countries were not conclusive. And when it comes to wolves, experiences from continental Europe are contrasted. Whereas on the one side, the natural recolonisation of the wolves' former haunts is certainly a success from an environmental and conservation stand-point it is at the cost of increasing conflicts with farmers and other rural stakeholders. The recent downgrading of the conservation status of the wolf is most certainly the consequence of raising concerns from the farming community. This will certainly be used as an argument against the reintroduction of the species in the UK. The fact that the Strategic Plan for the Bern Convention for the period to 2030 does not put much emphasis on restorat-

[17] A. Trouwborst, J-C. Svenning, *op. cit.*, p. 190.

ion species' populations does not help either.

The Bern Convention has been implemented in the United Kingdom through the Wildlife and Countryside Act of 1981. Under the Wildlife and Countryside Act of 1981 there is no provision imposing a general obligation to restore species. Only for sites of specific interest, Article 31 provides for restoration measures which can be taken as remedy for an offence under the Act where the owner or occupier of any land in a site of special scientific interest has allowed prohibited and destructive activities[18]. Under the Nature Conservation (Scotland) Act 2004, the Scottish Natural Heritage may propose to give a restoration notice for sites of specific interest where it is satisfied that a person has intentionally or recklessly damaged any natural feature[19]. The scope of this provision is very narrow as it only concerns sites of specific interest that may be considered as special by reason of any of its natural features which can include fauna. Yet, it could hold tremendous potential within the framework of ecocide as in the hypothesis that past eradication of species would occur in a site of special scientific interest, the perpetrators would therefore be under a legal obligation to restore if the species eradicated was the natural feature which made the site its special nature. This is an important legal provision for species still present in Scotland such as the European wild cat which is present in Scottish sites of special scientific interest such as the Cairngorms. Should wolves, lynxes and bears be reintroduced, it could be presumed that the location where they would be reintroduced would become of sites of special interest. However, there are significant legal hurdles preventing such reintroductions[20].

Under Section 14(1) of the Wildlife and Countryside Act 1981, a licence is required to release into the wild any animal which is not «ordinarily resident in and is not a regular visitor to Great Britain (England and Wales) in a wild state». The provision is framed differently for Scotland but any person who released any animal to a place outwith its native range is guilty of an offence. A licence is therefore needed under Section 16 of the Wildlife and Countryside Act 1981. The Scottish Code for Restoration specifically explains that:

«former natives' that were once native to a location but have become extinct there, and are unable to recolonised naturally, are considered to be outwith their native range for the purposes of the 1981 Act. Therefore, they require a non-native species licence for reintroduction. Once a former native has been reintroduced back into a location, it does not automatically become part of its native range. Unless the barriers that prevented natural recolonisation have been removed, human intervention is required to import further individuals, and a licence is still required for subsequent releases in that locality».

The Department for Environment, Food and Rural Affairs (DEFRA) has the same policy for England and Wales. To make potential reintroductions even more difficult, a licence is also needed to keep any dangerous wild animal under the Dangerous Wild Animals Act

[18] Article 28E(1) read in conjunction with Section 28 and Section 31.
[19] Article 10 A of the Nature Conservation (Scotland) Act 2004.
[20] Rewilding Britain, A Guide to Legislation and Regulations for Rewilders.

1976. Any potential reintroduction would necessarily imply to hold some specimen captive before reintroduction hence the licence would be needed and wolves, bears and lynxes, all of whom being listed under the Act.

The amount of discretion afforded to the British Government and public authorities in general by domestic law in relation to species reintroduction – and even as potential remedy to past ecocides – is further facilitated by the lack of a constitutionally entrenched right to a healthy environment.

2.3 The right to a healthy environment: an unsuitable legal ground to remedy past ecocides.

There is no equivalent to a constitutional right to a healthy environment in the United Kingdom as one may find in Art. 66 of the Constitution of Portugal for example or in that of over 100 States[21]. The right to a healthy environment could have offered a legal ground for reintroduction of extinct species. In light of the ecosystemic services offered by apex predators and their contribution to the good functioning of ecosystem services necessary to support life on earth and by extension human health, economy and well-being, the right to a healthy environment could potentially offer a legal ground for predator reintroductions.

In the aftermath of the adoption of resolution A/76/L.75, the UK government stated that although committed to the fight against climate change, biodiversity loss and environmental degradation, it considered that there was «no international consensus on the legal basis of the human right to a clean, healthy and sustainable environment» and denied its emergence as a customary right[22]. The UK nonetheless voted in favour of the resolution.

If the right to a healthy environment is not recognised under UK domestic law, the right to a healthy environment can nonetheless be activated through the Human Rights Act of 1998 which give effect to the rights and freedoms guaranteed under the European Convention on Human Rights. The European Convention on Human Rights does not expressly provide for a right to a clean environment. Yet, an extensive and broad interpretation has led the Court to consider that some rights protected by the Convention may be affected by adverse environmental factors[23]. Convention rights which may be specifically infringed as a result of environmental degradation based on the cases from the ECtHR are the right to life (Art. 2), the right to respect for private and family life (Art. 8); the right to property (Protocol 1 to the ECHR), right to due process (art. 6), the right to receive and impart information and ideas (Article 10), the right to an effective remedy (Article 13). While it is not within the purview of this article to provide for a detailed overview of the interaction between environmental protection and human rights; some emphasis will be given to the use of Art. 8 to enforce environmental standards to determine to what extent it can be of use within our problematic.

[21] Y. Aguila, *The Right to a Healthy Environment*, 2021, IUCN.
[22] Statement of the UK Government delivered to the UN General Assembly at the adoption of resolution A/76/L.75.
[23] Council of Europe, *Manual on Human Rights and the Environment*, 2012.

At the outset, the Court stated very clearly in a very established caselaw that environmental degradation does not necessarily involve a violation of Article 8 as it does not include an express right to environmental protection or nature conservation[24]. Therefore, Article 8 cannot be used in an aspirational way, there has to be some form of direct harm to plaintiff which should reach a certain threshold[25]. In *Fadeyeva*, the Court stated «in order to raise an issue under article 8 the interference must directly affect the applicant's home, family or private life (...) the adverse effects of environmental pollution must attain a certain minimum level if they are to fall within the scope of Article 8». The Court referred to its own case law on the matter[26]. In *Leon and Agnieszka Kania v. Poland*, where the plaintiffs complained about the high levels of noise emitted by a nearby company, the Court added that in order to trigger Article 8, a plaintiff has to be directly and seriously affected[27]. In *Dubetska and Others v. Ukraine*, deemed that environmental nuisance inherent to city life were not serious to trigger the protection of Article[28].
With these principles in mind, it would be very difficult to use Article 8 to prompt authorities to restore eradicated species to prevent further environmental degradation on the ground that it constitutes an infringement on the right to enjoy one's living space. Although there is an increasing amount of evidence of increasing environmental degradation stemming from the absence of keystone species, the resulting harm would only be incremental. An applicant would be hard pressed to prove a causal link between the absence of keystone species such as apex predators and a resulting infringement of its human rights. The case of *Kyrtatos v. Greece* is probably the most relevant here where the destruction of wetlands due to urban development did not fall under the scope of article 8 according to the Court as other international instruments were deemed more relevant[29]. In light of this decision, it is unlikely that the eradication of species whether past or present would trigger Article 8 as it is beyond the scope of the Convention. Even if it were, the causal link between eradication of species and infringement of Convention rights would be too hard to prove.
If the Court in *Powell & Rayner v. the United Kingdom*, the ECtHR recognized the right to respect for private and family life included the respect of one's quality of life and one's living space[30], in most cases there was a direct and serious form of environmental hazard suffered by the plaintiffs: fumes and noise from waste treatment plant (*López Ostra v. Spain*), polluted water (*Tătar v. Romania*), aircraft noise (*Hatton and Others v. the United Kingdom*). In *Fadeyeva v. Russia*, the applicants lived in the vicinity of an iron-smelting plant which released significant concentration of hazardous substances in the atmosphere. The Court

[24] *Fadeyeva v. Russia*, Judgment of 9 June 2005 at paragraph 68; *Kyrtatos v. Greece*, judgment of 22 May 2003.
[25] *Fadeyeva v. Russia*, *op. cit.*, paragraphs 68-69.
[26] *López Ostra v. Spain*, judgment of 9 December 1994, Series A no. 303-C, p. 54, §51, *Hatton and Others v. the United Kingdom* [[GC]], no. 36022/97, § 118, ECHR 2003-VIII.
[27] *Leon and Agnieszka Kania v. Poland*, Judgment of 21 July 2009, paragraphs 98-104.
[28] *Dubetska and Others v. Ukraine*, paragraph 105.
[29] *Kyrtatos v. Greece*, *op. cit.*, paragraph 52.
[30] *Powell & Rayner v. the United Kingdom*, judgment of 21 February 1990, paragraph 40.

found that there was a violation of Article 8 as the environmental impact of the plant interfered with her right to respect of her home and private life. Denial by the Russian authorities to relocate her immediately to protect her from the pollution and merely putting her on a waiting list was not enough for Russia to discharge its positive obligations under the Convention.

Positive obligations of States within this framework consist in positive measures to protect Convention rights[31] or prevent their infringement but do not consist in measures to protect the environment *per se*. Therefore, it is highly unlikely that the Human Rights Act which gives effect to the ECHR in the UK would provide for a good legal ground to reintroduce eradicated species to restore ecosystem services necessary to guarantee the right to a healthy environment.

Under the current regime, there is only an obligation on means on countries such as the United Kingdom to restore species even if they have been victims of ecocide such as the UK's lost guild of predators. As it stands, ecocide is not a legal ground in itself to justify restoration or rewilding measures. Even though, initiatives have been launched at the international level and domestic level to introduce ecocide in the penal arsenal they would likely be fruitless. They would most likely be limited in scope *ratione materiae* and *ratione temporis* and would not cover past ecocides. More importantly, the definitions proposed do not take into account the specificities of ecocide in the form of eradication of species otherwise known as theriocide.

3. The Limited use of criminal law to deal with past ecocides in the form of eradication of species due to anthropogenic causes

3.1 The principle of legality as an insurmountable obstacle. Although the negative effects of species extinction through human eradication may still be felt today, the principle of legality constitutes an insurmountable bar to any criminal action. Jurisdiction of any court be it at the international level or the domestic level would necessarily have to be prospective[32]. The principle being so firmly entrenched both at the international and domestic levels. Article 11 of the Universal Declaration on Human Rights of 1948 provides that «No one shall be guilty of any penal offence on account of any act or omission which did not constitute a penal offence, under national or international law, at the time when it was committed. Nor shall a heavier penalty be imposed that the one that was applicable at the time the penal offence was committed». Article 15 of the International Covenant on Civil and Political Rights and Article 7 of the Convention for the Protection of Human Rights. Several regional human rights conventions have reaffirmed the principle such as Article 9 of the Inter-American Convention on Human Rights. The content of the principle is also firmly established and is comprised of 3 key principles 1) Criminal offences and penalties must be provided by law as an act

[31] *Guerra and Others v. Italy* [[GC]], judgment of 19 February 1998, paragraph 58.
[32] P. Okowa, O. Flasch, *Reflections on Ecocide as a Fifth Crime under the Rome Statute of the International Criminal Court*, in C. Stahn (ed.), *The International Criminal Court in Its Third Decade*, Nijhoff, Brill, p. 486.

adopted by the parliament 2) criminal law must be very well determined, which means that it must be worded in clear and specific terms and also must be foreseeable 3) the principle of legality includes that the criminal law, which provides an act or an omission as a criminal offence must be adopted and brought into force before committing the crime. Human rights courts have also reaffirmed that the principle remains a central element of criminal prosecution in a democratic society[33]. Even within the context of the Nuremberg trials where the most egregious crimes against humanity and genocide were under scrutiny, failure to abide to these principles was heavily debated[34]. It is therefore hard to imagine that an exception would be made to enable the prosecution of ecocide in the form of eradication of species especially if it happened in a distant past. Ecocide is still to this day not recognized as a crime under international law. If some jurisdictions have introduced the crime of ecocide within their domestic legislation[35], the principle of legality also requires that the criminal law must be very well determined, which means that it must be worded in very clear and specific terms and also must be foreseeable. Although it is not the purpose of this article to make another commentary of the definition provided by the International Environmental Panel (IEP), the abundant literature which was published in the aftermath of the publication of the definition of ecocide suggests that the condition of a clear worded language was not fulfilled in the IEP definition proposal nor by its domestic offshoots in the United Kingdom.

3.2 Ecocide: a problematic definition.

As a reminder the definition of the IEP reads as:

«*For the purpose of this Statute, "ecocide" means unlawful or wanton acts committed with knowledge that there is a substantial likelihood of severe and either widespread or long-term damage to the environment being caused by those acts*».

The definition was heavily commented and criticized and since both the definitions provided in the UK bill[36] and that of the Scottish proposal[37] are heavily inspired by the IEP definition, similar criticism could apply to them. According to a majority of legal academics, the definition would not likely meet the requirements of clarity under the principle

[33] *Baena-Ricardo et al. v. Panama*, Judgment of February 2, 2001 Inter-American Court of Human Rights, §101.
[34] G.A. Finch, *The Nuremberg Trial and International Law*, in *The American Journal of International Law*, vol. 41, 1, 1947, pp. 20-37.
[35] Ecocide / serious environmental crimes in national jurisdictions.
[36] «1. It is an offence of "ecocide" for a person, company, organisation, partnership or any other legal entity registered in the United Kingdom, to be in breach of section 2 of this Act. 2. For the purposes of this Act, "ecocide" - (a) as it applies to an individual, means unlawful or wanton acts or omissions committed by persons of superior responsibility who had knowledge, or should have knowledge, that there was a substantial likelihood of severe and either widespread or long-term damage to the environment being caused by those acts. (b) as it applies to a company, organisation, partnership or other legal entity, means strict liability for unlawful or wanton acts or omissions with a substantial likelihood of severe and either widespread or long-term damage to the environment being caused by those acts».
[37] «Ecocide: unlawful or wanton acts committed with knowledge that there is a substantial likelihood of severe and either widespread or long-term damage to the environment being cause by those acts».

of legality[38]. Beginning with the *mens rea* – with knowledge – which was criticized for being deeply confusing as it constituted a significant departure from the requirements of Article 30 of the ICC Statute[39]. The first trigger of criminal liability is that an unlawful act be committed with knowledge that there is a substantial likelihood of severe and either widespread or long-term damage to the environment was criticized as there are few prohibitions under international environmental law[40] aside from the general prohibition under customary international law to prevent damage to the environment of other states[41]. Alternatively, this would require states to criminalize a given action under their domestic legislation[42].

Under the usual terminology of the ICC statute, «knowledge» means awareness that a circumstance exists or a consequence will occur in the ordinary course of events which covers *dolus directus*[43] and *dolus indirectus*[4445]. In other words, the perpetrator is required to be aware that his acts are «virtually certain» to bring about the prohibited consequence(s)[46]. As pointed out by many authors[47] under the Panel's definition «knowledge» rather covers *dolus eventualis* otherwise known as recklessness meaning that the perpetrator needs only to be aware of a substantial likelihood of severe and either widespread or long-term damage[48]. The fact that the *mens rea* further required that the perpetrator must be aware that the damage will be «clearly excessive in relation to the social and economic benefits anticipated» was also significantly criticized[49]. According to Minkova[50], Hendry[51] and Killean[52], awareness of the excessive damages in relation to the anticipated benefits of a given act is

[38] L.G. Minkova, *The Fifth International Crime: Reflections on the Definition of "Ecocide"*, in *Journal of Genocide Research*, vol. 25, 1, p. 81: «the ambiguity concerning the mental element of Article 8ter is hard to reconcile with the legality principle codified in Article 22 Rome Statute that provides that the definition of a crime shall be "strictly construed"».
[39] A. Branch, L. Minkova, *Ecocide, the Anthropocene, and the International Criminal Court*, University of Cambridge, pp. 3-4; K. Jones, *The Beginning of the End of Ecocide: Amending the Rome Statute to Include the Crime of Ecocide*; L.G. Minkova, *op. cit.*, pp. 62-83.
[40] D. Robinson, *Your Guide to Ecocide*, in *Opinio Juris*, 2021.
[41] Principle 21 of the Stockholm Declaration of 1972 which codified customary international law according to the ICJ, in *Legality of the Threat or Use of Nuclear Weapons*, ICJ Reports 1996, p. 226, at para. 30.
[42] Ibid.
[43] Where the perpetrator foresaw and desired the illegal event and/or harmful consequence.
[44] Where in addition to the consequences resulting from the desired illegal committed by the perpetrator, other certain but undesired consequences were foreseeable by a reasonable person. It differs from *dolus eventualis* where the events were a mere possibility from the illegal action.
[45] J.D. Van Der Vyver, *The International Criminal Court And the Concept of Mens Rea in International Criminal Law*, in *U. Miami Int'l & comp. L. Rev.*, vol. 12, 2004, p. 66.
[46] ICC, *Bemba*, "Decision Pursuant to Article 61(7)(a) and (b) of the Rome Statute on the Charges of the Prosecutor Against Jean-Pierre Bemba Gombo" (ICC-01/05-01/08-424), Pre-Trial Chamber II, 15 June 2009, para. 362.
[47] P. Okowa, O. Flasch, op. cit., pp. 473-492.
[48] See also L.G. Minkova, *op. cit.*, pp. 78-80.
[49] K. Jones, *op. cit.*, p. 11.
[50] L.G. Minkova, *op. cit.*, p. 80.
[51] P. Hendry, *Mens Rea and the Proposed Legal Definition of Ecocide*, in *Völkerrechtsblog*, 2021.
[52] R. Killean, D. Short, *Scoping a Domestic Legal Framework for Ecocide in Scotland*, Report for the Environmental Rights centre for Scotland (ECRS), 2024, p. 23.

too difficult to prove. Let alone for acts constitutive of ecocide committed in the past especially in the form eradication of species.
When it comes to eradication of a given species, this may be the unintended result of a succession of lawful acts through time none of which being the action of one specific perpetrator but rather that of several actors (government, farmers, any economic agent, hunters) over any given and significant period time without any intent and awareness that their actions was likely to eradicate a species. Conversion of land, habitat destruction, deforestation which occurred prior to the industrial revolution were not necessarily done with intent or even awareness that this would result in the disappearance of a given species which seemed abundant at the time. This is how mega-herbivores become extinct when their habitat has been gradually destroyed or converted to agricultural lands through time although the perpetrators responsible did not really intend to eradicate the species as such. This is the story of the aurochs in the United Kingdom, the wisent[53] in continental Europe, the Indian rhinoceros[54], Eld's deer (*Rucervus eldii*)[55], the barasingha (*Cervus Duvaucelii*)[56] and to a lesser extent the blackbuck (*antilope cervicapra*) in India where land conversion played major role in the decline and extinction of these species[57].
When it comes to ecocide in the form eradication species, past or present, identification of perpetrators becomes impossible. If we take the example of eradication of species through the form of wildlife crime, perpetrators may involve state officials through which states may be vicariously liable, middlemen including powerful crime syndicates, wildlife traffickers, poachers, trophy hunters[58]. The same observation regarding legal eradication of species such as lethal control of predators which may lead to ecocide[59] and involve several co-perpetrators including the state and its agencies and officials, farmers, hunters, poachers and a host of rural stakeholders.
The introduction of a cost-benefit component in the proposed *mens rea* takes into account this hypothesis when it comes to species eradication[60]. But as pointed out by the doctrine this *mens rea* implies a threshold up to a certain point where harming the environment may be seen as beneficial and legitimate[61] until it is too late. This has led many to point out the anthropocentric take of the IEP on ecocide[62]. Minkova criticized the cost-benefit approach as diminishing the symbolic value of criminalizing the crime of ecocide at the

[53] D.E. Wilson, R.A. Mittermeier, *Handbook of the Mammals of the World*, vol. 2, Barcelona, Lynx, p. 577.
[54] M.K. Ranjitsinh, *Indian Wildlife*, New Delhi, Brijbasi, 1995, p. 99; D.E. Wilson, R.A. Mittermeier, *op. cit.*, p. 172.
[55] A.J.T. Johnsingh, N. Manjrekar, *Mammals of South Asia*, Universities Press (India) Pvt. Ltd, p. 258.
[56] M. Rangarajan, *India's Wildlife History*, Delhi, Permanent Black, 2001, p. 4.
[57] C. Mishra et al., *The role of incentive programs in conserving snow leopard*, in *Conservation Biology*, vol. 17, 6, 2003, pp. 1512-1520.
[58] T. Milliken, J. Shaw, *The South Africa – Viet Nam Rhino Horn Trade Nexus: A deadly combination of institutional lapses corrupt wildlife industry professionals and Asian crime syndicates*, in *A Traffic Report*, 2012.
[59] R. Woodroffe, S. Thirgood, A. Rabinowitz, *op. cit.*, pp. 2-3.
[60] Ambos and Winter, p. 187.
[61] A. Branch, L. Minkova, *op. cit.*, pp. 8-9.
[62] E. Winter, *Stop Ecocide International's Blueprint for Ecocide Is Compromised by Anthropocentrism: A New Architect Must Be Found*, in *Israel Law Review*, vol. 57, 1, 2024.

ICC in the first place, namely, to communicate the idea that the wellbeing of nature and that of humans are inherently interlinked[63]. The intrinsic worth of the environment is denied as causing harm to the environment is *prima facie* legitimate. As pointed out by Minkova under the «wanton» criteria which covers legal acts which need to be clearly excessive in relation to the social and economic benefits anticipated. As a result, not all acts that cause that type of environmental damage are «illegitimate, or even undesirable».

Yet, the anthropocentric take on ecocide should not come as a surprise. Ecocide is in a way the child between international criminal law and international environmental law. The latter is all about reaching a balance between socio-economical needs and protection of the environment. In the Pulp Mills case, the International Court of Justice recalled the principle that as part of the principle of prevention, a State is obliged to use all means at its disposal in order to avoid activities which take place in its territory, or in any area under its jurisdiction, causing significant damage to the environment of another state[64]. There is this idea again that some amount of damage to the environment is tolerable or acceptable up to a certain level which has to be determined on a case-by-case basis: «it is for each State to determine in its domestic legislation or in the authorization process for the project, the specific content of the environmental impact assessment required in each case, having regard to the nature and magnitude of the proposed development and its likely adverse impact on the environment as well as to the need to exercise due diligence in conducting such an assessment»[65]. The Court reaffirmed this principle in Certain Activities Carried Out by Nicaragua[66]. This idea that some amount of environmental damage is acceptable to further legitimate goals such as industrial development is at the core of international environmental law which is further materialised through the idea of sustainable development. Anthropocentrism is therefore at the very heart of environmental law and even international wildlife law which may be another factor behind the rejection of a strict liability regime. Similarly international criminal law and especially the ICC was «strictly intended to respond to anthropocentric harm by human agencies»[67]. The anthropocentric perspective underlying the whole ecocide initiative both at the international level and at the UK domestic level may have some relevancy when it comes to environmental hazards, pollution or depletion of natural resources. But animals are a very specific kind of natural resources which should not be legally qualified as such in light of their sentience. As such, ecocide in the form of eradication of species is so specific that it should be covered by dedicated provisions or legal instruments.

3.3 Theriocide, wildlife crime, crime of mass destruction of fauna as alternatives to ecocide would have provided for a much clearer definition.

[63] L.G. Minkova, *op. cit.*, p. 65.
[64] *Pulp Mills on the River Uruguay (Argentina v. Uruguay), Judgment, I.C.J. Reports 2010,* p. 14, at para. 101.
[65] *Pulp Mills* case, *op. cit.*, para. 205.
[66] *Certain Activities Carried out by Nicaragua in the Border Area* (Costa Rica v. Nicaragua) and *Construction of a Road in Costa Rica along the San Juan* River (Nicaragua v. Costa Rica), Judgment, I.C.J. Reports 2015, p. 665, at para 104.
[67] P. Okowa, O. Flasch, *op. cit.*, p. 488.

An argument could be made that many problems pointed by academics as to the lack of clarity of the IEP definition of ecocide could have been avoided to some extent if a specific category had been created for ecocide as a form of eradication of species or theriocide. In a sense, the IEP was maybe overambitious in trying to criminalize all forms of harm to the environment in one catch-all term: ecocide. As pointed out by Krott, nobody really knows precisely what the environment is[68]. Some academics advocate that having a list of prohibited acts provides greater certainty and predictability than a formulaic approach[69]. It may be relevant to follow the example of Article 441 of the Ukrainian Criminal Code which draws a list of what is comprised within the term ecocide including the mass destruction of flora and fauna[70]. An argument will be made that ecocide in the form of mass destruction of fauna or species eradication is a very specific and very different form of ecocide than other forms such as climate change, pollution and destruction of whatever component of the environment or the ecosystem.
In a seminal article, Piers Beirne suggested the use of the term theriocide based on the Greek root *θηρίον* which means an animal other than human[71]. Beirne explains in his article that theriocide is better term than zoocide which actually encompasses both human and non-human animals[72]. Theriocide is therefore much more specific. Beirne defined theriocide as the name for those diverse human actions that cause deaths of animals regardless of whether it is socially acceptable or unacceptable, legal or illegal[73]. Activities covered include but are not limited to intensive rearing regimes, hunting and fishing; trafficking; vivisection; militarism; pollution; and human-induced climate change[74]. Theriocide, in the form of mass destruction of species involves the mass killing of sentient beings bring this crime much closer to genocide. When it comes to theriocide, there has been and there still is a specific intent from perpetrators to destroy in whole or in part members of a species bringing it closer to genocide. It is noteworthy to remember that under Article 6 of the ICC statute the *actus reus* for genocide comprised killing members of the group with a *mens rea* to destroy in whole or in part. Applied to theriocide, it is not even necessary to have an intent to completely eradicate a given group/species. Intent to kill some members of a given species would be enough to trigger criminal liability in this hypothesis. In this respect, I respectfully disagree with many academics which criticized the high threshold to trigger ecocide on the ground that people rarely if ever set out with the purpose of harming the environment as such[75].
In practice, some current forms of mass destruction of animals including legal ones such

[68] D. Krott, *The definitional dilemma – The quest for a definition of "ecocide" and "international environmental crimes"*, in *The Resolution Journal*, vol. 3, *Environmental Crimes and Protection*, 2021 Conference Articles, p. 5.
[69] R. Killean, D. Short, *op. cit.*, p. 21.
[70] D. Krott, *op. cit.*, p. 5.
[71] P. Beirne, *Theriocide: Naming Animal Killing*, in *IJCJ&SD*, vol. 3, 2, 2014, p. 55.
[72] P. Beirne, *op. cit.*, p. 56.
[73] P. Beirne, *op. cit.*, p. 49.
[74] P. Beirne, *op. cit.*, p. 49.
[75] D. Robinson, *op. cit.*

as lethal control of predators or mega herbivores requires a very specific intent to eradicate them from a given area. The disappearance of wolves, bears and lynxes from the United Kingdom is especially the result of wilful and purposeful eradication embedded in policies throughout time. There was a specific intent to make them disappear from the British countryside. It is reported that in AD 950, King Athelstan imposed an annual tribute of 300 wolf skins on Welsh King Hywel Dda[76]. In the 13th century, King John was offering a reward of five shillings for each wolf pelt submitted[77]. King Edward I reportedly ordered the total extermination of all wolves of the Kingdom and hired knights for the task[78]. James I of Scotland passed an act requiring all lairds to seek out and destroy wolves while further acts for the destruction of wolves were passed in 1457, 1527 and 1577[79]. In all these instances, isn't there a very specific intent to destroy by killing members of a species rather than a group?

From India to the United States, similar measures were taken with specific intent to eradicate wolves and other predators by the various authorities in power. The extinction of the cheetah in India solely due to anthropogenic causes is a case on point. Before the British Raj, cheetahs were taken in great numbers from the wild by the Moghuls and Indian princes to be trained for hunting deer and antelopes such as the blackbuck[80]. Although they were not killed, they were nonetheless used to satisfy human needs and depleted populations in the wild. Divyabhanusinh, an expert on India's natural history explains in his book «the Story of India's Cheetahs» that when the British took over, they had no interest in capturing live cheetahs for hunting purposes. Since they saw no need nor purpose in them, so they killed them for sport:

«*Unfortunately, the British did spear or shoot cheetahs when they came across them in the wild. Mughal emperors, Indian princes and potentates of an earlier era had mainly restricted themselves to taking cheetahs from the wild to train for the hunt. Though some of these animals could have been killed, they were not the primary objects of shikar (Indian term of hunting). The British, on the other hand, made them targets for sport and for collecting trophies, and during the 19th and 20th centuries the Indian princes and other privileged classes started aping the imperial masters* (...)».

Divyabhanusinh in the same book produces the personal account of a British officer telling of his slaughter of four cheetahs.

«I fired. To the shot, up spang six cheetahs, beautiful brutes, growling and rushing over each other, one evidently severely wounded. (...) Before I could determine whether to fire my second barrel or to bolt, the old shikari (hunter), yelled out, "come quickly for your horse, they are cheetahs you can spear them; we'll kill them all!". A mens rea of specific intent to kill would not be too difficult to prove in this case nor in the case of other legal

[76] Great Wolf Slayers of England.
[77] Ibid.
[78] Ibid.
[79] The Disappearance of Wolves in Britain.
[80] C. Divyabhanusinh, *The Story of India's Cheetahs*, The Marg Foundation, 2023, p. 103.

eradication of predators. Again, isn't there a specific intent to destroy members of a species in both these instances?»

In Europe, America or India, it was not unusual for the relevant authorities to put bounties with intent to eradicate a species[81] as was the case in the United Kingdom for wolves, bears and lynxes. All colonial powers and their representatives massively slaughtered wild animals and it is interesting to note that extinction of charismatic species of fauna occurred within colonial times[82]. The quagga was exterminated by the Boers, the thylacine in Tasmania as a result of bounties set up by the Tasmanian government.

Boomgard on this book on tiger and people in the Malay World writes: «In tropical areas under European overlordship, holding out rewards for capturing or killing fierce animals was a widespread phenomenon. For example, the Dutch offered rewards for jaguars (then also called tigers) in their Caribbean colony Suriname, for lions and leopards in the Cape colony in South Africa, and for crocodiles in Sri Lanka. The British offered rewards for tigers, leopards, and various other animals in India and Burma»[83]. Rangarajan in his book on India's Wildlife History indicates that larger rewards were offered for tigresses and special prizes given to finish off cubs[84]. Can there be better evidence of specific intent of theriocide than the killing of female and cubs? Just like for genocides, propaganda was also used to justify the mass killings[85]. A British Major stationed in India wrote the following:

«It becomes a question how far it would not be well to employ in each region where necessity exists a certain number of paid tiger-killers or snake-destroyers, as the case might be, whose sole and special duty would be to follow their vocation just like the mole-catcher and rabbit-killer in our country. If the extermination of creatures which prey upon herbivores were taken up as systematically in India as the extermination of creatures which prey on game in England, there is no reason why very satisfactory results should not be obtained[86]. And extermination happened as between 1875 and 1925, 80 000 tigers, more than 150 000 leopards, 200 000 wolves were wiped out»[87].

The story of the tiger bounties in the Malay world or in India is, therefore, part of the much larger story of how Western trading companies and governments attempted to rid the tropical areas where they held sway of dangerous animals, or at least that were perceived to be dangerous[88]. It is interesting to note that the Javan and Bali tigers went extinct and the Sumatran, Malayan and Indochinese species are on the verge of extinction. As pointed out by Boomgard, hunting is a historical phenomenon practiced both by kings and the nobility and hunter-gatherers and when it comes to dangerous predators such as

[81] P. Boomgaard, *Frontiers of Fear, Tiger and People in the Malay World 1600-1950*, New Haven, Yale University Press, 2001, p. 87.
[82] P. Boomgaard, *op. cit.*
[83] Ibid.
[84] M. Rangarajan, op. cit., p. 23.
[85] Ibid., p. 25.
[86] Ibid., p. 22.
[87] Ibid., p. 32.
[88] P. Boomgaard, *op. cit.*

big cats or wolves the intent was always to rid the environment of these animals[89]. What is under criticism is the utilitarian mindset which remains firmly entrenched in Western countries. Ironically, in India it is the tiger's value as a trophy which motivated the British authorities to conserve it when it was on the brink of extinction[90] as another illustration of the utilitarian mindset. It was already too late for the cheetah which was less valued. The utilitarian mindset is still very pregnant today. Whereas it is in its name that species were eradicated, it is also in its name that reintroduction of predators is not considered by the British authorities when it comes to wolves, bears and lynxes. In stark contrast, the Government of India is willing to reintroduce cheetahs against all odds thanks to the more ecocentric approach which is more prevalent in Indian culture through the Vedas, Hinduism and Jainism.

Under a utilitarian perspective, an animal is only allowed to live if of some use to mankind[91]. The historical case of the cheetah illustrated this perspective perfectly and is further reflected in the preambles of most international conventions dealing with the protection of wildlife be it the Washington Convention on International Trade in Endangered Species of Wild Fauna and Flora or the Convention on the Conservation of Migratory Species which recognize that wild animals must be conserved for the good of mankind. As soon as any species is perceived as a threat to human interests, mass killing with intent to eradicate becomes legitimate[92], even by today's standards. Not so long ago, the 1900 Convention for the Preservation of Wild animals, Birds and Fish in Africa listed in its Schedule 5 «Harmful animals desirable to be reduced in number» which included the whole guild of African predators from lions to baboons, otters, crocodiles, pythons and large birds of prey. The convention «encouraged the destruction of the eggs of crocodiles, poisonous snakes, and pythons». Even though provisions such as the one of the 1900 Convention are rare, they left a legacy even in modern conservation treaties and domestic legislations. Most international conventions on the protection of biodiversity actually provide for exemptions enabling a state to exert lethal control of species under given circumstances which usually framed in vague language. Article 9 of the Bern Convention for the Conservation of Wildlife and Natural Habitats of 1979 provide a host of exceptions where Contracting Parties could resort to lethal control of protected species under the Convention in defence of property and economic interests. The Bern Convention nonetheless provided some safeguard methods of control should not be detrimental to the survival of the population concerned. However, this does not mean that mass killings will not ensue. Especially for species such as the wolf which status has been downgraded by the

[89] Ibid., p. 107.
[90] M. Rangarajan, op. cit., p. 23.
[91] «The "value" of animals, specific eco-systems and distinct groups of people is measured instrumentally and anthropocentrically, from the point of view of corporate profit rather than inherent rights». R. White, *Environmental harm, an eco-justice perspective*, Bristol, Bristol University Press, p. 163.
[92] R. Woodroffe, S. Thirgood, A. Rabinowitz, *op. cit.*, p. 2.

Convention[93] specifically because the species is still to this day considered as a pest by some. R. White writes[94]:

«(...)The concepts of "pests" and "invasive species" are contested notions insofar as each reflects human interpretations of value and worth. The idea of "pest", for example, reduces the life, energy, activity and wellbeing to that of threat, worthlessness and nuisance relative to human objectives. It tends to portray targeted species in ways that foster eradication and fear of species rather than understanding or appreciation of broader ecological and zoological processes and imperatives». British born Indian naturalist Dunbar Brander writes about the leopard: «As leopards can be considered vermin, pure and simple, the ethics of how they are killed does not arise»[95].

Case on point, Art R-427-6 of the French Environmental Code defines as pest (or vermin) "nuisible" any animal species which harms public health and/or disturbs the smooth running of certain human activities. At the UK domestic level, the Prevention of Damage by Pest Acts previously known as the Rats and Mice (Destruction) Act 1919 is also a relic of this utilitarian mindset which can lead to the legitimate mass destruction of species. By extension, the mere fact that only endangered species or migratory are protected by the law and that species are further listed into appendix based on their conservation status translates this very idea of that there is hierarchy between animal species based on their value for mankind[96].

Another reason to rue the missed opportunity of a creating tailored ecocide/theriocide for the mass destruction of species, is that it could have enabled for a wider *actus reus* such as causing serious bodily or mental harm to members of the group. Such an actus reus would have enabled the taking into account concerns for animal welfare and well-being and the need to protect their habitat. As noted by Legge and Brooman, «ecocide masks issues that relate to animals alone in light of their sentient capacities»[97]. They further contended that environmental harms or crimes should include harm against animals such as abuse, mistreatment or death of animals and birds due to environmental hazards caused by men which would be a way to recognize their right to life[98]. While Article 6(c) which provide for deliberately inflicting on the group conditions of life calculated to bring about its physical destruction in whole or in part could have allowed to deal with the destruction of species habitat. However, the *mens rea* would have been more difficult to demonstrate in this latter hypothesis and this is where the concept of wantonness could have been useful. Contrary to the general crime of ecocide, the alternative and less stringent *mens rea* of

[93] Bern Convention Standing Committee approves EU proposal to modify wolf protection.
[94] R. White, *Species justice and harm to animals, Environmental harm, an eco-justice perspective*, Bristol, Bristol University Press, p. 119.
[95] A.A. Dunbar brander, *Wild Animals in Central India*, New Delhi, Nitraj Publishers, 2018 edition, p. 143.
[96] P. C. Lee, *People, Perceptions and 'Pests' Human-Wildlife Interactions and the Politics of Conflict*, in C. Hill, A.D. Webber, N.E.C. Priston (eds.), *Understanding Conflicts about Wildlife, a Biosocial Approach* in *Vol. 9 of Studies of the Biosocial Society,* New York-Oxford, Berghahn Books, 2017, pp. 15-29, p. 16.
[97] D. Legge, S. Brooman, *Reflecting on 25 Years of Teaching Animal Law: Is it Time for an International Crime of Animal Ecocide?,* in *Liverpool Law Review*, vol. 41, 2020, p. 212.
[98] Ibid. p. 212.

«wantonness» would also be easier to demonstrate as well. Eradication of species can take many forms: habitat destruction, any form of wildlife crime from poaching to illicit trafficking of species[99], any legal form of hunting or killing from trophy hunting to commercial hunting or combination or both. Some species such as the Asiatic lion and Asiatic cheetahs which used to be present from Israel to India were entirely wiped out as a result of habitat destruction and overhunting[100] (a small population of Asiatic lions remain in the Gir forest in Gujarat, India). In all these hypothesis, even habitat destruction for economic and social needs, it would be very hard for perpetrators not to be at least aware that there would be substantial risk of species eradication which would also satisfy the *actus reus* of «severe and either widespread or long-term» damage to the environment especially in light of the role played by keystone species such as apex predators which could affect the environment of other states through shared ecosystem services[101]. Mackintosh et al. rightly contend that the proportionality test to satisfy the wanton criteria based on social benefits would already be fulfilled at least for all endangered species listed under the CITES regime as their legal trade is subjected to a stringent permit system to ensure that an endangered species does not become extinct due to unsustainable trend[102]. A bold argument could also be made that if it is legally acknowledged that animals are sentient being, the requirement of «severe and either widespread or long-term» damage to the species conservation status might be unnecessary. No social benefits would justify the mass killing of any species regardless of their conservation status on the ground of their sentient status.

Regardless of the merits of creating a specific crime of ecocide in the form of mass destruction of species akin to genocide, one significant hurdle remains that it would nonetheless require a change of legal status for animals from natural resources to persons which is not without controversy. Animals are unequivocally sentient beings and their killing carries much more significant ethical implications than the destruction of other natural resources. Yet, the mere proposal to assimilate the mass killing of non-human animals to genocide is also highly controversial both from an ethical and legal perspective[103]. This is the hierarchy of victimhood described by Tanya Wyatt and Rob White which sets humans at the top of the hierarchy[104]. As such victimhood would be another hurdle to overcome.

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[99] K. Mackintosh, O. Swaak-Goldman, G. Dawson, G. Van der Woude, *Wildlife Crime: Testing the Waters for Ecocide*, in *An International Crime of Ecocide: New Perspectives*, Symposium 2023, p. 4.
[100] Divyabhanusinh, *The Story of Asia's Lions*, Mumbai, Marq Publications, 2008.
[101] Ibid., p. 6.
[102] Ibid., p. 8.
[103] Referring to some human groups as "animal" has been used as form of dehumanisation leading to genocide. See generally P-J. Delage, *La condition animale: Essai juridique sur les justes places de l'homme et de l'animal*, Le Kremlin-Bicêtre, MareMartin, 25 February 2016. Also G. Varona, *Restorative Justice for Illegal Harms Against Animals: A Potential Answer Full of Interrogations*, in B. Pali, M. Forsyth, F. Tepper (eds.), *The Palgrave Handbook of Environmental Restorative Justice*, Cham, Palgrave Macmillan, 2022, pp. 305-332, pp. 305-306.
[104] T. Wyatt, *Wildlife Trafficking: A Deconstruction of the Crime, the Victims, and the Offenders*, Basing-stoke, Palgrave MacMillan, 2013, p. 74.

3.4 The limited scope of victimhood under criminal law and unsuitable reparations further diminishes the relevance of criminal law to deal with ecocide.

Another limitation of criminal law which derives from its intrinsically anthropocentric character is that the first victims of ecocide which could encompass any element of the environment cannot have standing before either the ICC and most domestic courts[105] and cannot be considered as victims which has some serious repercussions on reparations. Non-human animals cannot be classed as victims of a crime[106] and environmental harm has for a long time been considered as a victimless crime[107]. If we take the ICC regime, Rule 85 of the Court's Rules of Procedure and Evidence, only natural and legal persons who have suffered or sustained physical, material, psychological and or moral harm with a causal nexus to a crime for which the defendant was convicted may qualify as victims. There is now a body of evidence that there is a continuum between humans and non-human animals[108]. The latter have sentience and can feel pain, emotions and have even cultures[109] at least for those who are part of the *chordata* and even cephalopods. Whereas both international law and most domestic jurisdictions are still oblivious of this body of scientific evidence, there is nonetheless an emerging legal trend in favour of the recognition of animal rights based on characteristics that they share with humans. Indian[110], Argentinian[111] and New Zealand courts have recognized that animals have legal rights. The World Trade Organization through one of its Appellate Body expressly acknowledged the European Union's view that the protection of animals is value of high importance and matter of public morals[112]. The constitutions and laws[113] of several countries have also granted rights to nature. There is now a growing number of academics who also

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[105] *Nonhuman Rights Project, Inc. v. Cheyenne Mountain Zoological Society*, No. 24SA21(Colo. Jan. 21, 2025).
[106] R. White, *Green victimology and non-human victims*, in *International Review of Victimology*, Vol. 24, 2, 2017, pp. 239-255, p. 241.
[107] M. Flyn, M. Hall, *The case for a victimology of nonhuman animal harms*, in *Contemporary Justice Review*, vol. 20, 3, pp. 299-318.
[108] S. Hurn, *Humans and other animals, Cross-cultural perspectives on Human-Animals Interactions*, London, Plutopress, 2012.
[109] M. Bekoff, J. Pierce, *Wild Justice, the Moral Lives of Animals*, Chicago, The University of Chicago Press, 2009.
[110] See *Animal Welfare Board v. A. Nagaraja*, Supreme Court of India, 7 May 2014A. *Periyakaruppan vs The Principal Secretary to Government and The Additional Chief Secretary and Commissioner of Revenue Administration*, Madras High Court, 19 April 2022, *Lalit Miglani vs State of Uttarakhand and Other*, High Court of Uttarakhand, 30 March, 2017; *Mohammed Salim v. State of Uttarakhand*, High Court of Uttarakhand, 20 March 2017.
[111] In the case, CCC 68831/2014/CA1 an orangutan and EXPTE.NRO.P-72.254/15 of November 3, 2016 chimpanzee were recognized as legal persons and granted legal rights. In another case from 2022 before a court in Buenos Aires, a cougar was declared «subject of rights» (Court of First Instance in Criminal, Juvenile, Felony and Misdemeanor Matters No. 3, Ledesma, Diego Alberto Chamber 1 – Animal Protection Act. Abuse or Acts of Cruelty, Number: IPP 149744/2022-0.
[112] *EC – Measures Prohibiting the Importation and Marketing of Seal Products*, 22 May 2014, para 5.202.
[113] See Articles 71 to 74 of Ecuador Constitution recognizing the rights of «Pachamama», Bolivia Framework Law on Mother Earth and Integral Development to Live Well of 15 October 2012, Panamanian Law No. 285, Argentina Ley 14.346.

support the idea of animal rights[114] and long are the days where the concept of granting rights to nature was subject to ridicule.
Under such perspectives, one could think that animals which the aforementioned jurisdictions consider as legal persons would be considered as natural persons under Rule 85 (1) and be considered as direct victims or at least indirect victims of harm under Rule 85(a). As pointed out by Peters, the fact that a «person» is incapable to bear any legal responsibilities and societal duties should not prevent that «person» to be granted rights and to have standing in court through representation citing the example of infants and mentally handicapped humans[115] and one may add purely legal constructs such as corporate entities. Yet, there is a consensus that animals cannot qualify as victims before the ICC and in most domestic jurisdictions even in those which have incorporated the crime of ecocide in their criminal legislative arsenal[116]. As pointed by M. Lostal, the ICC has adopted the theory of human exceptionalism[117]. Rule 89(1) and its interpretation by the Trial Chamber in the Lubanga case further confirms this theory «whilst the ordinary meaning of Rule 85 does not per se limit the notion of victims of the crimes charged, the effect of Article 68(3) of the Statute is that participation of victims in trial proceedings, pursuant to the procedure set out in Rule 89(1) of the Rules, is limited to those victims who are linked to the charge»[118]. At best animals victims of ecocide could be used to compensate their guardians or other human beings connected to them in some ways (park wardens, conservationists) as indirect victims[119].
Because criminal regimes, be it at the international or domestic level only have human interests at heart, none of the reparations would make much sense as shown by Article 75(2) of the Rome Statute where victims may be awarded reparations in the form of restitution, compensation and rehabilitation. From an ecocentric or zoocentric[120] standpoint, restoration would be the only relevant form of reparations as advocated by Polly Higgins[121]. The idea of restoration has also been vouched by Rachel Killean where she considered

[114] A. Peters, *Animals in International Law, The Pocket Books of the Hague Academy of International Law,* Leiden, Brill Nijhoff, 2021; W. Scholtz (ed)., *Animal Welfare and International Environmental Law, From Conservation to Compassion,* Cheltenham & Northampton, Edward Elgar, 2019, S. Brels, *Le Droit du bien-être animal dans le monde*, *Évolution et universalité*, Paris, l'Harmattan, 2017.
[115] A. Peters, *Liberté, Égalité, Animalité: Human-Animal Comparisons in Law*, Symposium Article in *Transnational Environmental Law*, p. 1, Cambridge University Press, 2016, pp. 21-22.
[116] M. Lostal, *De-objectifying Animals, Could they Qualify as Victims before the International Criminal Court?*, in *JICJ*, 2021, pp. 583-610 pp. 583-584. G.M. Frisso, *Ecocide, The Environment As A Victim At The International Criminal Court*, in *International Crimes Database*, 2023.
[117] M. Lostal, *op. cit*., p. 592.
[118] Appeals Chamber, *Prosecutor v Thomas Lubanga Dyilo*, Judgment on the appeals of The Prosecutor and The Defence against Trial Chamber's I's Decision on Victims', Participation of 18 January 2008, 11 July 2008, ICC-01/04-01/06-1432, para. 58 (p. 18).
[119] G.M. Frisso, *op. cit*., p. 17.
[120] Some authors distinguish between ecocentric and zoocentric approaches, the latter being more specific to non-human interests. (See J.E. Schaffner, *Value Wild Animals and Law*, in W. Scholtz (ed.), op. cit., pp. 8-37, p. 13.
[121] P. Higgins, *Eradicating Ecocide*, London, Shepheard Walwyn, 2015, pp. 143-148.

restoration as a form of restitution or if not feasible payment of the costs and expenses incurred in restoring the environment[122]. She went even further by emphasizing the collective experience of ecocide which may require a collective response which may involve various forms of rehabilitation measures such as regenerative and protective projects focused on restoring ecosystems[123]. Particularly noteworthy in Killean's approach is that reparation should be based on 3 ecocentric principles: recognition of the interconnected nature of human and other than human harm and repair, the expansion of the Court's no harm principle to encompass "eco-sensitive" approaches to reparation, and an expansive and ecocentric understanding of the principles of dignity, non-discrimination and non-stigmatisation[124]. The first principle is of particular relevance to the issue of ecocide in the form of eradication of species as it is a form of acknowledgment of the sentient status of non-human animals, opens the path to victimhood alongside humans as the well-being of the latter cannot be accomplished without consideration to wellbeing of nonhumans who are part of the natural world[125]. The second principle delineated would complement the first as it enables the ICC to adopt what Killean coined as an eco-sensitive approach[126].
The merit of this approach is that it could be applied to both future ecocides which Killean focused upon but also ecocides of the past the effect of which continue today. An argument will be made that it may be more relevant to move away from the ICC regime and criminal law both at the international and domestic level as a whole as there are too many legal hurdles to appropriately tackle the issue of ecocides in the form of extinctions of species and more specifically past extinction of species. Several countries[127] have introduced the crime of ecocide in their penal arsenal and yet there is no record of a single case worldwide[128]. Restorative justice may prove to be a better option as it would encompass Killean's ideas of collective harm and reparation but without the punishing element which may explain why ecocide will never be adopted as a 5th crime under the ICC regime. Restorative justice may be a step towards a more constructive approach to mend the effect of ecocides of the past in the form of extinction of species and offer a legal ground for rewilding.

4. The quest for another legal ground for restoration of extinct species

4.1. Environmental Restorative Justice (ERJ) as a new legal ground to remedy ecocides of the past through rewilding efforts.

Although rewilding and restoration may involve similar actions and may overlap, there is a

[122] R. Killean, *Reparation in the Aftermath of Ecocide*, in *An International Crime of Ecocide: New Perspectives* Symposium 2023, p. 9.
[123] R. Killean, *op. cit.*
[124] Ibid.
[125] Ibid., p. 6.
[126] Ibid., p. 7.
[127] Russia (1996), Kazakhstan (1997), Kyrgyz Republic (1997), Tajikistan (1998), Belarus, (1999) Georgia (1999), Armenia (2003), Ukraine, Belgium (2024), Brazil (2023), France,
[128] R. Killean, D. Short, *op. cit.*, p. 18.

distinction between the two terms. According to du Toit and Pettorelli[129], restoring implies returning something to its former condition or state. In contrast, rewilding means returning wildness, which is untamed, imperfect, unruly and always changing in ways that are not entirely predictable. The term restoration will be used here because restorative justice seeks to restore parties to the positions they were in before crimes were committed[130]. That would translate in our case into restoring populations of extinct British predators through rewilding efforts. At the bottom of it lies the idea that there is a moral duty owed to the exterminated wolves, bears and lynxes. Justice for the members of the species which have been eradicated. ERJ is the direct application in environmental matters of restorative justice defined by the Crown Prosecution Service as a process through which parties with a stake in a specific offence collectively resolve how to deal with the aftermath of the offence and its implications for the future[131]. According to the CPS, the aims of RJ are:
- Victim satisfaction: to reduce the fear of the victim and ensure they feel "paid back" for the harm that has been done to them.
- Engagement with the perpetrator: to ensure that they are aware of the consequences of their actions, have the opportunity to make reparation, and agree a plan for their restoration in the community.
- Creation of community capital: To increase public confidence in the criminal justice system and other agencies with a responsibility for delivering a response to anti-social behaviour.

Environmental Restorative Justice has been designed to address the failure of justice systems[132] which is also at the root of the Earth Jurisprudence movement. Coined by Thomas Berry, the philosophy behind Earth Jurisprudence revolves around the interconnectedness and wholeness between all components of nature, including mankind[133][134]. More concretely, it implies that all Earth creatures form a community which are subjected to the same laws which impose a duty of care to one another, especially humans as a result of their creativity and destructive power[135]. Central to this new paradigm is that: «Every component of the Earth Community has three rights: the right to be, the right to habitat, and the right to fulfil its role in the ever-renewing processes of the Earth Community»[136]. These three principles could offer a solid legal ground to restore species such as Scotland's lost guild of predators in order for them to fulfil their role in the British

[129] J.T. Du Toit, N. Pettorelli, *The differences between rewilding and restoring an ecologically degraded landscape*, in *J apple Ecol.*, vol 56, 2019, p. 2468.
[130] S. Porfido, *The use of restorative justice for environmental crimes in the European Union's legal framework* in *Queen Mary Law Journal*, 1, 2021, p. 106.
[131] Restorative Justice.
[132] M. Forsyth et al., *Environmental Restorative Justice: An Introduction and an Invitation*, in B. Pali, M. Forsyth, F. Tepper (eds.), *The Palgrave Handbook of Environmental Restorative Justice*, Cham, Palgrave Macmillan, 2022, p. 3.
[133] Ibid., See also C. Cullinan, *Wild Law: A Manifesto for Earth Justice*, ebook, Totnes, Devon, Green Books, p. 100.
[134] R. White, *Environmental harm, an eco-justice perspective*, Bristol, Bristol University Press, 2013, p. 148.
[135] Ibid.
[136] C. Cullinan, *Wild Law*, *cit.*

ecosystems.

Restorative Justice is indeed at the heart of Earth Jurisprudence and Wild Law[137]. Within this perspective, restorative justice is defined as «a system of remedies based on restorative, rather than retributive justice (...) were it is possible for the offender or wrongdoer to make appropriate amends and rejoin the community as quickly and efficiently as possible in the interests of the well-being of the whole»[138]. In a way, ERJ veers away from punitive ecology[139] perspective encapsulated by the criminal law concept of ecocide for a more constructive approach which may be better embraced not only by states but also the public at large. This may be especially necessary in the case of perpetrators who resort to bush meat and poaching to make ends meet[140]. Forsyth et al. demonstrate that ERJ provides for a more flexible approach to harm enabling it to extend to situations currently not covered by other justice frameworks. The ambiguity and struggles around the definition of ecocide to make it fit the ICC template resulted in a definition so unclear that it would hamper any effort to prosecute. The flexibility offered by ERJ transcends the strict categories of international criminal law. Concepts of victimhood, harm, remedies can be given a much broader scope. It provides for other fora of justice that the current UK law or international law do not allow because they do not recognize Nature and non-human animals as subject of laws. At the root of ERJ is the recognition of the intrinsic value of nature denied by traditional justice systems[141] through the attribution of rights[142]. Forsyth et al. provide the example that a restorative process, a restoratively-focused plan of action or a restorative contract which contains suggestions to prevent or repair harms and damages can be collaboratively drawn up and agreed to, and because it is inclusive and participatory, such a contract and plan of action has more potential to be sustainable and transformative[143]. Forsyth et al. further describes the process as one based «relationality, both as a matter of inter-existence and as aspiration and on the need to respect and listen to different perspectives and on an understanding of the need to value and support connections between humans, between humans and more-than-humans and between humans and Nature. ERJ calls simultaneously to the past and the future»[144]. Whereas criminal law due to the principle of legality turns mostly to the future. ERJ is further described a both healing and reparative because it can be both preventative and proactive[145]. As such it seems better suited to deal with ecocides of the past than any other area of the law.

[137] Ibid., p. 108.
[138] Ibid., p. 108.
[139] S. Porfido, op. cit., p. 106.
[140] R. White, D. Heckenberg, *Green criminology: An introduction to the study of environmental harm*, London, Routledge, 2014.
[141] J. E Schaffner, *Value, wild animals and law*, in W. Scholtz (ed.), *op. cit.*, pp. 8-37, at p. 8.
[142] H. Wessels, *Nature's Rights & Development Remedies: Enabling Substantive and Restorative Relief in Civil Litigation* in B. Pali, M. Forsyth, F. Tepper (eds.), *The Palgrave Handbook of Environmental Restorative Justice*, Cham, Palgrave Macmillan, 2022, pp. 101-125, pp. 106-107.
[143] H. Wessels, *op. cit.*, pp. 11.
[144] Ibid., pp. 3-4.
[145] Ibid., p. 4.

Another advantage of environmental restorative justice is that similarly to transitional justice processes, it operates a reconciliation between perpetrators and victims, enabling some form of relief without relieving guilt and accountability but without the punishing elements. In a way, environmental restorative justice seeks to heal rather than punish. ERJ operates a reconciliation between mankind and nature. Wessels and Widjekop talk about ERJ as «a vehicle for reintegration of the wrongdoer into the community within which the wrongdoer caused harm»[146]. H. Wessels contend that the development of the ecocentric approach promoted by Earth Jurisprudence in litigation in Ecuador and Colombia has the potential to influence and strengthen relationships between humans and Nature, and promote restorative justice and ecological restoration[147]. Because the essence of restorative justice is to repair harm and those who have been harmed, non-human can be encompassed as victims and there is no principle of legality which can prevent looking into past ecocides[148]. This is the greatest advantage between ERJ and Earth Jurisprudence is the equal consideration given to both humans, non-humans other natural entities[149]. Indeed, as indicated by Cullinan, the more ecocentric approach offered by ERJ does not mean that animal rights will be given precedence over human interests as all rights are given equal weight and status[150].
It is this same flexibility which will enable non-human animals to be considered as victims[151]. Although, a dialogue -a central element to restorative justice processes[152] cannot be initiated directly with non-human animals as such. Perpetrators from corporations to individual wrongdoers will have the opportunity to get a perspective on the harm that they have done and engage in a reflective process. A dialogue can also be initiated with humans who are directly or indirectly impacted by ecocide either because of the resulting environmental harm or due to their involvement in the protection of non-human animals or both[153]. When it comes to ecocides of the past, perpetrators are long gone, but dialogue can also be initiated with those who oppose restoration of species. Varona talks about animals as agents or recipients of that justice[154]. R. White takes the example of the reintroduction of wolves in Yellowstone in National Park which was considered as a duty to the wolf as a species in opposition to ranchers[155]. As hinted by R. White, there is a moral duty which can serve as a legal ground to restore apex predators in the UK. Because mankind

[146] H. Wessels, F. Widjekop, *Restorative and Earth Jurisprudence* in B. Pali, M. Forsyth, F. Tepper (eds.), *The Palgrave Handbook of Environmental Restorative Justice*, Cham, Palgrave Macmillan, 2022, pp. 75-99, p. 75.
[147] H. Wessels, *op. cit.*, p. 103.
[148] H.Wessels, *op. cit.*, pp. 6 and 10-11.
[149] H. Wessels, F. Widjekop, *op. cit.*, p. 75.
[150] C. Cullinan, *op. cit.*
[151] R. White, *Green victimology and non-human victims*, in *International Review of Victimology*, vol. 24, 2, 2018, p. 240.
[152] G. Varona, *op. cit.*, pp. 305-306.
[153] Ibid., p. 315.
[154] Ibid. *op. cit.*
[155] R. White, *Green victimology*, *op. cit.*, p. 240.

is responsible for the theriocide of wolves, bears and lynxes, it could be argued the UK has a moral and legal duty towards the species to restore them to the British wilderness. The flexibility of ERJ is reflected in its procedural and governance mechanism based on mediation, restorative justice conferences where the offense is acknowledged, an apology offered and some form of restitution or compensation to the victim of the group to heal the relationship[156]. Example of use of ERJ includes the New South Wales Land and Environment Court which is empowered to give due considerations to animals and plants and is considered by some by engaging in restorative justice[157] even though its mandate does not specifically make reference to it. Wessels and Widjekop provide several examples where ERJ has effectively been used and where trees and rivers have been considered as victims in four New Zealand restorative justice conferences[158] and one Canadian restorative justice conference[159]. In the New Zealand cases, the trees were cut down without the required resource consent. They were considered as victims with the local council acting as their representative. In another case, a river was represented as sediment laden storm water was illegally discharged from a quarry affecting the quality of the water of a river of cultural significance. The perpetrator had to make a donation to the Lower Waikato River Society instead of paying a fine. We can see here how this approach could be more constructive than punishment[160]. In a case where a perpetrator who discharged some contaminants in a river agreed at the restorative justice conference to put $80 000 in a trust and apologized for the offence[161]. The most significant case is that of *CopCan Contracting Ltd. and the District of Sparwood (2010)*[162], where 29 fish died as a result of dewatering in 2009. Members of the community represented the interests of the river. Restitution was agreed by the perpetrators through habitat compensation plan, riparian improvements to increase the juvenile fish-rearing habitat and a letter of apology[163]. Restorative justice processes in New Zealand are integrated within the criminal justice system through the Sentencing Act 2002. Section 24A (2)(a) especially provides for restorative justice processes in certain cases where the Court will have to adjourn criminal proceedings to determine whether a restorative justice process is appropriate in the circumstances of the case. Section 24A applies if the offender has pleaded guilty to the offence and there are 1 or more victims and no restorative justice process has previously occurred in relation to the

[156] I. Mason, in C. Cullinan, *Exploring Wild Law*, Ed. P. Burdon, 2011, Kindle edition.
[157] R. Walters, D.S. Westerhuis, *Green crime and the role of environmental courts*, in *Crime Law and Social Change*, 59, pp. 279-290.
[158] *Auckland City Council v 12 Carlton Gore Road Ltd and Mary-Anne Catherine McKay Lowe*, Auckland District Court (MCElrea DCJ), 11 April 2005 (see Hamilton 2015, p. 552).
[159] H. Wessels, F. Widjekop, *op. cit.*, p. 85.
[160] Ibid. See *Waikato Regional Council v Huntly Quarries Ltd and Ian Harrold Wedding*, Auckland District Court (McElrea DCJ), 30 July 2003 and 28 October 2003 (see MCElrea, 2004, pp. 13-14).
[161] DC Auckland, CRN 20050040131612, 2 March 2006, Judge McElrea (see S. Porfido, *op. cit.*, pp. 116-118).
[162] British Columbia, Natural Resource Compliance and Enforcement Database (25 January 2022).
[163] H. Wessels, F. Widjekop, *op. cit.*, p. 86.

offending. Between 2001 and 2012, restorative conferences were used in 33 prosecutions according to report from the Ministry of the Environment[164]. We could imagine a similar scheme for wolves, bears and lynxes of Scotland where restitution in the form of rewilding would be an adequate remedy from the British Government as the successor to some of the perpetrators.

Despite all the flexibility that it can offer ERJ does not solve all problems in connection quantifying harm. As Schaffner pointed out, acknowledging that wild animals have intrinsic value also means their value is unquantifiable or priceless[165]. If non-human animals could be considered as victims, quantifying and measuring harm and the adequacy of restorative measures remains a guessing game[166] and anthropocentered[167]. Wessels argue that it is the very purpose of ERJ not to quantify harm to Nature as this would be a fall back to anthropocentrism which is contrary to the very spirit of ERJ[168]. Even when the interests of non-human animals are represented it is still done under a human perspective[169]. In a way, the will to stop mankind's destruction of Nature even in the name of its intrinsic value is not completely devoid of anthropocentric motives. At the bottom of it the fate of humanity as part of the Natural world is at stake[170].

ERJ is also still at its inception and not yet well embedded in domestic or international legal systems. Even countries like Australia which are often hailed in the literature as a pioneer in the field of ecocentric justice especially as a result of New South Wales Environmental Court remain grounded on «economic rationalisation»[171]. Assuming that a moral basis can be found through Earth Jurisprudence and Wild law, the question remains as to the institutional basis[172]. G. Varona proposes a Spanish perspective where she proposes to embed ERJ within the Spanish Criminal Framework through three phases[173]. The first phase would seek to identify participants (humans and animals through representative) and their needs and set the stage for the dialogue process, the second phase would consist in the dialogue stage with facilitators enabling perpetrators to reflect on their actions and establish a connection which would lead to restorative agreements. Under our case, this would be restoring the species in the wild. The third stage would encompass monitoring that the restorative agreement is implemented.

5. Conclusion.

Neither the current international law nor domestic law frameworks offer a satisfactory res-

[164] S. Porfido, *op. cit.*, p. 116.
[165] J. E Schaffner, *op. cit.*, p. 20.
[166] R. White, *op. cit.*, p. 249.
[167] J. E Schaffner, *op. cit.*, p. 20.
[168] H. Wessels, *op. cit.*, p. 120.
[169] B. Pali, I. Aertsen, *Inhabiting a vulnerable and wounded earth: Restoring response-ability,* in *The International Journal of Restorative Justice*, vol. 4, 1, 2021, pp. 3-16, p. 5.
[170] R. White, *Environmental harm, op. cit.*, p. 148.
[171] B. Sydes, *The challenges of putting Wild Law into practice*, in M. Maloney, P. Burdon (eds.), *Wild Law – In Practice*, Abingdon, Routledge, 2014 pp. 58-72, p. 58 and 65.
[172] R. White, *Environmental harm*, *op. cit.*
[173] G. Varona, *op. cit.*, pp. 318-322.

ponse to ecocides of the past. Although these regimes do not prevent restoration of species or rewilding to restore ecosystems and would even encourage them, they nonetheless allow for utilitarian considerations to prevail over environmental and zoocentric ones. It is a way ironic that utilitarian considerations should prevail over ecocentric ones as the latter are more likely to benefit a greater number of persons which is the very purpose of utilitarianism. If initiatives to criminalise ecocides are certainly commendable, well enshrined principles of criminal law will prevent to take into account past ecocides which continue to produce their effect today. This is especially the case of ecocides in the form of eradication of species such as the apex predators of the United Kingdom. Moreover, all ecocide legislative proposals fail to properly encapsulate the specificities of eradication of species/sentient beings as form of ecocide. It seems that environmental restorative justice could offer a glimmer of hope as more flexible and more likely to take into considerations the plight of non-human animals. Yet, the system remains in its infancy would need to be further developed and tested to really make an impact. There is also a big question mark as to whether such a system based on ecocentric would work in the United Kingdom, the cradle of utilitarianism. Whereas to UK laws are almost tailored to prevent reintroduction of extinct species, it is likely that the introduction of Environmental Restorative Justice would not be enough to restore these species to the wild unless one manages to reconcile the farming community with apex predators and show that the latter could actually benefit the former.