PEACE STUDIES JOURNAL

Vol. 8, Issue 1
October 2015

Nonhuman Collateral Damage and Just War Pacifism

Author: Andrew Fiala
Title: Chair of the Department of Philosophy and Director of the Ethics Center
Affiliation: California State University, Fresno
Location: Fresno, California, United States
E-mail: afiala@csufresno.edu

Keywords: Just War Theory, Pacifism, Collateral Damage, Animal Welfare

---

NONHUMAN COLLATERAL DAMAGE AND JUST WAR PACIFISM

Abstract

This paper offers a pacifist argument that is the result of adding environmental concern to the traditional just war theory. The paper considers some of the negative environmental impacts of war and militarism. It discusses how the concept of collateral damage works within the just war theory and explains why the just war theory should include a consideration of nonhuman collateral damage. The paper defends "just war pacifism" as a reasonable conclusion for those who think that nonhuman collateral damage ought to be taken into account.

NONHUMAN COLLATERAL DAMAGE AND JUST WAR PACIFISM

War and militarism cause environmental damage. A growing body of work—both scholarship and international agreements—is concerned with mitigating the environmental impact of war. The International Committee of the Red Cross, for example, has issued two reports focused on protecting the environment in time of war (ICRC 1993 and 1996). A newly developing field of inquiry called "warfare ecology" aims to provide detailed empirical analysis of the impact of war on the ecosystem (Machlis & Hanson, 2008). Wars harm both the people who inhabit the ecosystem and the nonhuman elements of the ecosystem. In addition, militarism—the larger social, political, and economic system of military power—is both a massive consumer of natural resources and a significant source of pollution.

While the environmental impacts of war and militarism are clear, the moral question is whether those impacts can be justified. To answer that question an obvious place to begin is with the just war theory. The just war theory stipulates conditions in which war can be justified: as a last resort, in pursuit of a just cause, with right intention, and so on. According to most interpretations of the just war theory, so-called "collateral damage" is allowed when this damage is not deliberately intended, when it is proportional, and when it occurs as part of a legitimate war aim. However, most versions of just war theory use the term collateral damage in a restricted fashion—applying it only to harms done to human beings.

This essay considers how environmental impacts could be factored into just war theory as "nonhuman collateral damage." It concludes that when nonhuman collateral damage is taken into consideration, war and militarism become even more difficult to justify than they already are. This essay builds upon arguments familiar from what is often called "just war pacifism." This version of pacifism accepts the moral framework of the just war theory while arguing that a rigorous interpretation of the just war theory leads to pacifist conclusions. When we extend our concern beyond the human realm, there are even stronger reasons to be sympathetic to just war pacifism. The paper has three parts. First, I consider the negative environmental impacts of war and militarism. Second, I show how the concept of collateral damage works and why it should include nonhuman collateral damage. And third, I connect this with the critique of war known as just war pacifism.

The Negative Environmental Impacts of War and Militarism

The most obvious negative impact of war on the environment occurs when bombs are dropped, forests are burned, and waste and desolation are left behind on the battlefield. Consider one example: how deforestation is used as a weapon within war. This is an old method of warfare (with fire being used as a weapon) that was updated in Vietnam with the use of Agent Orange and other defoliants. In Vietnam, 5 million acres of forest were defoliated; 500,000 acres of cropland were destroyed (sprayed with "Agent Blue"—a chemical specifically aimed at destroying crops including rice). The destruction included 250,000 acres of mangroves, which are essential for coastal ecology (see http://www.agentorangerecord.com/impact_on_vietnam/environment/defoliation/). The impact of all of this devastation will continue to linger for generations. Vietnam is not the only place impacted by deforestation caused by war. A report by DeWeerdt (2008) showed how deforestation occurred in and around Rwanda as a result of the Rwandan genocide and subsequent refugee crisis. DeWeerdt also points out that war is especially hard on already fragile ecosystems such as deserts—citing the challenges caused by the oil fires left in Kuwait after the Iraqi invasion and subsequent Operation Desert Storm. The list of negative environmental impacts of war is long and could stretch from Biblical times through Sherman's march to the sea and on to Okinawa, Hiroshima, and beyond—including environmental destruction caused by narco-wars in South and Central America, and the war on terrorism in Asia and the Levant.

Not every environmental impact of war is negative. In some cases, war can benefit local ecosystems. Brady, Schultz, and Schwarzstein have each shown that the no-man's lands created in wars can quickly become wildlife refuges. Apparently some beneficial ecological results of militarism have occurred in the DMZ in Korea, as well as in the mined borderlands between Iran

and Iraq. In the borderland between Iran and Iraq, for example, the Persian Leopard has made a comeback. In the case of the Persian Leopard, landmines have helped: the leopards are too light and agile to detonate the mines left behind by the war—even though human beings still avoid areas strewn with mines. One great irony here is that when human warfare creates spaces of mutual hostility that are too dangerous for human beings, the nonhuman world has a chance to flourish. In the short term we might cheer on the Persian Leopard and the other creatures who are benefiting in this modest way from "man's inhumanity to man." But this is obviously not a decent solution either to the environmental problem, or to the problem of war. The solution cannot be a world of mutual deterrence and militarized borderlands.

War impacts the nonhuman world in other ways. We might consider, for example, how animals have been used in war and the deep systematic implications of how we think about war, animals, and the environment. The title of one recent publication points toward a deep system problem: *Animals and War: Confronting the Military-Animal-Industrial Complex* (Nocella, Salter, & Bentley, 2013). That collection of essays argues that there is a deep and pervasive social, political, and economic system in which war and animal usage has long been intertwined. A systematic effort aimed at liberation and peace must consider the problem of anthropocentrism. Anthropocentrism (or what Colin Salter calls "human chauvinism" in Nocella 2013) includes the assumption that animals can simply be used in war. A critique of anthropocentrism—either from an animal rights/welfare standpoint or from the standpoint of ecology—would lead us to consider nonhuman suffering as a significant concern in critiques of war. Said differently, if we bring animals and the environment into conversations about the justification of war, we would be forced to think even more critically about war.

Again the story is not entirely one-sided. Soldiers themselves have had an interesting relationship with the animals that they use. The Animals in War Memorial in London makes this point. This memorial is dedicated to the countless animals that have been used in war—dogs, pigeons, horses, elephants, and so on. The Memorial contains this quotation: "This monument is dedicated to all the animals that served and died alongside British and Allied forces in wars and campaigns throughout time…They had no choice" (Animals in War website: http://www.animalsinwar.org.uk/index.cfm?asset_id=1385). Animals are caught up in war without choice and do not receive any obvious benefit from their involvement in war. The Memorial's website reminds us that soldiers themselves are deeply impacted by the loss of animals in their care. A poem that accompanies the memorial is, "The Soldier's Kiss," by Henry Chappell ((http://www.animalsinwar.org.uk/index.cfm?asset_id=1422). The poem recalls the death of a horse in war:

> Only a dying horse! He swiftly kneels,
> Lifts the limp head and hears the shivering sigh
> Kisses his friend. While down his cheek their steals
> Sweet pity's tear: "Goodbye Old Man, Goodbye."

The denial found in the claim this is "*only* a dying horse" is belied by the soldier's tears and the tender kiss goodbye. Animals are valued comrades, whose deaths matter—even in the midst of battle. Recognizing that even soldiers care about animals helps to open a chink in the armor of anthropocentrism. The horror of war is not only the destruction of human beings. The horror of

war also includes the wanton destruction of beloved nonhuman companions, who are part of the collateral damage of war.

Before turning to the moral question of whether nonhuman collateral damage can be justified by the just war theory, let's consider the environmental costs of *militarism*—which can be defined as the social and political system that is engaged in preparation for war. The impacts of militarism may be less obvious than the outright killing that occurs in open warfare; but these impacts are equally important. Indeed, the effects of militarism on the environment may be more significant since militarism is an ongoing social project, while wars are episodic. Machlis and Hanson argue, for example, that "war preparations alone utilize up to 15 million square kilometers of land, account for 6% of all raw material consumption, and produce as much as 10% of global carbon emissions annually" (2008, p. 729).

There are both direct and indirect impacts of militarism on the environment. As summarized by Gay (2015), *direct* ecological harms are caused by the production of weapons, the deployment and testing of these weapons, and the storage and reprocessing of these weapons. Details include the use of petroleum, heavy metals and other toxins, as well as obviously harmful practices that are part of training. Wildlife at bombing ranges are harmed, for example. In the oceans the use of sonar training buoys harms whales and other marine animals. Gay summarizes the *indirect* negative impacts of militarism as including potential disasters (for example, from storage of toxic waste at military facilities or from possible damage caused by earthquakes to nuclear facilities, etc.). He also points toward a significant indirect impact as relating to the allocation of social resources—spending social capital on developing and deploying destructive technologies, rather than on more productive endeavors.

We might add at least two other more or less direct impacts: the impact on the environment from the prevalence of weapons, as well as the impact on the environment on dislocated (hungry and desperate) persons. DeWeerdt points out that automatic weapons made available through militarized conflicts in Africa have been turned against animals, including hippos and gorillas. We might add here that as human populations are dislocated and as infrastructure is destroyed in conditions of war, refugees and survivors give up on sustainable practices and are forced to scrape by with whatever means are available. A related issue is that poor governance and social and economic problems in peacetime are exacerbated by war and lead to further problems during wartime, including environmentally destructive activity by those struggling to survive during wartime (see Glew and Hudson, 2008).

Other accounts fill in further details including the massive development of military infrastructure, which includes all sorts of actions: dredging for ports, building canals, constructing roads, mining, building bridges, constructing dykes, and developing underground bunkers (see Dutch, 2006). We should consider, for example, the military importance of the Panama and Suez canals, as well as the military purpose of railways and roads. One anecdote might make this point. General John. J. Pershing addressed the U.S. Senate in 1921, arguing about the essential military importance of roads. He said, "Every road is of value during war" (U.S. Congress, 1921, p. 214). The great project of constructing the interstate highway system in the U.S. was a social engineering project, an economic boost for industry, and a way of facilitating the growth of militarism. It is not surprising to note that President Dwight D. Eisenhower's 1956 plan for the interstate highway

system in the U.S. was called, "The National System of Interstate and *Defense* Highways" (italics added for emphasis). Eisenhower was inspired by his own experience moving military materiel across the United States (he was involved in a slow moving transcontinental convoy in 1919) and across Europe and Germany in the Second World War (Pfeiffer, 2006). The point of this example is to show that military purposes and civilian infrastructure and development concerns intersect, while having significant environmental impacts. Not only is road construction itself environmentally harmful but also, the interstate highway system is a central feature of contemporary American commerce, which includes significant environmental impacts in terms of carbon emissions and other pollution.

Nonhuman Collateral Damage

The previous section has established that war and militarism are harmful to the nonhuman world. The moral question still needs to be considered, as to whether such environmental harms can be justified. The just war theory provides a moral framework within which we can examine this question. Although absolute pacifists will claim that war (and possibly violence even more broadly construed) can never be justified, the just war framework does not condemn war absolutely. Rather, the just war theory allows that in some cases war can be permitted: in response to a just cause, as a last resort, as a proportional response with the right intention and so on, according to principles commonly outlined under the rubric of *jus ad bellum*. The just war theory also stipulates that within war certain principles ought to be followed (known as principles of *jus in bello*): we ought to discriminate between combatants and noncombatants, we ought to avoid disproportional harm, and we ought not use means that are evil in themselves. There is a significant literature on the just war theory that fleshes all of this out in a variety of ways.

Most of the literature on just war theory is anthropocentric: human concerns are usually the *only* concern of the just war tradition. It is worth noting that the historical development of the just war theory occurs within Christian and European traditions, where anthropocentrism is taken for granted. Key authors in this tradition—from Augustine to Grotius and Kant—are decidedly anthropocentric. Within the usual interpretation of just war theory, if there is some concern for environmental issues, it is quite indirect. For example, poisoning water supplies is not justifiable according to traditional just war theory. The reason this is wrong is because it harms human beings, and not because of the direct damage done to wildlife or ecosystems.

Critical approaches to the issue of environmental damage in war may look in the direction of non-Western traditions that offer a critique of anthropocentrism. Another approach might begin by looking at ideas familiar either from ethicists who are focused on animal welfare concerns—such as Singer, Regan, or DeGrazia—or from the concerns of ecologists who are critical of anthropocentrism such as Deep Ecologists like Naess, Devall, and Sessions. Let us consider one of these authors in a bit more depth: Arne Naess, a leading philosophical voice of deep ecology. Naess's scholarship brings together awareness of non-Western traditions and Western philosophical critiques of anthropocentrism. Naess's work also includes extensive consideration of Gandhi and nonviolence (Naess 2005b). Although he is not an absolute pacifist, Naess advocates creative nonviolence. Naess also thought that peace movements and environmental movements should be joined together along with social justice movements in what he called "the three great movements" (2008, p. 99). The connection between deep ecology and Gandhi is

interesting. Although Gandhi is not primarily focused on ecological issues (as Lal has argued in 2002 and 2000), Gandhi is interested in articulating a worldview that centers on love, compassion, and nonviolence. Naess explains, for example, "Gandhi made manifest the internal relationship between self-realization, nonviolence, and what has sometimes been called biospherical egalitarianism" (2005a, p. 524). From this point of view, war is wrong because it harms *both* human and nonhumans.

Some authors have built upon such ideas and weaved them in more detail around the concerns and concepts of the just war theory. Woods (2007) for example, has argued that a significant problem is that "military necessity" appears to usually or always trump environmental concern. Nonetheless, Woods points out that there is a growing body of international law that is concerned to limit the environmental impact of war. Woods proposes that the issue of *proportionality* in just war theory (both macro-level proportionality in the sphere of *jus ad bellum* and micro-level proportionality in the sphere of *jus in bello*) can be a useful guide. Traditional, anthropocentric just war theory limits proportionality considerations to a focus on harm to humans. However, a non-anthropocentric interpretation of just war theory would argue that wars that devastate the environment are also not proportional.

Clearly, the issue of proportionality is important. An even more useful concept is the idea of "collateral damage" as extended to the nonhuman world. Chalecki has explained in some detail how the concept of nonhuman collateral damage can be understood within the just war framework and within international law. Traditional *jus in bello* considerations do not usually look at nonhuman collateral. Nonetheless, Chalecki notes that Principle VI of the Nuremburg Code defines as a "war crime" any "devastation not justified by military necessity" (Chalecki, 2013, p. 154). Such immoral devastation can include the deliberate destruction of artworks, religious icons, or other monuments or culturally significant artifacts. This probation on devastation can easily be extended to include environmental damage. Chalecki's work summarizes ideas found in the International Red Cross documents mentioned above, indicating as Woods does, that international institutions are beginning to attend to this issue. Nonetheless, collateral damage is an idea that is ordinarily employed within just war theory in an anthropocentric fashion. The concept of collateral damage shows up in discussions of the problem of *discrimination* (within the framework's *jus in bello* set of considerations). Justified military forces ought to discriminate between combatants and noncombatants—and each category is traditionally focused on human beings. Human combatants are legitimately killed. When human noncombatants are unintentionally killed, this is described as "collateral damage." Collateral damage is permitted by application of the doctrine of double effect: if the primary intention is to destroy a legitimate target, then foreseen but unintended collateral damage is permitted. The idea of collateral damage is usually used exclusively to describe harms to human noncombatants. But the concept has been plausibly been extended in a non-anthropocentric direction by Chalecki.

It may be possible to establish concern for nonhuman beings within an anthropocentric version of just war theory. For example, if animals (or wetlands or forests) are understood as property, then we might find some reason to avoid destroying them based in respect for property. An anthropocentric account of collateral damage might include a concern for civilian property. However, critics of anthropocentrism, such a Naess, will argue that this does not go deep enough, since it lacks direct concern for nonhuman beings.

It is important to note that within just war theory, the concepts of collateral damage and noncombatant immunity point toward some deep and open questions. McMahan (1994, 2009) has pointed out that in some cases human combatants are "innocent" (and don't deserve to be killed), while human noncombatants may be culpable (and so may not deserve the immunity afforded to them). Consider, for example, the moral difference between a conscripted soldier (who is in a sense not guilty for the war he is fighting in) as compared to a political war-monger, who does not fight but supports the war (and hence is culpable). The set of problems indicated here is helpful in considering whether nonhuman beings can also be considered as noncombatants. Animals employed in war, for example, are not culpable and thus could plausibly be construed as noncombatants (although to be clear, McMahan does not make this connection).

Steffen (2015) has also extended just war considerations in a way that seeks to describe the environment as a "noncombatant." Steffen points out that one of the challenges is that some forms of warfare effectively "weaponize" nature, turning natural forces into destructive forces to be used against an enemy. If this is true, then these natural forces are not "innocent noncombatants." We might consider for example, whether horses, dogs, or other animals used in war can legitimately be killed. There may have once been something dishonorable (according to codes of chivalry) in targeting a soldier's horse. However, in the era of mechanized weapons and high altitude bombing, such distinctions no longer apply. Thus, according to most mainstream accounts of justice in war, nonhumans can be legitimately targeted—especially if these nonhumans are weaponized. The same reasoning might apply, then, in consideration of other nonhuman elements on the battlefield. Forests can be burned, watersources can be fouled, and so on—if those natural features are being used by an enemy as a resource or weapon of war.

Steffen concludes that the natural world should be given a sort of "immunity from harm" similar to that which is afforded to noncombatants. This depends, of course, upon the sort of value we ascribe to nonhuman beings. Steffen points out that biocentric or non-anthropocentric approaches claim that there is some sort of intrinsic value in nature or in natural objects. If this is so then the natural world—including nonhuman animals—should be taken into account in the moral calculus of the just war theory. We might add an even stronger prohibition here, based upon the sorts of considerations that have come out of McMahan's work. We would presume that nonhuman beings cannot be culpable for war in any sense. Indeed, the nonhuman world is "innocent" in the sense that nonhuman beings (whether animals or other features of the ecosystem) do not have the relevant intentionality to make them culpable. We need to be careful here—as for example, with regard to attack dogs, who may be "innocent" but who are "weaponized" when attacking and thus may be legitimately killed in self-defense. In general, it seems we ought to recognize that nonhuman animals and the natural world ought not be harmed because they are "innocent." Thus it is possible to conclude that the nonhuman world deserves the kind of immunity that is afforded to human noncombatants, and that nonhuman collateral damage ought to be factored in to moral evaluations of war.

Just War Pacifism

There is more to be said about the concepts and issues considered above. The discussions in the literature of just war theory are detailed and complex, as are discussions of anthropocentrism and

non-anthropocentrism in environmental ethics and animal welfare, but let's move on to the next point. What should we think about war and militarism if we include non-anthropocentric concern? I argue that if nonhuman collateral damage matters in warfare, then it becomes even more difficult to justify war. Said differently, a just war theory that includes an account of nonhuman collateral damage will set up a high standard for the permissibility of war, which will tend toward the conclusion that war is usually not justified.

I have offered an interpretation of the just war theory that points toward a form of just war pacifism in other work (Fiala, 2004, 2008). In general, I argue that very few wars live up to the standards of the traditional just war theory. Even wars that are declared for ostensibly justified causes often end up violating principles of *jus in bello*. In the era of mechanized warfare, when killing occurs on a massive scale and in an indiscriminate fashion, it is likely that principles of *jus in bello* will be violated. Modern wars tend to create a substantial amount of collateral damage. Although collateral damage can be justified by the use of the doctrine of double effect (which permits harms to noncombatant so long as this harm is unintentional), I argue that this moral requirement is not as easily satisfied as proponents of war often believe. A serious appraisal of the importance of proportionality constraints and the principle of discrimination points us in the direction of a general rejection of modern warfare. Similar conclusions have been reached by a variety of authors who may be called "just war pacifists," "practical pacifists," or "contingent pacifists" (May, Sterba, Holmes, & Fiala, 2014). It may be that the use of smart bombs and drones could help in this regard by minimizing damage and narrowing targeting. So just war pacifists and contingent pacifists do not reject war absolutely. Rather, this approach admits that in some cases, limited and discriminate war could be justified by rigorous application of the just war theory.

However, if we bring nonhuman collateral damage into this conversation, the difficulty of justifying war increases. Consider the sorts of environmental and nonhuman damage we discussed above. If this sort of thing counts in the moral calculus of war, then the burden of proof for the justification of war becomes substantially higher. The same reasoning applies to the more broadly construed problem of militarism. If preparation for war also creates environmental damage, and if we take non-anthropocentric concerns seriously, then preparation for war is not easily justified.

Woods (2007) points in this direction when he applies an idea familiar from environmental ethics to the question of war: the precautionary principle. Woods concludes, "preventing environmental damage demands heightened caution and an injunction against military activities likely to lead to this damage" (p. 27). While Woods is somewhat circumspect (he does not argue toward a pacifist conclusion), it is possible to reach a stronger pacifist conclusion from this sort of approach. The history of warfare and militarism gives us good reason to suspect that warfare and militarism will create substantial nonhuman collateral damage. If we admit that nonhuman collateral damage matters, and if we admit that there are reasons to be skeptical of war even within a more traditional anthropocentric approach to just war theory, then it is reasonable to conclude that wars will often fail to live up to the standards of moral justification and ought to be morally condemned.

Conclusion

The history of warfare shows us blatant disregard for nonhuman collateral damage. Indeed, warfare has usually been justified on entirely anthropocentric grounds. A significant objection to the line of argumentation of this paper is that nonhuman beings do not count morally or that if they do count, the moral worth of nonhuman beings is far outweighed by human interests. The same sorts of anthropocentric arguments have been raised against those who argue for animal welfare or environmental concern. An extended defense of non-anthropocentrism is beyond the scope of this paper. I conclude by noting that one need not be a radical non-anthropocentrist to see that the impact of war on nonhuman beings gives us further reason to be skeptical of war. Anthropocentric concerns already lead just war pacifists to be skeptical of war. The fact that children are killed in war as collateral damage already gives us a significant reason to be critical of the justification of war. Even a slight sympathy for non-anthropocentric concerns can tip the balance toward pacifism. Recognition of the fact that nonhuman collateral damage is extensive in war and in militarism gives us reason for skepticism about the justification of war. Even if the nonhuman world is not afforded the kind of inherent dignity and value that biocentrists and animal rights advocates claim, it remains true that human beings love and cherish the nonhuman world. Even if the horse that is killed or the forest that is burned has no intrinsic value, these things have value for the human beings who shed tears at such wanton destruction.

References

Brady, L. (2010). How wildlife is thriving in the Korean peninsula's demilitarised zone. *The Guardian*. (April 13, 2010).

Chalecki, E. L. (2013). *Environmental security: A guide to the issues*. Santa Barbara, CA: ABC-CLIO.

DeGrazia, D. (1996). *Taking animals seriously: Mental life and moral status*. Cambridge, UK: Cambridge University Press.

DeGrazia, D. (2002). *Animal rights: A very short introduction*. Oxford, UK: Oxford University Press.

Devall, W. and Sessions, G. (1985). *Deep ecology: Living as if nature mattered*. Salt Lake City, UT: Gibbs M. Smith, Inc.

DeWeerdt, S. (2008). War and the environment. *World Watch Magazine*. January/February 2008, 21, 1.

Dutch, S. (2006). *Military impacts on the environment.* Retrieved from https://www.uwgb.edu/dutchs/EnvirGeolNotes/Military.HTM

Fiala, A. (2004). *Practical pacifism*. New York, NY: Algora Publishing.

Fiala, A. (2008). *The just war myth: The moral illusions of war*. Lanham, MD: Rowman and Littlefield.

Fiala, A. (2014). "Contingent pacifism and contingently pacifist conclusions" *Journal of Social Philosophy* 45(4), 463–477.

Fiala, A. (Ed.) (2015). *The peace of nature and the nature of peace*. Leiden, NL: Brill.

Gay, W. (2015). "Negative impacts of militarism on the environment." In Andrew Fiala (Ed.), *The peace of nature and the nature of peace*. (pp. 51-60). Leiden, NL: Brill.

Glew, L. and Hudson, M.D. (2007). Gorillas in the midst: The impact of armed conflict on the conservation of protected areas in sub-Saharan Africa. *Oryx*. 41, 140-150.

Holmes, R. (1999). Pacifism for non-pacifists. *Journal of Social Philosophy* 30, 3.
ICRC (International Committee of the Red Cross) (1993). *Protection of the environment in time of armed conflict*. Retrieved from https://www.icrc.org/eng/resources/documents/misc/5deesv.htm
ICRC. (1996). "Guidelines for military manuals and instructions on the protection of the environment in times of armed conflict" Retrieved from https://www.icrc.org/eng/resources/documents/misc/57jn38.htm
Lal, V. (2002). "Gandhi and the ecological Vision of Life: Thinking beyond Deep Ecology" *Environmental Ethics* 22(2) (Summer 2000), 149-68.
Lal, V. (2000). "Too deep for deep ecology: Gandhi and the ecological vision of life" in Christopher Key Chapple & Mary Evelyn Tucker (Eds.), *Hinduism and ecology: The intersection of earth, sky, and water.* Cambridge, MA.: Harvard University Press.
Machlis, G. E. & Hanson, T. (2008). "Warfare ecology" *BioScience* 58 (8) (September), 729-736.
May, L. (2012). "Contingent pacifism and selective refusal." *Journal of Social Philosophy* 43(1) (Spring 2012), 1–18.
McMahan, J. (1994). "Innocence, self-defense and killing in war." *The Journal of Political Philosophy* 2(3), 193-221
McMahan, J. (2009). *Killing in war*. Oxford, UK: Oxford University Press.
Naess, A. (1989). *Ecology, community and ;ifestyle: Outline of an ecosophy.* Cambridge, UK: Cambridge University Press.
Naess, A. (2005a) "Self-Realization: An ecological approach to being in the world" *Ecology* in A. Drengson & H. Glasser, (Eds.), *The selected works of Arne Naess*, X. Dordrecht, NL: Springer.
Naess, A. (2005b) *Spinoza and Gandhi as inspiration for deep ecology*. In A. Drengson & H. Glasser, (Eds.), *The selected works of Arne Naess*, X. Dordrecht, NL: Springer.
Naess, A. (2008). *The ecology of wisdom: Writings by Arne Naess*. A Drengson &. Devall, B. (Eds.). Berkeley, CA: Counterpoint Press.
Nocella II, A. J., Salter, C., & Bentley, J. K.C. (Eds.) (2013). *Animals and war: Confronting the military-animal industrial complex*. Lanham, MD: Lexington Books.
Pfeiffer, D A. (2006). "Ike's interstates at 50: Anniversary of the highway system recalls Eisenhower's role as catalyst" *Prologue* 38, 2. Retrieved from http://www.archives.gov/publications/prologue/2006/summer/interstates.html
Regan, T. (1982). *All that dwell therein: Essays on animal rights and environmental ethics*. Berkley, CA: University of California.
Regan, T. (2003). *Animal rights, human wrongs*. Lanham, MD: Rowman and Littlefield.
Regan, T. (2004). *The case for animal rights*. Berkeley, CA: University of California.
Schultz, C. (2014). "By keeping poachers out, mine fields give endangered animals somewhere to hide." *Smithsonian Magazine*. (December 22, 2014).
Schwartzstein, P. (2014). "For leopards in Iran and Iraq, land mines are a surprising refuge." *National Geographic* (December 19, 2014).
Sessions, G. (1995). *Deep ecology for the 21st century*. Boston, MA: Shambhala Press.
Singer, P. (1990). *Animal liberation*, 2nd ed. New York, NY: New York Review.
Steffen, L. (2015). War and the environment: A proposed revision in the ethics of restraint. In Fiala, A. (Ed.). *The peace of nature and the nature of peace*. (pp. 41-50). Leiden, NL: Brill.

Sterba, J. (1998). *Justice for here and now*. Cambridge, UK: Cambridge University Press.
Sterba, J. (2005). *The triumph of practice over theory in ethics*. Oxford, UK: Oxford University Press.
Sterba, J. (2006). The Most Morally Defensible Pacifism. In Bleisch, B. and Strub, J-D. (Eds.), *Pazifismus: Ideengeschichte, theorie und praxis*. Bern, DE: Haupt Verlag.
U.S. Congress. (1921). Interstate Highway System. *Hearings before the committee on Post Offices and Post Roads United States Senate Sixty-Seventh Congress First Session on S. 1355*.
Woods, M. (2007). The nature of war and peace. In Brough, M.W., Lango, J.W., and van der Linden, H. (Eds.). *Rethinking the just war tradition*. Albany, NY: State University of New York Press.