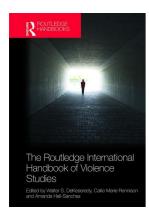
This article was downloaded by: 10.3.98.93

On: 26 May 2019

Access details: subscription number

Publisher: Routledge

Informa Ltd Registered in England and Wales Registered Number: 1072954 Registered office: 5 Howick Place, London SW1P 1WG, UK



The Routledge International Handbook of Violence Studies

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Publication details

https://www.routledgehandbooks.com/doi/10.4324/9781315270265-28

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Published online on: 30 Oct 2018

How to cite: - Paul B. Stretesky, Bonnie Berry. 30 Oct 2018, An alternative view of animal abuse

from: The Routledge International Handbook of Violence Studies Routledge

Accessed on: 26 May 2019

https://www.routledgehandbooks.com/doi/10.4324/9781315270265-28

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An alternative view of animal abuse

Violence against the environment and all its creatures

Paul B. Stretesky and Bonnie Berry

Introduction

We realize that the title to this chapter is shocking and depressing. We also realize that, unfortunately, it is an accurate depiction of the content of this chapter and the state of the world. Our point in writing this chapter is to show that environmental damage is a form of violence. When the environment is attacked, so are human and nonhuman animals, be those nonhumans polar bears, bees, wolves, manatees, or others. Ordinarily, we think of animal abuse as direct and individual, such as neglect, starvation, assaults, and murder of animal companions and farm animals, animals misused for entertainment, and the like. A stark example would be the cruelty of a woman's spike heel impaling a live (soon-to-be-dead) kitten, as videotaped for the amusement of cruelty-minded humans. Yes, these are all examples of animal abuse. However, on a far larger scale, often invisible and usually indirect, are environmental abuses that nonhuman animals endure. These animals may be the above-mentioned (companions and others) and they can be wildlife.

In this chapter, we argue that environmental degradation should be thought of as violence in the same fashion as the more personal and direct forms of violence such as assaults and homicide. Environmental violence, as we refer to it, can occur through a variety of legal or illegal means and it can involve violent acts against humans and nonhumans, such as poisoning, battery, suffocation, burning alive, starvation, and false imprisonment. We therefore refer to environmental deaths and assaults as environmental violence throughout this chapter. It may be hard to imagine how environmental degradation can be considered a form of violence, as we are not accustomed to thinking beyond individual actions when we think about violence. As a result, we will lead the reader through our thought process, drawing upon the literature from several different disciplines that have recognized the danger posed by environmental degradation. Our discussion of environmental degradation is centered upon a comparison of harm as caused by environmental and more orthodox forms of violence. We

flesh out our comparison with a discussion of environmental regulations and laws whose violations are not necessarily considered crimes, even though humans may see these violations as "wrong," as they are not prohibited by criminal statutes. This particular issue is important because it signifies the importance that humans place on the biosphere; that is, we recognize that environmental destruction of the Earth and its inhabitants is wrong, and yet there is an absence of penalties against the wrongdoers. As with ordinary crimes of violence, we must discuss the motivations for environmental crimes, the potential for compensation, and the current political climate that seems unimpressed with environmental damage. We conclude by offering our definition of environmental violence that is compatible with our overall view that environmental violence threatens the Earth itself and all its inhabitants.

What is environmental violence?

We begin our investigation by pointing out that the orthodox conception of violence has failed humans and nonhumans. We suggest a new definition of violence, one that is rooted in the concept of environmental degradation. To begin, Stretesky and Lynch (1998, p. 164) observe that the word "violence" is often conceptualized as "one-on-one physical force exerted through fists, feet, clubs, knifes, and guns." We label this conceptual definition of violence the "orthodox definition," because most people, including many criminologists, believe that violence is intentional behavior carried out by individuals to "threaten, attempt, or inflict physical harm on others" (Rosenfeld, 2010, p. 1). The ideology that has produced this orthodox definition of violence "is like a set of blinders [that] keep us from calling a mine disaster a mass murder" (Reiman & Leighton, 2015, p. 79; see also Gouldner, 1976). We suggest these blinders be cast off and environmental degradation be viewed as the single biggest form of violence facing the Earth and its inhabitants. To illustrate our opinion that environmental violence is not given the attention it deserves, consider global public opinion polls that rank people's attitudes about the greatest threats to the world. In one survey of 17 major countries, "global terrorism" ranks as the single biggest threat facing the planet (Dahlgreen, 2016). Another recent and similar global public opinion survey carried out in 38 countries by the Pew Research Center ranked the "Islamic militant group known as ISIS" as the greatest danger to the world (Poushter & Manevich, 2017). In both sets of polls, environmental concerns (e.g., "climate change") did make the list, but it is clear that violence - and terrorism-related violence in particular - is the top concern in many countries of the world. Although people are right to be concerned about terrorist groups such as ISIS, the simple fact is that these forms of orthodox violence tend to draw attention away from other important threats to global citizens. For example, let us compare some causes of human death around the globe. The National Consortium for the Study of Terrorism and Responses to Terrorism (2017) estimated that, in 2016, terrorists caused 34,676 deaths and 39,851 injuries worldwide. We can add 437,000 homicides to this estimate as determined by the United Nations Office of Drugs and Crime (2013). Together, these two orthodox forms of violence are treated as crime and are responsible for nearly half a million deaths around the world. At the same time, public health researchers estimate that there are more than 4 million human deaths worldwide as a result of environmental factors (Cohen et al., 2005; see also Briggs, 2003, p. 20). These numbers are summarized in Table 24.1 so that comparisons can be made between the two forms of violence.

As Table 24.1 demonstrates, violence to humans as a result of environmental factors far outnumbers deaths from homicide and terrorism combined. In fact, for every death caused by terrorists and murderers, there are nine deaths associated with environmental degradation in the form of air pollution. Data on indicators of environmental degradation suggest this gap will more

Table 24.1 Estimates of deaths across the globe from environmental factors and terrorism

Cause of death	No. killed
Unsafe water	1,730,000
Outdoor air pollution	799,000
Indoor air pollution	1,619,000
Lead exposure	234,000
Terrorism	34,676
Homicide	437,000
Total deaths	4,853,676
Ratio of environment degradation	9.29 to 1
to terrorism & homicide	

Note: Numbers of deaths resulting from "unsafe water," "outdoor air pollution," "indoor air pollution," and "lead exposure" were adapted from Table 1, entitled "Excess deaths from selected environmental factors" in Cohen et al. (2005, p. 5).

than likely widen over time. For instance, let us examine data measuring the Earth's "ecological footprint." The ecological footprint or "appropriated carrying capacity" was proposed as an important planning tool by scientist Mathis Wackernagel in 1994 (p. 4). Wackernagel's idea was to develop an indicator measuring the "ecological assets" needed to support ecological withdrawals and additions. When applied to the Earth, this concept can be interpreted as a "global footprint" and can be expressed as the number of Earths needed to support life in any particular year. In 1970, humans were using exactly what the Earth could sustainably produce (Global Footprint Network, 2018). That is, in 1970, the Earth was estimated to be at "biocapacity," and therefore the global ecological footprint was estimated to be "1." Since 1970, however, there has been a steady increase in the ecological footprint, and, in 2013, the Global Footprint Network suggested that we need 1.68 Earths to support the world's consumption and pollution practices. If we continue "business as usual," we can expect that by 2030 we will use more than two Earths to support our consumption practices (see www.footprintnetwork.org/our-work/ecological-footprint/). This means that we are accelerating our harmful practices.

We extend the concept of the global ecological footprint to violence and suggest that the expansion of pollution and natural resource extraction in relation to the Earth's carrying capacity is a harbinger for trends in environmental violence. That is, we suggest that the ecological footprint will tend to be positively correlated with the types of environmental death reported in Table 24.1. Only time will tell if we are correct, but we predict that the gap between environmental and orthodox violence will only increase if the ecological footprint is any indicator of deaths that result from environmental degradation. Indeed, we have history on our side. For instance, Cohen et al. (2017) estimate that, between 1990 and 2015, the number of worldwide deaths due to ambient air pollution increased enough to remain one of the biggest mortality risk factors. Importantly, risk for death from air pollution is highest among low-income countries. The researchers point out, "should these trends [in air pollution] continue, they will lead to increasing burdens" (Cohen et al., 2017, p. 1908). In short, past behavior concerning environmental violence is likely to be a good predictor of future behavior.

Table 24.1 and the concept of the ecological footprint and increasing deaths due to environmental degradation lead us to argue that an alternative definition of violence is

needed to emphasize the serious nature of environmental deaths. To be sure, we are not the first academics to question the definition of violence with respect to environmental causes. For example, more than twenty years ago Christopher Williams (1996) asked, "Why do we not readily conceptualize environmental victimization and resultant injury as violence?" (p. 191; see also Lynch, Long, Barrett, & Stretesky, 2013, for a general discussion of environmental crime). Our definition of environmental violence uses the information in Table 24.1 to argue that environmental degradation is an important aspect of violence. Environmental degradation is the release of pollution into the environment and/or the extraction of natural resources from the environment in such a way that it impedes an ecosystem or the natural functioning of plants and animals together in a biological community (Schnaiberg, 1980). If we assume that a healthy ecosystem is desirable because it provides us with "resources necessary for life [such as] clean air and water, food, and shelter," then environmental degradation can simply be expressed as any undesirable disruption to the ecosystem (Dunlap & Marshall, 2007, p. 329; see also Aye, Edoja, & Charfeddine, 2017, p. 2, and Johnson et al., 1997). As we will explain, these conditions should be conceptualized as violent to humans and nonhumans.

Mala en se or mala prohibita

Crimes can be divided into two categories, mala en se and mala phohibita. Mala en se crimes violate our basic moral sensibilities. Mala prohibita crimes are crimes because they are prohibited by the government. Of course, there may be overlaps between these categories. Nevertheless, orthodox acts of violence, such as murder, are usually thought of as mala en se because they are universally believed to be morally wrong (and also prohibited by the state as a result). That is, we have laws on the books stating clearly that rape, murder, assault, and battery are against the law and are harmful and immoral in their own right. Moreover, violent crimes such as murder are generally considered morally wrong across the globe and are nearly always rated as the most serious crime in surveys that examine crime seriousness (O'Connell & Whelan, 1996). There are, of course, exceptions to this situation, because people are executed, killed out of mercy, and killed in war. These exceptions are, nevertheless, heavily debated, given that they can be interpreted by some as murder. For example, some people view abortion as murder, and others see it as choice (Scott, 1989). The same could be said about the slaughter of animals for food, with some saying, for example, that "meat is murder" (Freeman, 2010). Even considering these diverging views, exceptions, and debates, humans almost universally define murder as wrong.

Crimes that produce environmental degradation are generally believed to be less serious and therefore might be thought of as mala prohibita. In fact, these crimes rarely require intention to prove guilt, as they are often strict liability offenses. Although the leniency around proving guilt for prohibita cases may appear desirable, given that is easier to obtain a guilty verdict from the court, we do not believe this should be the case for environmental violence. In fact, we believe that environmental violence should be treated as mala in se because it is an offense that leads to the destruction of the "Earth system" and life as we know it. Consider, for example, the concept of planetary boundaries developed by Johan Rockström and his colleagues (Rockström et al., 2009a, 2009b; Steffen et al., 2015). Rockström et al. use scientific evidence in developing a framework that explains nine conditions that must exist so that "humanity can operate safely." They argue that these conditions are "not negotiable" and, if not met, could have "deleterious or even catastrophic" consequences. In short, Rockström et al. set out a scenario of mass environmental violence against humans and

nonhumans. In their original research, they were able to provide estimates for seven of the nine planetary boundaries by scouring the scientific literature to identify the processes for which they believe Earth boundaries could be identified. The importance of the planetary boundary perspective is that it signals the limit at which an abrupt and likely disastrous change to the environment will occur. Unfortunately, Rockström et al. say there is little chance for recovery from these changes, as the boundaries serve as Earth's "tipping points." Even more frightening is the potential interaction between planetary boundaries. That is, as one boundary is approached, another boundary may change. The boundaries, consequences, and limits that Rockström et al. identify are adapted for this chapter in Table 24.2 as originally displayed in their article on planetary boundaries published in *Science*.

As Table 24.2 suggests, there are already three boundaries that have been crossed. These are climate change, the rate of biodiversity loss, and the rate of interference with the nitrogen cycle. Given the seriousness of the consequences for crossing the boundaries in Table 24.2, we suggest that human actions that lead us closer to these boundaries must be thought of as mala en se crimes. That is, like murder, they threaten the moral fabric of society because they threaten the very existence of life on Earth and because they kill and injure millions of people each year, as Table 24.1 suggests. Unless we can find a way to redefine those acts that bring us closer to these planetary boundaries, we will be unable to contemplate important changes to our destructive behavior. In short, environmental regulations and environmental laws will continue to be treated as subservient to the economy unless ecological systems become a fundamental value that needs to be protected (Stretesky, Long, & Lynch, 2013). This will not occur, as we suggest, until we start to think of violations of environmental laws as mala en se. Until that time, we believe that politicians and industry will argue that removing these regulations does not challenge society's values, but instead simply represents the removal of

Table 24.2 The concept of planetary boundaries as presented by Steffen et al., 2015

Boundary	Parameter	Boundary	Current level
Climate change	Atmospheric carbon dioxide concentration in parts per million	350	387 [*]
Biodiversity loss	Extinction rate in number of species per million	10	>100*
Nitrogen cycle	Quantity of nitrogen removed from the atmosphere for human use in tonnes	35	121*
Phosphorus cycle	Quantity of phosphorus flowing into the oceans in tonnes	11	9
Stratospheric ozone depletion	Concentration of ozone	276	283
Ocean acidification	Mean saturation state of aragonite in surface sea water	2.75	2.95
Global freshwater use	Consumption of freshwater (km ³)	4,000	2,600
Change in land use	Percentage of global land cover converted to cropland	15	11.7
Aerosol loading	Overall particulate concentration in atmosphere	Not estimated	
Chemical pollution	Amounts emitted or concentrations	Not estimated	

^{*} Boundary exceeded

Note: This table is adapted from Steffen et al. (2015).

business interests and an end to government "red tape" (Stratton, 2011). Without a significant moral anchor, we will be unable to protect the Earth's planetary boundaries, and the harm to human and nonhuman animals will increase.

Motivation

As the reader knows, motivation is a fairly important feature in determining criminal guilt. Violent crimes as horrible as murder can come about through negligence or with malice aforethought. Environmental violence can, arguably, be accidental or intentional. This brings us to the question of intent and profit. Judges and juries need to grasp the intention and what was to be gained from acts of violence. If getting their spouse out of the way allows the murderer to pursue another lover or collect insurance money, we have clear intent and a profit motive. If rape, assault, or battery teaches the victim a lesson about relative social power, we have intent and profit of a social standing variety. On a grand scale, environmental damage is highly profitable on a monetary level to corporations that prefer to dump their toxic waste into water systems and spew their poisons into the air, without expensive regulatory mechanisms that could, perhaps, contain the waste or make the waste less harmful to the planet and thus all beings.

And then there is remorse as expressed, or not, by violent offenders of both stripes. Some violent offenders express remorse, but do not really feel remorseful; instead, they may hope to lighten a judgment or a sentence if they express remorse (Presser, 2003). Some violent offenders do not realize how unremorseful they sound when they explain their offenses. Here, we are thinking of the oil spill from the Deepwater Horizon oceanic drill in the Gulf of Mexico. That spill occurred in 2010 and is considered the largest oil spill in history (EPA, 2018). The initial violent explosion that preceded the oil spill killed 11 people. The spill consisted of millions of barrels of oil being released into the Gulf and caused permanent damage to the ecosystems by worsening water quality and leading to an increase in algal blooms (Parks, 2015). Importantly, and related to planetary boundaries, a portion of heavily polluted marsh grasses that aid in carbon absorbtion appear to be irreversibly damaged (Lin et al., 2016). Moreover, in addition the human deaths the spill caused, it also significantly reduced biodiversity in the region by killing species of turtles, dolphins, shorebirds, and fish (Venn-Watson et al., 2015).

A few days after the spill began, a Fox News (US) reporter asked the CEO of BP, Tony Hayward, what he would like to say to the people of the region. Hayward said, "I'm sorry. We're sorry for the massive disruption it's caused to their lives, and you know, we're, there is no one who wants this thing over more than I do. You know, I'd like my life back" (see www.youtube.com/watch?v=MTdKa9eWNFw). That statement by the head of BP, who was arguably responsible for the lax standards that resulted in unfathomable environmental damage to the coastal waterways of New Orleans and a lot of dead wildlife, was criticized for the coldness and cruelty of his statement and matches the accounts given by some killers (e.g., Pogrebin et al., 2006). Only two months after the interview, Hayward had changed his wording in a prepared statement published in *The Guardian*:

Since 20 April, I have spent a great deal of my time in the Gulf Coast region and in the incident command centre in Houston, and let there be no mistake – I understand how serious this situation is. This is a tragedy: people lost their lives; others were injured; and the Gulf Coast environment and communities are suffering.

(Hayward, 2010, n.p.)

It became clear during the Congressional hearings that Hayward had little knowledge of the exact conditions at Deepwater Horizon; nevertheless, the issue of intentionality is still an issue, as he could have intentionally pursued policies that downplayed risk to increase company profit margins. This exact scenario is documented by Vincent Ruggiero and Nigel South (2013, p. 16), who suggest that the company pressured low-level managers to increase production and cut costs or fail to have their contracts renewed. As a result, Hayward, as the head of BP, undoubtedly encouraged the normalization of what would appear as risky (and certainly deviant) behavior in many other organizations (Vaughan, 1997). Thus, memos such as the one from a BP employee about the drilling at the Horizon well four days before the BP accident, stating, "who cares, it's done, end of story, will probably be fine" did not even refer to the most serious outcome (which other oil company executives immediately recognized), a well blowout (see Achenbach, 2011, p. 130). In short, the idea that corporations most responsible for environmental violence intentionally set out to harm the environment are likely far-fetched; nevertheless, there are a number of environmental criminals who commit their crimes intentionally. For example, the EPA documents hundreds of environmental violations where it is clear that offenders carefully planned their environmental harm for profit (https://cfpub.epa. gov/compliance/criminal prosecution/). In the end, we suggest that actors who violate environmental laws and regulations are probably like most criminals. They go through life with little planning, are often engaged in risky management practices, and do not intentionally set out to harm ecosystems, but they nevertheless engage in behavior that favors production and profit over ecosystem health. This behavior is widespread and sometimes, as in the case of BP, catastrophic. As a result, we suggest that, like negligent murder, many cases of environment violence adopt a similar profile. That is, although offenders' risky behavior may be clear to others, it may not be clear to the offenders themselves because they are unable to appreciate the potential consequences of their actions and the harm that they cause.

Harm and victim compensation

In many criminal justice systems worldwide, victim compensation is an integral part of the process. If guilt is determined, demands can be made upon the offender to repay the victim. Compensation works better in the criminal justice system against ordinary violent criminals than it does in environmental damage cases. Although, to ease environmental degradation, companies can be ordered by the courts to clean up substances or stop behavior, the action is often slow in coming and nearly always incomplete. In some cases, companies use their sentences to their economic advantage. That is, companies that are asked to clean up the environment as a result of a violation often advertise their mitigation work as environmental activism. In some cases, they plan for this by arranging for supplemental environmental projects that ensure that, if they are subject to reporting requirements, they can advertise their environmental citizenship (Peters & Romi, 2013). This form of greenwashing only serves to convince the public that a company cares for the environment.

In many cases, however, environmental damage may not be reversible, and nature is little impacted by other forms of compensation courts can impose, such as monetary compensation for damages. This is certainly the case when it comes to violence against nonhumans. In the case of development, some species of animals will become extinct (see Table 24.2). The level of violence against nonhuman animals through environmental degradation is immense and can best be illustrated through the concept of the Anthropocene. The term Anthropocene suggests that we are living in a new era where humans are having a tremendous influence on the Earth's environment. The idea of classifying the Earth's history according to epochs is nothing new.

Scientists have used epochs to group time periods together in ways that create a history of the Earth. Recently, however, there has been a movement among scientists to reclassify the current era as the Anthropocene (Crutzen, 2002). Evidence of this human dominance over nature can be found in ecosystems all around the world. For instance, humans have advanced the erosion of continents through the development of industrial agriculture, and carbon dioxide releases are at an all-time high, as are concentrations of carbon dioxide in the biosphere. Even ocean acidification is increasing (Zalasiewicz et al., 2008). In particular, researchers have found that even low levels of nitrogen pollution in water are threatening the ability of a significant portion of aquatic life to reproduce itself (Camargo & Alonso, 2006). Together, these activities have implications for humans and nonhuman animals. In short, it is not simply a matter of killing organisms, but of completely eliminating entire species from existence.

Going further, some scientists have suggested that the impact of humans on nonhumans is so severe that we are entering a "sixth mass extinction." This is the case because the current rate of species loss is estimated to be nearly 100 times what we would expect if humans were not around (See Table 24.2 and Ceballos et al., 2015). In particular, there are claims that as many as 58,000 wildlife species are lost each year (Toukhsati, 2018). As already noted, species loss inhibits biodiversity and pushes us over the planetary boundary. In the case of species loss, victim compensation is not useful. As a result, we suggest that law enforcement and regulatory systems we rely on around the globe are ill equipped to deal with the harm caused by this form of biodiversity loss.

We could suggest that similar issues arise with respect to ordinary violence. For instance, murderers cannot bring back their victims from the dead, although family member and friends might wish that were the case. As a result, victims may want revenge for the harm offenders have caused to their friends and loved ones. This notion of revenge has also emerged in the ecology literature. Recognizing the idea that an Earth system exists, James Lovelock developed the notion of Gaia. In Greek mythology, Gaia is the goddess of the Earth. According to Lovelock (2007), Gaia is the biosphere, a living collective that co-evolves with all life on Earth. When we humans disrupt Gaia by, for example, releasing chemicals into the environment, we cause significant harm beyond the problems associated with that particular release. To wit, when we release carbon dioxide into the environment, that chemical can raise global temperatures by absorbing heat that would have been released from the Earth. But, as temperatures increase as a result of carbon dioxide in the atmosphere, this can also allow for more of the sun's radiation to enter the Earth, warming it even more (see Charlson et al., 1987). This feedback loop hypothesis is known as the Anti-CLAW (named using the first letter of the last names of the scientists who came up with the idea: Charlson, Lovelock, Andreae, and Warren). The anti-CLAW hypothesis constitutes "Gaia's revenge" (Lovelock, 2007). In essence, bringing back the biosphere from the polluted state that humans have created is not possible, and all that is left is the Earth's revenge, which may be amplified by a series of additional consequences (Charlson, Lovelock, Andreae, & Warren, 1987).

Right-wing politics and environmental concerns: a toxic mix

Politics, unsurprisingly, cannot be left out of the mix of environmental violence and violence against all beings in that environment. As we have shown, violence against nonhuman animals is not just against nonhuman animals, because all creatures of the Earth are connected. It is important to point out, however, that animal rights and environmental activists are also targets of violence. The Bush administration, post-9/11, when going after terrorist groups, claimed

that animal rights activists and the organizations of which they are a part were terrorists and thus subject to control in the form of arrest, detention, and loss of income (Berry, 2002).

More to the point is political influence as it visits itself upon environmental violence and animal violence, witness the Trump administration's rolling back of environmental protections. Because of climate change and climate change denial, the US is experiencing more flooding than ever. Flood-prone parts of the US have more than 2,500 sites that handle toxic chemicals, with approximately 1,400 of them located in areas with the highest risk of flooding. Climate change has led to an increased flood danger, which has led to an increased number of toxic spills. U.S. federal law does not explicitly require toxic chemical waste sites in floodplains to take extra precautions against flooding. Nor do most state and local governments have such requirements. But an executive order signed by President Barack Obama in 2015 required planners to account for the impact of flooding from rising sea levels and increased precipitation. Donald Trump rescinded those rules in 2017. Hazardous chemical plants located near these floodplains include fertilizer plants; chemical sites; oil, gas, and petrochemical industries; plastics plants that exude sodium hydroxide and other carcinogens; and energy plants that spill fuel oil and benzene (Tabuchi, Popovich, Migliozzi, & Lehren, 2018).

As another example, out of too many, before Trump became president, the US seemed to be on its way to refusing the XL pipeline cutting through the middle of the country, but not now. If the pipeline project comes into being, the water supply for the local indigenous peoples will be poisoned, and the wildlife upon which the indigenous peoples depend will die. And yet another Trump-endorsed environmental and wildlife crime: a mining project that had been on hold has been given the green light. The gold mine, in Alaska, will be beneath spawning grounds for sockeye salmon, a threatened fish (Jones, 2017). In a third example, under Trump administration rules, animal migration routes will be disrupted (a) when the land space in national parks is limited to make way for oil and gas exploration and (b) if a wall is erected between the US and Mexico. Neither Trump nor his Interior Department understands or cares about the survival of these animals and their necessary treks to breeding grounds and food sources. The animals will die as a result (see, for example, Middleton, 2018).

In the United States, laws and regulations that prevent environmental degradation are currently under intense attack. The message is simple: environmental regulations are not needed. Prior to being elected, Donald Trump suggested that, "Environmental protection, what they do is a disgrace; every week they come out with new regulations" (Schoen, 2016). Once elected, the president withdrew from the Paris climate agreement, noting, "We will see if we can make a deal that's fair ... If we can't, that's fine" (Milman, Smith, & Carrington, 2017). This approach to environmental regulation recognizes that environmental laws and regulations are questionable. Taken together, these examples suggest that political action and political "thinking" do not take into account the humans, the nonhumans, and the overall environment necessary for healthy living; such thinking sets the stage for the imminent demise of the Earth and its inhabitants. But the present-day policymakers just do not care about taking these risks, which is strange in itself, as they and their offspring are a part of the Earth.

Selfishness and corporate profit as violence

Baby animals are cute and lovable, regardless of species. Yet we sometime forget or refuse to know that baby (and adult) animals are transported against their wishes, die en route, and arrive in hostile or strange environments, perhaps to be further abused. This example of a violent crime is not unlike "white slavery" or other forms of kidnapping of humans, usually for profit. A

secret pipeline of young bonobos, residents of Africa, are ape-trafficked to private collectors or unscrupulous zoos, ordinarily in Southeast Asia. Because they are less frightening than the adults and easier to deal with, trafficked animals are more likely to be babies. The smuggling of apes is only part of this very bad picture. Apes are further threatened, and their populations are being exhausted, by corporations that profit from forest depletion. The hunger for palm oil and biofuels is devastating rain forests, home to an enormous range of nonhumans (including apes) and humans (Mol, 2017). Habitats for nonhumans and humans have been wiped out for the sake of rubber plantations in Indonesia, Malaysia, and Africa (Gettleman, 2017).

No story of environmental abuse would be complete without mention of polar bears. Because of oil drilling in the polar region and because of climate change, polar bears are drowning and starving to death. The ice floes are shrinking owing to warming, and the spaces between floes are increasing, such that polar bears, who travel across the oceans using ice floes as stepping stones, cannot swim far enough to make it to the next floe. They drown. Also, because the fish are being depleted thanks to environmental damage, the bears starve (Pierre-Louis, 2018). It is not too much of an exaggeration, if it is an exaggeration at all, to compare the starvation of polar bears and numerous other members of the Earth's wildlife to the deliberate starvation of children and adult humans. If this is not animal cruelty, it is hard to imagine what would constitute animal cruelty.

In a final example of animal cruelty for profit, VW, the automobile manufacturer, got into trouble when it was discovered that it was fudging its emissions tests. In short, VW needed to show that its automobiles were eco-friendly, and so it ... lied. To make matters better, in VW's mind (but worse, in environmental and animal advocates' minds), VW began testing its diesel automobile exhaust systems on live monkeys, forcing the monkeys to inhale the diesel fumes. The manufacturer's purpose was to show, by its testing, that it was eco-aware. The result, however, was a lot of sick monkeys who were used as test subjects (Ewing, 2018a, 2018b). The good news is that the tests were halted because of a significant public outcry.

Conclusion

The purpose of this chapter was and is to make a connection between violence as we usually think of it (murder, rape, assault, and battery) and violence that is just as real in the form of environmental damage and the resulting damage to plants, rivers, oceans, insects, humans, and indeed every living thing on the planet. Assuredly, this is a depressing comparison and a depressing occurrence. It would be better for us all if humans were not criminally selfish, unthinking, and profit-driven. However, the authors agree with the Reverend Dr. Martin Luther King when he remarked that societies do evolve in the correct direction, very slowly and incrementally, but they do. There are setbacks, such as those the US is undergoing, at time of writing, under the Trump administration. But that cannot and will not last long, because we have progressed enough that the recognition of environmental and animal violence, and that it is wrong, is real. One way that we can continue to progress is to reframe our thinking about violence. As we have suggested, environmental degradation should be treated as violence. We see this violence occurring when individuals, groups, or organizations engage in behavior that causes environmental degradation. Importantly, redefining violence in this way may lead us to examine our own behaviors and actions, as well as challenge corporate behavior that is risky. That is, Agnew (2013) suggests that many people may be unaware that the environmental harm they engage in actually leads to "ecocide." This needs to change. Understanding how we engage in these normalized behaviors and contribute to environmental violence to both humans and nonhumans is critical.¹

Note

1 One of the main barriers faced by animal rights advocates is in making the case that nonhuman lives are equal to human lives, that the lives of both types of animal (nonhuman and human) are equally worthy. A strong case could be made that, in terms of environmental violence, humans' lives, as perpetrators of environmental destruction, are worth less than nonhuman lives.

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