**Hunting for Justification: Arguments for a Real and Ethically Acceptable Prehistoric Hunting Scene**

Author: Maarten Peels

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Institution: Utrecht University

Supervisor: Franck Meijboom

Second Supervisor: Liesbeth Feikema

Second reader: Jos Phillips

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# 0. Introduction

*Death is mostly out of sight in Western urban cultures, but it is a part of everyday life in nature, and in indigenous cultures.*

- Gregory Stephens[[1]](#footnote-1)

 *No doubt it will always be necessary to kill animals.*

-Jacques Derrida[[2]](#footnote-2)

This thesis is aimed at substantiating a larger project, a fictional narrative film set in the Late Palaeolithic in Europe (40-12k years ago). Before writing this thesis, I made a short film in this theme, and now I am working on a longer one.[[3]](#footnote-3) Since my film will be about hunter-gatherers, I am considering to add a scene that features a real-life hunt using the bow and arrow. My motivation, briefly put, is that it most powerfully conveys an important and timeless message about our relationship to nature: that life requires death. It is legally possible to make this scene in certain jurisdictions, and I could publish it too. But as Tom Regan has noted, “the appeal to legal rights by itself never settles any moral question,”[[4]](#footnote-4) and so it is with my film plans. The main point of this thesis is to argue that, under the right conditions, it is indeed ethically acceptable to make this scene.

 The heart of the issue is that we would be killing an animal for an artwork. Another problem is that hunting in the first place is a very controversial topic these days. In light of this, it is not obvious that my scene is ethically acceptable. Investors as well as authorities responsible for granting the production permits might have doubts about the morality of the project. Based on precedent, there is also reason to believe activists will try to boycott it.[[5]](#footnote-5) Given this potential controversy, it is necessary to justify the making of my scene in order to convince potential critics.

My argumentation rests mainly on the fact that wildlife management policies require the yearly killing of a wildlife. As I will argue in section 3, we need to hunt in order to keep wild grazer populations in check. Through this, we prevent ecological degradation. The goal of this argument is to create a space in which killing wild animals is ethically acceptable. Once hunting can be seen as acceptable at a base level, a hunt that is part of a film scene has a chance of being acceptable too.

In this section (0), I will explain my motivation for making this scene and the conditions that (to me at least) would make it ethically acceptable. In section 1, I present the legal framework of the case and some relevant societal context. In the following sections, I will present and discuss the views of others: a critical view of hunting from the perspective of animal ethics (section 2); the views of ecologists, wildlife managers and hunters (section 3); and additionally several indigenous views (section 4). In the conclusion (section 5), I will reflect on all the above aspects of my case and explain whether or not I will go through with the plan.

Importantly, the ethical debate about my hunting scene, as I will frame it, involves three closely related types of relationships:

* Me and the animal
* Me, the animal and the ecosystem
* Me, the animal and the cultural-historical context

Sections 2 (animal ethics), 3 (ecology and hunting) and 4 (indigenous perspectives), respectively, correspond roughly to these types. Animal ethics, by focusing on the individual rights of animals, puts emphasis on the morality of me killing another being. However, this is not the whole story. It is simplistic to suppose that the killing of a wild deer can only be understood as an interaction between two individual organisms. The killing of wildlife should also be seen in a larger context, viz. the relationship between humans, animals and ecosystems. The indigenous perspective then provides cultural-historical context, and also makes for an interesting contrast to the worldviews in our industrialized society. Especially concerning the way indigenous societies relate to their environment, both spiritually and practically, we have much to learn.

## Methods and Limitations

The topic of this thesis lies at the intersection between (ecological) science, history, ethics and aesthetics. As such, I made use of academic papers, practical research papers about hunting and views expressed in public debate. Mostly I used examples and arguments from the Dutch and American context, since the former is my home country and the latter has an exceptionally active (bow)hunting community.

Moreover, I held interviews with stakeholders in the hunting debate. I had several reasons for holding these interviews. First, my proposed case is so rare (only one film has done something similar – *Walkabout* (1971)) that hardly anything has been written about it in the academic literature. Second, though it can be useful to apply e.g. Peter Singer’s theory to my case, he does not write about it explicitly. Third, there is no societal consensus on hunting. Opinions vary greatly and have been in flux for decades. It is therefore useful to collect current-day opinions and arguments that are relevant for my ethical assessment. Asking people knowledgeable about animal ethics what they think of my case could reveal things that I would not have come up with in a solo endeavour. What does a zoo biologist think about the concept of wildness? And what are the responsibilities of land stewardship according to a real land steward?

Finally, I believe that philosophy should not be confined to books, but should actively engage with the world. Academic philosophy can sometimes lose sight of how other people use concepts, as well as the practical side of ethical issues. Potentially, we can construct a new ethical theory, alter our behaviour accordingly, but run into a disaster because we did not take real-world conditions into account. Similarly, we could frame hunting as ethically unacceptable and stop doing so; but because hunting has a significant effect on ecosystems, we should not stop hunting without assessing whether any negative consequences could arise. And so, by holding interviews in a Socratic style I have gained important insights into the main ethical arguments from the hunting debate as well as boots-on-the-ground-approaches to nature reserves.[[6]](#footnote-6)

In total, I interviewed 9 persons. This includes three hunters, a wildlife manager, a land steward, a bushcraft expert, an advocate for reptile welfare, a zoo biologist and a politician (Dutch Partij voor de Dieren). I am very thankful for their contributions. Due to concerns about activist retaliation, the hunters and the wildlife manager asked me to cite their input anonymously.

Throughout this thesis, whenever hunting wildlife is discussed, I will use deer as an example species (or collection of species). For not only are they archetypically wild, they are also one of the most hunted species. Moreover, they were hunted during the Ice Age as well, meaning it is a realistic choice of prey to use in the film.

## My Motivation for Making the Hunting Scene

The scene I propose here brings up ethical questions. Is it okay to kill a deer for an artwork? Is it ever okay to kill a deer? And how about using the bow and arrow? As noted, I do not doubt that there would be significant controversy if the film comes out, or if the plans become known. This makes it appropriate to explain my personal motivation for making this scene.

For clarity, I will first describe the scene I want to make in more detail. The themes of the film will be the relationship of humans to their environment, the circle of life and the changing seasons. The setting is the Late Palaeolithic of Europe, around 40-12 thousand years ago. An important part of human subsistence strategies in this era was hunting. People hunted both large and small prey, and relied to a significant degree on the nourishment and materials obtained from these animals. Because it was so central to their way of life, I want to include a scene in the film that shows how a hunt might have taken place. The actor will use a bow and arrow.[[7]](#footnote-7) He will be a real bowman, with the appropriate training and licences. He will wear a costume and body paint and will use an invented language. Before the hunt itself, there will be a scene in which he performs a ritual and asks his deities for permission and a successful hunt. Then, a small crew (probably just one cameraman) will follow him tracking a deer. Eventually the hunter will shoot and kill the deer with his bow and arrow. Afterwards, the whole body of the deer will be processed onscreen into food and useful materials. There will be no music, and it will be edited in a calm style.

Is a real hunt absolutely necessary to make this scene? The short answer is no. It would be possible to film live animals for a tracking scene, then use CGI or latex fakes to suggest a kill. Many films have used this technique.[[8]](#footnote-8) Or we just do the whole thing in the computer. But to me, this approach has three essential shortcomings: first, it would make less of an impact on the viewer. Knowing that the kill is real gives the viewer a more intense and memorable experience. I want to reach my audience in a deep way, and I believe that with a real hunting scene the film will be better able to do this. The film could open with a note on the hunting scene, leaving no doubt about the realness of it.

Second, I feel that is disingenuous that killing an animal for a film only becomes wrong when we see the kill onscreen. It is common to see actors eat meat in a film (e.g. *Chef* (2014) or *The Menu* (2022)) but seldomly if ever is it shown where that meat came from. Naturally, the animal whose meat the actors eat was not killed *specifically* for this film; it was reared, killed and slaughtered by the meat industry for the general market, after which the producers bought its meat. But rather than relieve these films from a moral burden, this points to the estrangement from our food made possible by industrialized animal rearing practices. Just as the slaughter of an animal is not shown in *Chef*, it is not part of our thinking when we buy meat in the supermarket. As a consequence, probably there would be little controversy if my actor only roasts a deer steak bought from a local butcher. This seems hypocritical: to accept filming the *eating* of meat but not the *killing, slaughtering and processing* of the animal from which the meat came*.* If we accept eating meat, we should accept this too. Considering this (leaving aside the differences between killing wild and domestic animals for now) the more honest option would be to show the hunt, as well as the gutting and processing of the deer for meat and useful materials.

The third and most important shortcoming of a fake hunting scene is that it would mean to look away from both our collective past and the current ecological situation of humanity. This point can be summarized in the following hypothesis:

*We still need to kill wild animals, only now for maintaining ecosystems instead of survival.*

Hunting has been an integral part of subsistence strategies ever since humans started walking upright. Nowadays it provides only a minor contribution to the diet of industrial societies. Because it is supposedly no longer necessary for humans to flourish, people increasingly find hunting deplorable and cruel.[[9]](#footnote-9) But, as I will argue in section 3, this criticism is not justified. Hunting has transformed from a core subsistence strategy into an unmissable part of ecology management. Though collectively we could do without wild meat, many ecosystems would suffer greatly if we stop hunting. Because of a lack of predators, some species (like deer) would grow beyond the carrying capacity of their reserve within decades. As a consequence, they overgraze, dramatically reducing biodiversity. This is why the managers of reserves continue to allow hunting and hunt themselves too. Clearly, the motivation of ecology management for killing wildlife is different than the motivation of Stone Age hunters, but it nevertheless creates a space in which the killing of a deer is a good thing. It is within this moral space that I want to make my scene. The numbers matter here. If we need to kill, say, 3 million deer each year to prevent ecological degradation,[[10]](#footnote-10) it should not be much of an issue to kill one of them whilst filming.

Certainly, we should reduce our killing as much as possible, and collectively we kill too much now. Many ecosystems are under threat from human activities, and we should work to conserve them. But we cannot bring the killing of wild animals down to zero, because even a vegan existence requires other things to die. Through urban expansion, the growing of food, resource extraction and wildlife management, humanity kills animals, and there is no way of out that situation. I believe we should not look away from it. Instead we should actively accept the emotional burden that it brings, embrace it and deal with it. I believe that a real hunting scene in a film about the Stone Age is a good way to remind viewers of the situation we’re in. We have not left the cycle of life and death, urban life only pushed it to the fringes of daily experience. The scene would be controversial, it would push against people’s limits, but that is exactly what art is for. Our disconnect from wild nature could be bridged with cinema.

To understand my motivation, it can be useful to consider past artworks that featured real deaths. Consider *Helena* (2000), which was an art installation in Denmark where museum visitors were invited to press the button of blenders that contained live goldfish (and did so). Or think of Damien Hirst’s *The Physical Impossibility of Death in the Mind of Someone Living* (1991), basically a tiger shark submerged in a large tank of formalin. And finally, there is the travelling exhibition called *Body Worlds*, which contains the skinned and preserved bodies of real people placed in various day-to-day poses. These artworks were controversial, but they derived their impact from the use of real deaths.

## The Conditions that Make The Scene Ethically Acceptable

Although I have claimed that the actual killing of an animal in the movie has added value, I think this act is not unconditional. To make the scene ethically acceptable, I postulated five conditions the production must meet:

1. The whole animal is used, on screen, for food and useful materials;
2. The animal is the target of culling[[11]](#footnote-11) policy and would be killed anyway;
3. The hunter shows respect and gratitude and performs rituals;
4. A part of the film’s profits will be donated to the organization that manages the area where the deer was shot;
5. The hunt is undertaken in strict accordance with local hunting guidelines and the production team has obtained the necessary licences.

Each of these will be argued for throughout the thesis. There is a sixth, optional condition, but that needs so much nuance that I will only mention it at the end of Section 4. In the concluding section, I will reflect again on these conditions.

# 1. Practicalities: Hunting Laws and Animal Abuse

In this section, I will briefly discuss the legal context of bowhunting. I will also explain why legally speaking, hunting is not animal abuse, and I will argue that this doesn’t change when a camera is rolling. This to show that condition (5) should and can be met by my production.

## 1.1 Hunting Laws: Where and When to Hunt With Stone Age Means

Currently, bowhunting is legal in 20 European countries and most of the USA. Some places require a bow to have a minimum pulling strength, others specify that a modern compound bow has to be used. Most do not specify the type of bow and so for simplicity we can state that there are many places where the production team could set up a Palaeolithic-style bow hunt. Nearly all jurisdictions have set seasons in which hunting is allowed, e.g. in winter or in summer. It seems that performing the hunt I intend would be a matter of travelling to a country where it is legal, having the actor(s) obtain the necessary licences and starting the hunt in the designated season.

*Figure 1: This map shows European countries where hunting by bow and arrow is legal (in green). Source:* [*https://europeanbowhunting.org/*](https://europeanbowhunting.org/)

However, would my proposed hunt, by being part of a film production, count as animal abuse, and so make my production plan illegal? Some countries have laws against abusing animals on film sets. Would they apply to our hunting scene? And, importantly, would the on-screen killing of a wild animal make the film ineligible for dissemination? After we’re sure that the scene is legally possible to make and disseminate, I will focus on its moral aspects in the rest of the thesis. Below, I will explain the laws that pertain to the use of animals in the film world.

## 1.2 Animal Abuse Laws for the Film Industry and Online Publishing Restrictions

Harm is not always abuse. In official legislation, hunting is not seen as animal abuse. This is so because the context in which a hunter harms an animal is different from the context in which a pet owner or farmer harms an animal.[[12]](#footnote-12) Moreover, an ethical distinction is commonly made by lawmakers between domestic animals and wildlife, and this is reflected in legal frames. In the Netherlands, animal abuse laws apply only to “pets, hobby animals and production animals”[[13]](#footnote-13) while there are separate laws that apply to wild animals. Other EU countries and the US have similar legal structures. Someone with the right weapons, the right licence in the right season may harm in order to kill certain species of wild animals in certain areas without it counting as abuse. Next to stunned slaughter and euthanasia, it is one of the few forms of legal animal harm.[[14]](#footnote-14)

 The question is whether this would hold when a hunt is part of a film production. Now we could argue that the harm is done ‘for entertainment purposes’, since a recording of the hunt would be used in film screenings. While some countries have laws against animal abuse in general, a few (e.g. the UK) have another set of laws specifically directed at protecting animals in the entertainment industries. Moreover, American Humane (AH), the organization responsible for the infamous “No animals were harmed” label, seems very clear in its guidelines that harming wildlife during film production is not permitted.[[15]](#footnote-15)

But consider the following. If a day-to-day hunter decides to film his activities in a documentary fashion, he would be simply filming a legal activity. As far as I am aware, there are no laws anywhere that do not allow for this. And in terms of publishing this footage online, there also shouldn’t be a problem. If the YouTube Community Guidelines are any measure, hunting is given an exception when it comes to publishing footage of animal suffering.[[16]](#footnote-16) Because of this exception, there are countless documentary-style videos on YouTube that show real hunting, with the animal suffering and dying onscreen. The community guidelines do not give any indication that, by being part of a fiction film, my proposed scene would not be allowed. Precedents from the world of cinema also do not indicate that a real hunt would be a problem legally. A handful of films featured real hunting scenes in the past, and though they were controversial, they were not illegal to make or disseminate.[[17]](#footnote-17)

 Considering the above, legally speaking it should be no problem to film my hunting scene and publish it on YouTube or show it in cinemas. But would official authorities agree? Recall that the AH guidelines are clear on not harming wildlife during production. But AH is not a government institution, and it is optional for filmmakers to invite them on set (and many don’t).[[18]](#footnote-18) Their guidelines are precisely that, guidelines. They are based on a certain view of how people should treat animals, and these views are open to discussion. I agree with lawmakers that a proper hunt is not a kind of animal abuse. And I believe it does not become so when a camera is rolling, for that does not affect the animal. It may only have an impact on the people seeing the footage.

As far as national or regional jurisdictions are concerned, it is likely that my film plans would require applying for special permits. But I cannot find solid reasons for assuming that my plans would not be given green light by authorities if all the normal requirements for executing the hunt itself are fulfilled. This means that condition (5), to undertake the hunt in strict accordance with local hunting guidelines and after obtaining the necessary licenes, can be met by my production.

Whether or not the plan is *ethically acceptable* is another question, which will be discussed in the following sections. My point being that my film plans will be controversial, but they cannot be stopped by official authorities or by activists that try to resort to legal measures. In all likelihood, the playing field laid out by lawmakers formally allows my scene to be made and published.

# 2. Critiques of Hunting from Animal Ethicists

*We are not (…) in what we might take to be the ‘ideal’ position (…) and it may at best be a bitter-tasting compromise.*

-Cora Diamond[[19]](#footnote-19)

*They cause terrible animal suffering with their retarded hobby.*

-Judith Krom, municipal parliament member for Partij voor de Dieren[[20]](#footnote-20)

Before animal ethics came to the fore in the 1970s, Western philosophers since the Enlightenment mostly evaluated animals as things or assets. For example, Descartes called them automatons, and Spinoza after him argued that “we can use them as we please”.[[21]](#footnote-21) After being a marginal voice for a long time, finally animal ethics became prominent as a response to concerns about industrial farming facilities and the rise of lab testing in the second half of the 20th century.[[22]](#footnote-22) As one of the first, Peter Singer was advocating to expand our moral circle using a utilitarian approach in *Animal Liberation* (1975).[[23]](#footnote-23) Later, Tom Regan wrote his highly influential *The Case for Animal Rights* (1983), which started and served as basis for the animal ‘rights’ approach.[[24]](#footnote-24) Though both approaches are associated in the public debate with the animal rights movement,[[25]](#footnote-25) there are significant philosophical differences between the two. So to avoid confusion, I will use the term “animal ethics” instead of “animal rights theory” when I group them together. In this first wave of animal ethics, hunting was a side topic, but the arguments put forth by Regan and Singer have been influential nonetheless. I will explain how both authors relate to hunting, focusing on Regan first. Based on their texts, none of the conditions mentioned in the Introduction survive scrutiny.

## 2.1 The Basics of the Rights Approach

Regan formulates an ethical theory among Kantian lines: a rational, rule-based system. The fundament of his newly constructed morality is “the postulate of inherent value”. It is the idea that “Individual moral agents themselves have a distinctive kind of value”.[[26]](#footnote-26) It is distinct from “intrinsic value.” This is the value of an individual relating to their experiences, with the codependent interest in having good experiences and avoiding bad ones. Inherent value, then, is something we attribute to moral agents *because of their being a moral agent*. It stands apart from the value stemming from experiences and cannot be reduced to it.[[27]](#footnote-27) Regan argues that attributing inherent value to individuals is valid first by contrasting it with act utilitarianism and a moral theory called perfectionism. These two latter theories have unacceptable implications that the inherent value postulate avoids. For matters of brevity, I will only discuss Regan’s critique of utilitarianism.

To make moral decisions, act utilitarians aggregate all the potential experiential outcomes of those involved and strive to realise the best experiences for the greatest number of individuals (more on this below when we discuss Singer). This approach, according to Regan, thereby reduces individuals to mere “receptacles” of experiences.[[28]](#footnote-28) Referring to Kant, Regan states that this would mean to treat an individual as a means to an end instead of an end in itself. In some cases, utilitarianism allows us to justify actions that are intuitively wrong, such as “killings done in secret” for the greater good.[[29]](#footnote-29) For Regan, cases such as this one present a significant deficiency of act utilitarianism. By adhering to the postulate of inherent value, we would avoid these counterintuitive implications.[[30]](#footnote-30)

The second reason we should adhere to the inherent value postulate is that it aligns with an intuition humans have about moral agents. Regan illustrates this with the analogy of a cup. If we see a moral agent as a cup, what goes into the cup are experiences. The experiences (what goes into the cup) have value, but the cup itself (the agent) has value too, a value of a different type than what goes into it.[[31]](#footnote-31)

However, “to restrict inherent value to moral agents is arbitrary.”[[32]](#footnote-32) Not just moral agents have inherent value: so-called moral patients have it too. For Regan, moral agents are individuals that have “the ability to bring impartial moral principles to bear on the determination of what, all considered, morally ought to be done and, having made this determination, to freely choose or fail to choose to act as morality, as they conceive it, requires.”[[33]](#footnote-33) Moral patients, on the other hand, do not have this ability, and so they “cannot do what is right, nor can they do what is wrong.”[[34]](#footnote-34) They can harm others, but because they have no reckoning of morality, this does not count as a moral wrong. “Human infants, young children, and the mentally deranged” belong in this category.[[35]](#footnote-35) But despite their limitations, Regan believes they have inherent value too.

However, restricting inherent value only to humans would be arbitrary as well. Instead, Regan posits that being a “subject of a life” is the criterion. He describes this property as follows:

(…) individuals are subjects-of-a-life if they have beliefs and desires; perception, memory, and a sense of the future, including their own future; an emotional life together with feelings of pleasure and pain; preference- and welfare interests; the ability to initiate action in pursuit of their desires and goals; a psychophysical identity over time; and an individual welfare in the sense that their experiential life fares well or ill for them (…).”[[36]](#footnote-36)

Many animals have all of the above, and so they are subjects of a life. But, as noted, since they do not have any moral capabilities, they are all categorically moral patients. Still, there are no degrees of inherent value, nor any in-between types;[[37]](#footnote-37) all those who have it, have it equally.[[38]](#footnote-38) This leaves a grey area where we cannot be sure whether an organism crosses the threshold. For example, we can argue about whether oysters or tardigrades are subjects-of-a-life. But there can be no doubt about my example species of deer, and so I leave this discussion for what it is.

 There is another essential element in Regan’s ethical theory, for having inherent value is not in and of itself a moral predicament.[[39]](#footnote-39) Regan’s moral prescriptions follow from the respect principle: “We are to treat those individuals who have inherent value in ways that respect their inherent value.”[[40]](#footnote-40) What follows from the respect principle is highly relevant for this thesis, for it has important implications for Regan’s view of hunting. The respect principle is essential for making the step to *attributing rights to individuals*, including animals.

Respectful treatment, briefly put, is what each individual is due according to Regan’s interpretation of justice.[[41]](#footnote-41) Getting a moral right is to make a claim to something (e.g. free speech) or against something (e.g. police violence) based on valid moral principles.[[42]](#footnote-42) Regan puts it as follows: “To establish one’s rights is to establish *their moral relevance* in the determination of what, in any actual case, morally ought to be done.”[[43]](#footnote-43) Since according to Regan’s interpretation of justice each individual is due respectful treatment because they have inherent value, and since (for Regan at least) that idea of justice is valid, each individual’s claim to respectful treatment is valid. Their claim is therefore a full-blown moral right. As noted, it does not matter whether the individual is a moral agent or a moral patient, or what species they belong to. As long as they are subjects-of-a-life, they have inherent value and a valid moral right to respectful treatment.

 So, what does respectful treatment entail? Formulated in the negative, the respect principle works as follows. We “fail to display proper respect whenever we harm [individuals] so that we may bring about the best aggregate consequences for everyone affected by the outcome of such treatment.”[[44]](#footnote-44) That is, “as if they were mere receptacles of valuable experiences”[[45]](#footnote-45) like in act utilitarianism. This means that we cannot sacrifice the few for the good of the many. As Regan emphasizes, “the numbers don’t count.” It’s not that consequences do not matter when making ethical decisions. There are certainly cases where the numbers matter, viz. when the involved parties stand to suffer equally per individual.[[46]](#footnote-46) Regan calls this the miniride principle (i.e. minimize overriding rights). But the point is that numbers shouldn’t be the only thing we consider. Rather, respect for the inherent value of individuals forms an extra element in moral deliberation, one that holds the basic interests of these individuals in extremely high regard. This forms the worse-off principle: If we are confronted with a dilemma, where a few individuals would be harmed greatly or a great many would suffer a little, then we should always refrain from harming the few greatly in lieu of their rights.

The point in the paragraph below is to explain how Regan’s theory of animal rights relates to hunting in order to understand what this theory means for my film plans.

## 2.2 How the Rights View Relates to Hunting

Considering the above, it should be no surprise that “[t]he rights view categorically condemns sport hunting (…).”[[47]](#footnote-47) Hunting causes the death of an animal, and for a moral agent (a human) to cause death “is the ultimate harm,” as well as “a deprivation of a quite fundamental and irreversible kind.”[[48]](#footnote-48) Killing wild animals is therefore a clear case of breaching these animals’ rights. Because of this, most of the usual justifications given for sport hunting are easily dismissed. Hunters might say that they “get exercise, take pleasure in communion with nature, enjoy the camaraderie of their friends, or take satisfaction on a shot well aimed,”[[49]](#footnote-49) but “[a]ll these pleasures are obtainable by engaging in activities that do not result in killing any animal.”[[50]](#footnote-50) In this framing of hunting, no rational moral agent should want to hunt.

 After this, Regan counters another justification of hunting: that we should hunt in order to prevent wildlife populations from growing too large, thus causing starvation when food runs out. His reply is threefold. First, he states that this argument “assumes that the death endured by hunted (…) animals is always better (i.e. involves less suffering) than the death these animals would endure as a result of starvation.”[[51]](#footnote-51) It is a tricky point, for it is true that a ‘sick’ shot (as hunters call it) results in prolonged suffering. But is that worse than weeks of slow starvation? Regan thinks this is not “obvious”, and concludes that the point that death by hunter is more humane is a “specious” at best.[[52]](#footnote-52) It should be noted that Regan misses a crucial point about overpopulation here, to which I will return in section 3.

 The second part of Regan’s reply is that “appeals to “humane concern” are dramatically at odds with the philosophy of current hunting (…) practices, as well as with wildlife management generally.”[[53]](#footnote-53) This philosophy, which Regan identifies as “the creed of maximum sustainable yield” (MSY), is the true face of contemporary hunting. Rather than controlling population numbers and prevent starvation, which he deems a “moral smokescreen”,[[54]](#footnote-54) the goal is really to allow future hunters to kill more animals. The result is that “the total number of animals who will die an agonizing death as a result of the poor shooting of hunters, (…) plus those who die by natural causes will be larger than if other options were adopted.”[[55]](#footnote-55) There are two faults in the text here. First, Regan tries to come off easy by referring to “other options” without mentioning any; and as we will see below when we discuss Singer, there are currently no viable alternatives to preventing overpopulation. Second, it seems confused to say that by killing wildlife, there will be more animals that die of natural causes. He repeats the point on the next page, stating that through the philosophy of MSY “more, not fewer, animals will die horrible deaths, either at the hands of humans or in the course of nature.”[[56]](#footnote-56) I do not understand how this would work. If we shoot wildlife, there will be fewer wild animals that die of starvation, for not only are there fewer, there is also more food per animal available.

 This point aside, the third, decisive problem of preventing starvation through population control is that it “profoundly fails to recognize the rights of wild animals” for it “assumes that policy decisions should be made on the basis of aggregating harms and benefits.”[[57]](#footnote-57) Wildlife managers and hunters need to breach the rights of a subset of wild animals to reach their goal, but “this does not compute morally” since “the rights view categorically denies the propriety of this approach to decision making.”[[58]](#footnote-58) He concludes that “wildlife managers should be principally concerned with *letting animals be*, keeping human predators out of their affairs, allowing these “other nations” to carve out their own destiny.”[[59]](#footnote-59) There are significant problems with this approach. First and foremost, there is the faulty underlying assumption that we can separate nature from human society; and second, it assumes that wild animals living in the nature reserves of today will not create awful circumstances for themselves and for other organisms when we stop hunting. I will save this discussion too for section 3.

Still, Regan acknowledges that there are exceptions to the predicament that we shouldn’t kill wildlife. First, he argues that moral patients (including animals) can cause “innocent threats”, in the sense that they harm others but do not have the moral capacities to realize what they’re doing is wrong.[[60]](#footnote-60) If the harm is great enough, and there are no nonviolent ways to stop it, then we are justified in harming the moral patient in order to stop them. A human getting attacked by a tiger is an obvious case. In his paragraph on hunting, Regan mentions the example of rabid foxes that have bitten children. The foxes are innocent, but their threat of harm is clear, and so we are justified in hunting them down. However, the exception for innocent threats does not hold clearly in the case of wild grazers such as deer. For, usually, these do not pose any such threat to people.

 The second exception can be deduced from another part of Regan’s theory, viz. what he calls “preference-respecting euthanasia”. In the case where an animal is “in conditions of acute, untreatable suffering”, we are justified in ending their life. [[61]](#footnote-61) For here it is clearly in the animal’s interest to end their suffering, though there is no other option than to stop living, “and there are things worse than death.” His example concerns a domestic pet, but similar situations sometimes arise in closely managed wildlife reserves. On the Maashorst, where I recorded my first stone age short film, there was an old, sick female bison that had no prospect of improvement in her quality of life. Since there were no natural predators, the managers decided on a mercy kill using a gun. Regan posits that a painless death is a necessary condition for it to count as euthanasia, but a well-aimed shot (something easily done with a sick, old animal) effectively makes for an instant, and therefore painless death. We were lucky in the timing of our filming days, for we were able to record the carcass in a visceral, rotting state, and incorporated this image into the story.

 The third exception in the rights view is for subsistence hunting. According to an analysis of Anthony and Varner,[[62]](#footnote-62) this exception works as follows. Regan acknowledges that there are relevant differences between humans and animals, so that when we have to choose between harming either, we should harm the animal. He states that “the harm that death is, is a function of the opportunities for satisfaction it forecloses.”[[63]](#footnote-63) Since humans have more capabilities, the death of a human would result in more opportunities for satisfaction getting foreclosed. So, when we must choose between killing an animal or killing a human, other things being equal, we should always kill the animal. In an earlier article, he wrote that “perhaps” this would make the subsistence hunting of people like the Inuit acceptable.[[64]](#footnote-64) Living in the Arctic circle, the Inuit have no choice but to kill animals in order to survive. They have to kill an indefinite number of animals, but since numbers do not matter, Anthony and Varner conclude that Regan’s theory implies that this type of subsistence hunting is acceptable. Exempting subsistence hunting as done by indigenous peoples is a common move in the animal ethics literature, as authors realize the intersectional implications of their critique on hunting. Considering that indigenous peoples have endured centuries of maltreatment from colonial powers, a critique of their hunting practices “may be perceived as support for an imperialistic imposition of a particular (Western?) norm of justice on those who do not recognize that norm.”[[65]](#footnote-65) This perhaps opens up a possibility for incorporating a real hunt in the film. In section 4.4 I will return to this point.

## 2.3 Implications of the Rights View for My Film Plans

Based on the above presentation of the animal rights view, it is clear that my plan to hunt a deer as part of making a film is not ethically acceptable. The whole thing is avoidable, as we could make the images using CGI. Since we have that option, and the deprivation that comes with using CGI is not that great (viz. a reduced emotional impact of the artwork and a limit on my artistic expression), the breach of the deer’s rights is not at all justified. Condition (1), that the whole animal is used onscreen, is not an acceptable justification, because to say that this compensates for the animal’s death is to treat it as a mere means to an end. The same goes for condition (4) (to donate part of the film’s profit to a reserve). Condition (2), that the animal must be the goal of culling policy, does not hold either, for the rights view categorically opposes this type of policy. Condition (3), to show respect to the animal before and after killing it, would not fit with Regan’s understanding of respect (which is to not breach an individual’s rights). And finally, condition (5), that the hunt should be done legally, is a mute point from the perspective of animal rights. For, as Regan has noted, “the appeal to legal rights by itself never settles any moral question.”[[66]](#footnote-66) As regular hunting is unacceptable, a bow hunt for a film scene is out of the question.

This leaves a few options to incorporate an animal’s death in the film. I could record an instance of wild predation, which will certainly create an emotional impact: e.g. wolves ripping apart a deer. And, like in my short film, I could film a carcass, either a natural one or one created by a mercy kill. I would still be able to show a certain beauty in death. This, I was able to tell from responses during screenings of my short film, still creates an emotional impact. Eileen Samshuizen, a politician for Partij voor de Dieren, told me she “didn’t have anything against that ethically” because “we wouldn’t let an animal suffer.”

And perhaps I could bring my actor in a situation where he is threatened by a wild predator and so has to defend himself (and the cameraman) with the only means available (a bow). But for obvious reasons this is not a desirable plan. However, the exception Regan gives for subsistence hunters offers a more feasible option. Perhaps, then, I could ask subsistence hunters like the San or the Hadza to star in the film. I will leave the argumentation for this option until section 4.4, where I have the space to discuss the nuances involved.

## 2.4 The Numbers *Do* Count: Singer’s Utilitarian Approach

Peter Singer wrote a theory that has similarities to the rights view of Regan, but also some important differences. First, they share an overall cause: to reduce human-caused animal suffering. Second, Singer’s approach shares some of Regan’s Kantian elements (e.g. attributing rights, not using individuals as mere means). But he is at heart a utilitarian, which the rights view categorically disapproves of. Concerning hunting, though, Singer seems equally negative.

Singer states that the main claim in his book *Animal Liberation* is “that to discriminate against beings solely on account of their species is a form of prejudice, immoral and indefensible in the same way that discrimination on the basis of race is immoral and indefensible.”[[67]](#footnote-67) He also compares his case for animal liberation to the liberation movement of women. He therefore calls society’s current attitude to animals “speciesism”, consciously coining a term similar to racism and sexism.[[68]](#footnote-68) In essence, he advocates to “bring nonhuman animals within our sphere of moral concern and cease to treat their lives as expendable for whatever trivial moral purposes we may have.”[[69]](#footnote-69)

 Nonhuman animals should be included in the moral circle because they have interest. Singer believes they have interest because they are capable of suffering. He refers back to Jeremy Bentham, who famously stated: “The question is not, Can they *reason*? nor Can they *talk*? but, Can they *suffer*?”[[70]](#footnote-70) Singer builds on this and argues that, judging on biological finds, we have enough reason to conclude that large animals are indeed capable of suffering. Many animals have all the neural infrastructure associated with pain in humans, and display similar behaviour when they are physically harmed.[[71]](#footnote-71) There is therefore no valid reason to assume they do not perceive pain when harmed. And even if a sceptic does not accept the large amounts of evidence from biology, animals at least “should receive the benefit of the doubt.”[[72]](#footnote-72) Once we accept animals’ capacity for suffering, it is clear that “[i]f a being suffers, there can be no moral justification for refusing to take that suffering into consideration.”[[73]](#footnote-73)

 Attributing rights to animals is one of the ways we can work towards improving their lives and reducing suffering. Singer, like Bentham and Regan, understands rights as valid moral claims to certain protections in society.[[74]](#footnote-74) However, he does not take rights to be of fundamental importance to the project of animal liberation. He states that “[t]he language of rights is a convenient political shorthand”, and he is not interested in a deep philosophical grounding of the concept.[[75]](#footnote-75) So whenever Singer mentions the rights of animals, we should not read him as we would with Regan’s theory. We should understand him as saying simply that animals have a certain moral claim to something because they have interests.

 Singer does acknowledge that there are relevant differences between humans and non-human animals. What do those differences entail? Dogs cannot vote, so it would be “meaningless” to attribute them a right to vote.[[76]](#footnote-76) But dogs are capable of suffering, and so it does make sense to attribute them a right not to be harmed. The point here is subtle. There are big differences between us and non-human animals, but the differences are not so big that we should refrain from extending the moral circle to include them. Singer strives to realize equality for nonhuman animals. But he does not mean equal *treatment* in all respects. He means first and foremost equal *consideration* when it comes to suffering.[[77]](#footnote-77) Once we have reason to believe an organism is capable of suffering, we should not cause it to suffer. Still, beings with more capacities are due more rights, and also rank higher in the utilitarian calculus: “A rejection of speciesism does not imply that all lives are of equal worth.”[[78]](#footnote-78) When choosing between saving a human or an animal, the animal should always go. The idea is to minimize suffering, but the suffering of humans is still more important.

Though we should minimize suffering, there are cases where we are justified in causing suffering. That is when the benefit gained from it compensates for the harm. If a harmful animal experiment could help find the cure to leukaemia, Singer believes it could be justified.[[79]](#footnote-79) But generally speaking, killing animals for food is not. The crucial concept here is necessity or needlessness. If the animal experiment is a necessary step towards curing leukaemia, one we cannot avoid, there is a definite gain through this path alone. But in the case of food, Singer believes that a vegetarian or vegan diet (supplemented with vitamin B12) is perfectly nourishing.[[80]](#footnote-80) It is therefore needless to kill animals for food, let alone to raise them in awful industrial rearing facilities.

So, with this in mind, how does hunting fare within Singer’s theory?

## 2.5 Peter Singer on Hunting: “Not the Greatest Evil That You Can Do”

The point right now is to establish in what way hunting is justifiable within Singer’s utilitarian animal ethics. Afterwards, it can be assessed whether my niche case of performing a stone age hunt for a fiction film is justifiable as well.

Initially, reading Singer gives a decidedly negative impression of hunting. As I have shown in a previous paper, he mentions it over a dozen times in his body of work, but it is mostly in offhand, disapproving sentences in texts that deal with other topics.[[81]](#footnote-81) In these cases, he uses negative terms (e.g. “the slaughter of wild animals by hunters”[[82]](#footnote-82)) or only mentions certain types of hunting that are obviously morally dubious (e.g. whaling or fox hunting[[83]](#footnote-83)). Singer can be forgiven for his pauvre discussion of hunting, for he made it explicit that his focus is on industrial farming and lab testing, as these “"cause more suffering to a greater number of animals than anything else that human beings do."[[84]](#footnote-84) On Singer’s framing, then, the choice seems clear. Either we kill wild animals, or we deprive hunters of the minor benefits that hunting brings. Since we have the option not to harm the animals, and since the harm to the hunters (in the form of deprivation) is not that great, we should save the animals.

Still, by only mentioning dubious examples Singer makes it seem as if there is no justification for hunting at all. One of the main points of this thesis is that hunting, if done with an eye for population control, is necessary to prevent ecological degradation. This makes it, I will argue in section 3, quite justifiable. Singer does in fact consider this point at one time, near the end of *Animal Liberation*. He writes of wildlife:

If it is true that in special circumstances their population grows to such an extent that they damage their own environment and the prospects of their own survival, or that of other animals who share their habitat, then it may be right for humans to take some supervisory action; but obviously if we consider the interests of the animals, this action will not be to allow hunters to kill some animals, inevitably wounding others in the process, but rather to reduce the fertility of the animals.[[85]](#footnote-85)

The problem with his suggestion of looking for this “more humane” method consists of two parts, one ethical and one practical. Ethically, we can question the morality of admitting hormones to wildlife or sterilizing them. Since they cannot agree to such procedures, surely we must understand it as a type of harm. Still, if weighed against death or the chance of serious wounding, it is not unreasonable to see fertility-reducing procedures as a lesser harm, as Singer seems to do. Another ethical consideration is that, by interfering with their reproduction, we take away one of the things that makes these animals wild. As will be discussed in more detail in section 3, independent reproduction is one of the core aspects of wildness as conceptualized by philosophers and ecologists. By influencing individual animals’ fertility, we push them one step towards domestication. If there is some intrinsic value in animals being wild, we reduce this value by influencing their fertility.

The practical objection to Singer’s suggestion is that there are currently no viable ways to reduce the fertility of wildlife. One method, which involves sedating the doe with a dart and giving her hormones intravenously, is prohibitively expensive.[[86]](#footnote-86) Costing upwards of €500 per doe, the costs would become staggering even in a small country such as the Netherlands.[[87]](#footnote-87) Consider as well that capturing and sedating a wild animal is always done with a risk of harming and killing it.[[88]](#footnote-88) The other method involves leaving food pellets with birth control hormones in the reserve, hoping that the targeted animals will eat it. In practice, however, dominant bucks push aside females to claim the pellets, so that the hormones end up in the wrong animal.[[89]](#footnote-89) Then, there is the point that we do not know exactly what the consequences are of giving wild deer birth control hormones in terms of their behaviour and wellbeing. Some of the known side-effects are “reduced food intake, inflammation of the milk glands, shifts in the sex ratio of the offspring and changes in the secondary sex traits (the growth of antlers).”[[90]](#footnote-90) Finally, there is the risk with some types of birth hormones that they not break down biologically and end up in the food chain[[91]](#footnote-91) or in our water supplies.[[92]](#footnote-92) Given these problems, then, it should be clear that doing away with hunting in favour of reducing fertility is not as easy as Singer makes it seem. When asked about culling in a live Q&A, he did in fact acknowledge the necessity of it, stating afterwards: “I’m not actually going to defend hunting but I can recognize that there are cases where killing may not be the greatest evil that you can do.”[[93]](#footnote-93)

A more positive vindication of hunting within Singer’s theory can be constructed by puzzling together several of his ideas. First, he states that the main goal of his ethics is “to live without inflicting miserable lives on animals.”[[94]](#footnote-94) If we accept that sickliness and starvation are consequences of overpopulation, stopping the practice of culling would inflict miserableness upon them. Though death is certainly a harm, Singer would probably agree with Regan that ending a life is a lesser harm than making one deeply and continuously miserable. Moreover, keeping ecosystems healthy is far from a “trivial moral purpose”. If we value the health of ecosystems (see section 3), it should be worth killing many individuals for its sake. Singer’s utilitarian approach formally allows for this, since the harm done to the individuals is outweighed by the interest of the other individuals in the ecosystem (which are much greater in number).

If we take the interest of the ecosystem as grounds for justifying hunting, it would be logical to also use the animal carcasses that we create. In a utilitarian calculus, it is the goal to create as much utility as possible. We would increase the utility of a kill by gaining nourishment and useful materials from the carcass,. One could argue that there is also utility gained when the carcasses are left to rot, since many creatures can eat from it. But in Singer’s theory, the utility for beings with the most capacities matters most, and so the benefit is greater when a human eats a dead deer than when it is left to flies or scavengers.

Moreover, Singer is not an absolutist when it comes to eating meat. He questions that a hunter who shoots a deer should receive more criticism that someone buying ham at a supermarket, for “it is probably the intensively reared pig who has suffered more.”[[95]](#footnote-95) And considering people that doubt about becoming vegetarian, he states that “we must ask ourselves, not: Is it *ever* right to eat meat? But: Is it right to eat *this* meat?”[[96]](#footnote-96) If any type of meat could be acceptable, it would be that gained from shooting wildlife for population control. On top of this, any other benefits gained from hunting are a bonus. Hunting could still bring social benefits and it could bring hunters in a mystical connection to nature. On their own, these benefits are not enough of a justification for hunting, but when population control makes it decisively acceptable, we would be wise to increase hunting’s utility as much as we can.

## 2.6 What Singer’s Theory Means for My Film Plans

In the last paragraph, it seemed that population control gave a decent justification for hunting within Singer’s utilitarianism. Condition (2), that the deer in my scene must be the target of existing culling policies, is thereby validated. This is also the case with condition (1), i.e. to use every part of the deer onscreen, since we would be increasing the utility of the animal we killed. I would discuss the other conditions here as well, but it is really of little use. By calling hunting for population management “not be the greatest evil that you can do” Singer attests that hunting might fit with his theory in the letter, but not in the spirit. If, after 50 years of writing, Singer only produced this reluctant non-disapproval for eco-minded hunting in a live Q&A, I do not doubt there would be room to accept a real hunting scene. As with Regan, the response from Singer would most likely be that the whole thing is avoidable by using CGI. Hunting just does not fit well with Singer’s individualism, just as it doesn’t with Regan’s. What a veterinarian manual called the “ethical dichotomy of killing wild animals to protect them”[[97]](#footnote-97) cannot easily be solved within these strands of animal ethics.

## 2.7 A Brief Note on the Incompatibility of Singer and Regan with Ecology

The reason that Singer’s theory seemed to give room to hunting was because I introduced the interest of the deer’s ecosystem as a factor in the utilitarian calculus. By adding the ecosystem’s interest, I shifted the meaning of Singer’s theory. Effectively, this consideration opens the door to Aldo Leopold’s land ethic, which is the topic of the next section. The point of the current brief paragraph is that utilitarian and Kantian animal ethics theories break down when applied to ecosystems. Both strands of animal ethics are fundamentally individualistic, meaning that the interest of species or ecosystems (if it is taken into consideration at all) is subservient to the individuals’. As Regan notes: “The rights view is a view about the moral rights of individuals. Species are not individuals, and the rights view does not recognize the moral rights of species to anything, including survival.”[[98]](#footnote-98) The same goes for ecosystems: “What is far from certain is how moral rights could be meaningfully attributed to (…) the ecosystem.”[[99]](#footnote-99) As will become clear, hunting is an effective focal point with which to explain this shortcoming.

# 3. An Ecology’s Interest as a Justification of Hunting: The Land Ethic

*Mankind cannot abdicate its responsibility for the ongoing management of the countryside it has created.*

-Countryside Alliance[[100]](#footnote-100)

*Whenever I hunt, I really feel connected to nature… but some of my friends that hunt, well, they just love f\*ng killing things.*

-Hunter from San Diego (who wished to remain anonymous)

In this section, the ecological perspective on hunting will be discussed. First, to provide relevant context, four philosophical perspectives on wild nature are explained: the romantic view, the asset-oriented view, the ecological view and finally the land ethic. Each perspective will be analysed in terms of what they imply for the practice of hunting. At the end of this section (3.8) I will argue against the critique that my hunting scene is immoral because it is made for entertainment.

## 3.1 Two Classic views On the Concept of Wildness

When exactly is an organism or an ecosystem wild? The concept of wildness is crucial in the hunting debate, because hunting strictly only applies to the chasing and killing of *wild* animals.[[101]](#footnote-101) Moreover, the way we think about wild nature determines to a great extent how we should relate ourselves to it ethically. The concept of wildness has many (wildly) differing definitions, but for the purposes of this paper it suffices to mention three main types of conceptualizations: romantic, asset-oriented and ecological. The land ethic provides an ethical framework for the ecological view.

The first view of wildness finds its origins in the Romantic movement.[[102]](#footnote-102) This conceptualization sees those areas of the world as wild that are large and impressive, as well as untrammelled, untamed, unexploited or undeveloped by humans. Because of this, they have something intrinsically valuable, and are capable of inducing sublime or mystical experiences in receptive people. Wild nature on this view is essentially pristine and beautiful like untreaded snow, but it can also be brutal, harsh and ugly. We could speak, like Thoreau, of “a wildness whose glance no civilization can endure.”[[103]](#footnote-103) As a famous lover of the wilderness, he understood it as a fascinating world, operating on its own measures of rightness and beauty, a world urbanites can briefly enter but no longer live in. The goal of preservationists is essentially to keep such wild nature free from ruinous human influence. Responsible land management here consists mostly of keeping civilization out and letting nature run its course.

Related to hunting, the Romantic view cuts both ways. For example, one could see the movie *Bambi* (1942) as a romanticized portrayal of wild nature. It makes nature look beautiful and peaceful, with man the hunter creating a brutal disturbance. On the other hand, many hunters themselves report an almost mystical sense of connection to their environment when they hunt. As a hunter from Noord-Brabant explained to me, by hunting one enters into the life-death relationships existing in nature. It is incomparable to simply taking a walk in the forest, because the hunter partakes in his surroundings instead of just looking at it. As this type of experience is described as mystical, it can be seen as similar to the sublime experiences associated with the romantic view.

Environmental philosopher William Cronon has identified major problems with the romantic view. His main point is that it separates humans from their non-human environment. He writes: “The dualism at the heart of wilderness encourages its advocates to conceive of its protection as a crude conflict between the “human” and the “nonhuman” (…).”[[104]](#footnote-104) If untouched nature is valuable, then human use of it is always morally wrong. The only way we can save the environment is by stopping human development, or (in the ultimate logical consequence) by committing suicide. In other words, the distinction “offers us little more that a self-defeating counsel of despair.”[[105]](#footnote-105) Another problem following from the human / non-human distinction is that it allows no middle ground: namely the countryside and managed reserves. On the romantic view, only vast, remote areas are truly wild or natural. But it is the middle ground in which we live, and it is the middle ground that needs much of our attention, since we depend on it for food, water, resources and recreation.

A similar kind of separation is inherent in the animal ethics literature. Consider again Regan’s statement that wildlife managers should be concerned with “*letting animals be*, keeping human predators out of their affairs, allowing these “other nations” to carve our their own destiny.”[[106]](#footnote-106) Singer too has stated that “once we give up our claim to “dominion” over the other species, we should stop interfering with them at all. We should leave them alone as much as we possibly can.”[[107]](#footnote-107) The romantic view seems implicit here, but the link becomes clearer when we consider that, in practice, letting animals be is only possible in huge, remote areas. In the middle ground, which Singer and Regan seem to omit like the romantic view does, we cannot let wild animals be, for the effect on their ecosystem would be detrimental. As will be explained in more detail in section 3.5, when deer populations are not managed, they effectively destroy their environment.

The distinction between wild nature and artificial environments becomes explicit in the debate about wild predation. Several authors have countered the claim that a theory of animal rights entails that we should strive to stop wild predators harming their prey. The answer from e.g. Jane Bennett is that we do not have undertake this absurd project because wild animals are in a morally different situation than domesticated species.[[108]](#footnote-108) Humans are moral actors, and so we are capable of realizing that harming an animal is bad; a wolf, however, has no moral capacities. Since wolves are not moral actors, nothing *morally* wrong happens when they tear apart a deer and let it die slowly, unfortunate though this death may be to the deer. With these mental gymnastics, animal ethicists confirm that they see an ethical separation between the human world and wild nature.

The second approach to wildness is more practical and asset-oriented. Here, wild nature is seen as a resource to be exploited. Forests provide timber, mountains give us iron and the rivers are tapped and dammed to lessen our thirst. As Aldo Leopold put it, “Wilderness is the raw material out of which man has hammered the artifact called civilization.”[[109]](#footnote-109) But, large though she is, nature is finite, and so her resources are too. In North America, this became an acute problem around the year 1900. After three centuries of unbridled economic development, American society was hitting the limits of what she could take from nature. In this situation the modern conservation movement was born.[[110]](#footnote-110) Conservationism as it became defined then is aimed at maintaining natural resources so that future generations can make use of them as well.[[111]](#footnote-111) The creed of conservationism, as we saw with Regan, is Maximum Sustainable Yield (MSY): the idea that if we don’t take too much now, there will be plenty that regenerates for the people of next year and the generations that come after.

Historically, asset-oriented conservationism and MSY have been central to hunting policies. From the start of the 20th century, governments have taken the economic value of hunting as an important justification for continuing to allow it.[[112]](#footnote-112) Not only does it bring in food, it also helps protect crops from wild grazers and it brings in money from paying sport hunters. As Conrad Gietman notes, “Hunting motives are inextricably linked to political-economic interests.”[[113]](#footnote-113) However, this justification of hunting is also easily critiqued from the side of animal ethics. As noted in section 2, we could do without deer meat, we could protect crops in nonviolent ways and we could replace the income generated by hunting licenses with other, animal-friendly economic activities. Economic benefit does not justify hunting in and of its own.

## 3.2 The Ecological View of Wildness

On the ecological view, there is no strict separation between humans and the rest of the world. The air we breathe is the same air a bald eagle breathes, and the water we drink is the same water a deep-sea urchin filters. And not just lifeless materials, but organisms themselves often transgress the boundaries between what we see as cultural and natural areas, blurring the lines between them. Still, there is a notion of wildness in ecology. This has to do with size, biodiversity and human interference.

For José Kok, biologist at Ouwehands Dierenpark (a Dutch zoo), wild animals are “animals that can maintain themselves as a species outside of a fence.” Maintaining themselves, she explained during our interview, means that they “can live in a healthy population without humans interacting with them.” This means, crucially, that animals are wild when they are capable of finding their own food and reproducing on their own. However, Kok also believes that the criterium of health means that in places such as the Netherlands, there really is no wild nature anymore.

This can best be explained as follows. On an ecosystem level, wildness increases along with the size of the reserve and decreases the more people interfere with it. Every reserve in North-Western Europe is not only relatively small and highly frequented by humans but also closely managed, and so they are relatively ‘not-wild’. Most notably, wildlife managers and sport hunters shoot part of grazer populations each year to prevent them from overpopulating. (In section 3.5, a case study will be presented where this became a pressing issue.) In huge and remote areas like the North Alaskan Noatak reserve, the Siberian taiga or the Congo rainforest basin, there is enough space for animals to migrate to food-rich environments and there are enough predators to keep populations down. No human interference is needed to prevent overgrazing. By contrast, as wildlife managers will stress, in smaller reserves deer populations will quickly disturb the balance of their ecosystem if humans do not interfere.

The idea of balance is commonly used when our policies regarding nature are discussed. Land managers in real life see certain conditions of the ecosystem as more valuable than others, and they refer to a beneficial condition as ‘balanced’. Willem van Vliet, who works as a steward for Geldersch Landschap, explained to me during our interview what he strives for in the areas he oversees: “A balance in terms of flora and fauna, that is without excesses. This means without outbreak of diseases, without outbreaks of hunger and without damage to the forest and to agriculture.”

However, from the perspective of ecology we should be careful with that term ‘balance’. It used to be common to think that wild nature after a while reaches a certain end-state when left on its own. It could then get tainted by human influence, yet would be able to recover to its former equilibrium if left alone again.[[114]](#footnote-114) But already in the 1970s ecologists shifted from thinking about ecosystems as ‘balanced’ to an approach that puts the concepts of ‘resilience’ and ‘biodiversity’ more central.[[115]](#footnote-115) Rather than existing around balances or equilibria, “[n]atural, undisturbed systems are likely to be continually in a transient state” and it does not matter whether we interact with them, for “they will be equally so under the influence of man.”[[116]](#footnote-116)

Consider that in even a small forest, there are tens of thousands of species of not just plants and large animals but also fungi, bacteria and microscopic creatures, with each individual organism having a certain metabolism and life cycle that relate to countless others. One population might stay relatively stable for a while, but other species will always fluctuate. Pair this with the idea that no ecosystem is free from outside influences (e.g. the weather and invasive species) or random events (wildfires, earthquakes) and it should be clear that an ecosystem is anything but a ‘balanced’ system that will reach a static equilibrium when left alone. For ecologists, a much more applicable concept is resilience, which refers to “the conditions for persistence” of the relationships between species.[[117]](#footnote-117) These relationships are trophic, meaning they are about eating and being eaten. It is generally accepted that the more biodiversity exists in an ecosystem, the more resilient it is to shocks and changing conditions. Biodiversity as such has become the paradigm of modern ecological conservation efforts.[[118]](#footnote-118) To illustrate, just image the opposite of a biodiverse ecosystem, a field of monocultural crops like potatoes. It only needs one new fungus to wipe out hundreds of acres, as happened during the Great Famine of Ireland. Though species disappear in biodiverse areas too, there are always others to fill in their niches.

Biodiversity in this sense is *descriptive* but it can also be used as a *prescriptive* term. Here, the reader witnesses a leap from ‘pure science’ to a theory of morally right action, whereby a value is humanly attributed to an ecosystem.[[119]](#footnote-119) When moral reasoning gets applied to ecology, we get environmental ethics. James Rolston III wrote succinctly on this:

Environmental quality is necessary for quality of human life. Humans dramatically rebuild their environments; still, their lives, filled with artefacts, are lived in a natural ecology where resources—soil, air, water, photosynthesis, climate—are matters of life and death. Culture and nature have entwined destinies, similar to (and related to) the way minds are inseparable from bodies. So ethics needs to be applied to the environment.[[120]](#footnote-120)

The author that spawned modern environmental ethics was Aldo Leopold with his book *A Sand County Almanac* (1949).

## 3.3 The Land Ethic and Hunting

Whereas Enlightenment thinkers saw the natural world as mechanistic and valueless, Leopold sought “the extension of direct ethical considerability from people to nonhuman natural entities.”[[121]](#footnote-121) Though this might sound similar to the goals of animal ethicists (Singer, Regan), Leopold is much more radical in the extension of the moral circle and includes not just conscious animals, but also plants, insects, fungi, rocks, rivers and soils. In effect, his land ethic “changes the role of *Homo sapiens* from conqueror of the land community to plain member and citizen of it."[[122]](#footnote-122) Humans are given an active responsibility in maintaining the health of the land, and that responsibility increases with how closely a society is tied to it. As a British political organisation called *Countryside Alliance* notes: "Mankind cannot abdicate its responsibility for the ongoing management of the countryside it has created.”[[123]](#footnote-123)

Rather than a Kantian or utilitarian axiom, the land ethic’s fundamental assumption is the following: “A thing is right when it tends to preserve the integrity, stability, and beauty of the biotic community. It is wrong when it tends otherwise."[[124]](#footnote-124) And rather than moral rights or the experience or pleasure or pain being the measure stick, “the good of the biotic community is the ultimate measure of the moral value, the rightness or wrongness, of actions.”[[125]](#footnote-125)

As a consequence, individuals are not attributed equal value like with Singer and Regan. Indeed, where their theories are fundamentally individualistic, the land ethic is fundamentally holistic.[[126]](#footnote-126) The ecosystem as a whole has enormously more value than individual organisms, species or materials, because the collective value of all other parts outweighs that of a few or single parts. In the analysis of J. Baird Callicott, the land ethic attributes value to individual organisms relative to their role in the ecosystem. Rare and endangered species deserve special consideration, while species that are common and numerous are less important.[[127]](#footnote-127) Compare this to Regan, who notes that the fact that “an animal is among the last remaining members of a species confers no further rights on that animal, and its rights not to be harmed must be weighed equitably with the rights of any others who have this right.”[[128]](#footnote-128)

The way the land ethic attributes value to organisms means that hunting is prima facie acceptable when it contributes to the health of the biotic community. Whether this is achieved through professional wildlife managers or sport hunters does not matter within the land ethic, for the effect in both cases is positive as far as the ecosystem is concerned. The effect of a deer population explosion, i.e. the reason why we must hunt according to the land ethic, is discussed below.

## 3.5 A Case Study of Hunting and Ecological Degradation

In the 1990s, the municipal council of Amsterdam was “a frontrunner in the national abhorrence of hunting” and put an official stop to it within its jurisdiction.[[129]](#footnote-129) This included a small nearby reserve (3300 ha) called the Amsterdamse Waterleidingduinen (henceforth AWL). The stated goal was to see what would happen to the deer populations when they were not managed.[[130]](#footnote-130) The result was that specifically the fallow deer population increased sharply. In two decades, their number grew from 100 to around 3000-3300 while scientists estimate the carrying capacity is only around 600-800.[[131]](#footnote-131) As a result, some serious problems popped up. At first, the deer went outside the reserve for food, eating anything they could find from people’s gardens or agricultural fields.[[132]](#footnote-132) As a consequence, traffic collisions became a regular thing.[[133]](#footnote-133) In response, in 2012 fences were places so that the animals were almost fully locked in. But then, because of the increased grazing pressure, biodiversity decreased among both flora and fauna: there were fewer to no flowering herbs left and there was a strong decrease of pollinator insects, birds and red deer. [[134]](#footnote-134) Some parts of the area came to resemble a barren steppe.[[135]](#footnote-135) Moreover, due to overgrazing and trampling some areas became increasingly effected by erosion.[[136]](#footnote-136) Starving deer were spotted more and more. (Activists tried to solve the problem by throwing hay and other food over the fence, but this led to diarrhoea among the animals.[[137]](#footnote-137)) The changes were alarming enough that in 2016 the policy was overturned. Since then, managers have done their best to try and bring the number of fallow deer down again but they were hampered by circumstances of weather and COVID-19.[[138]](#footnote-138) The managers made several fenced enclosures so that flora and pollinator insects were able to recover.

## 3.6 Reflections and Counterpoints

The AWL is a prime example of what happens when an ethical theory does not match up with the challenges of the real world. It shows that overpopulation and the detriment it causes to biodiversity is the decisive factor in the justification of hunting. This is the crucial point of this thesis, the point on which the rest of the argumentation for my film plans hinges. As noted, most justifications commonly given for hunting are easily dismissed. Hunting for food, as a cultural-social event or as a way to connect to nature can all be easily dismissed by critics as nonessential. The suffering of individual animals is also not decisive: either the animals suffer at the hand of hunters (a slow death, a wrong shot) or they die from starvation and sickness. These different types of suffering cannot be quantified and compared to the extent that one is undoubtedly worse than the other. Pro-hunters like Cahoone can downplay the suffering created by bullets or arrows,[[139]](#footnote-139) while anti-hunters can downplay the natural causes for suffering. For example, Frans Vera, the driving force behind the creation of the Oostvaardersplassen, once stated that he thinks “starving to death [is] a very peaceful way to go.”[[140]](#footnote-140)

Though the importance of wildlife *suffering* can be questioned by either side, the case of the AWL provides very solid evidence for the necessity of keeping populations down to prevent ecological degradation and a problematic decrease of biodiversity. Hunting is by far the most realistic option we have for doing so. Fertility control methods, as noted in section 2.5, are suboptimal at best and damaging at worst. Another suggestion, made by e.g. Roger King, is that we reintroduce predator species like wolves.[[141]](#footnote-141) This is easier said than done. First, they are very unpopular creatures among farmers, who lose cattle to them (in the Netherlands, there is reason to believe farmers have started poaching them for this reason[[142]](#footnote-142)). Second, you need a lot of wolves to handle existing deer populations fully, something that is difficult to achieve in small, disparate reserves as exist in many parts of Europe. The only way the predator solution might work is if all reserves become connected through land bridges. There is a project underway that has this as one of its aims, namely the Rewilding Europe Project. However, that is a big if. It is expensive and time-consuming to establish corridors, as this involves buying up farmland, building ecobridges across highways and not to forget finding political will. Meaning that even if the Rewilding Europe Project succeeds, in the meantime we must accept hunting as the only viable method of keeping wild deer populations down. And if the introduction of predators fails in some places, either because of ecological reasons or social opposition, it will remain the only option locally.

Some do doubt the ecological argument pro tanto. Critic of hunting Nettie Dekker has argued that overgrazing “is just a frame” used by hunters so that they can keep shooting.[[143]](#footnote-143) She argues that any reserve has a “natural” carrying capacity and “can never house *too many* animals” since nature sets its own standards.[[144]](#footnote-144) Now, though I find the pro-hunter ecological argument convincing, especially given what happened in the AWL, I am not an expert in ecology. I am not in a position to judge whether Dekker adheres to scientifically more sound theory than pro-hunting wildlife managers. However, if it can be any guide, there has been a court case about culling on the AWL in which the ecological argument was used by the defendant (i.e. the wildlife managers).[[145]](#footnote-145) Here, the health of the deer was explicitly excluded from the consideration. Instead, evidence about the impact of the overgrown deer population on traffic safety and damage to both crops and nature were put forth. For the judge, these arguments were the decisive factors in giving cullers the green light. If we accept the Dutch court as an independent societal arbiter, the ecological argument in favour of hunting has proven more convincing.

The land ethic, in short, is much better able to deal with the “ethical dichotomy of killing wild animals to protect them.”[[146]](#footnote-146) Rather than seeing hunting as “not the greatest evil that you can do” as Singer did, within the land ethic “to hunt and kill a white-tailed deer in certain districts may not only be ethically permissible, it might actually be a moral requirement, necessary to protect the local environment, taken as a whole, from the disintegrating effects of a [deer] population explosion.”[[147]](#footnote-147) The suffering undergone by deer when they are hunted is easily outweighed by the benefits of their death, for the rest of the ecosystem is better able to flourish when their numbers are kept in check.

Whether we use a gun or, as is the plan with my film, a wooden bow with stone-tipped arrows, does not matter within the land ethic. For even though the risk of the animal suffering is greater with the bow, it is still an effective enough weapon. One study among 7300 Minnesota bowhunters found a retrieval rate of 83% (meaning 17% of deer that were shot were not recovered).[[148]](#footnote-148) Moreover, as the bow has a shorter range, it requires hunters to blend with their environment even more, and brings them on a more equal level with their prey. As a side benefit, the bow is also a nearly silent weapon, meaning shooting an arrow disturbs the environment much less than with a gunshot. Prehistoric bows and arrows, moreover, require no production of metal, have no toxic by-products and are not polluting if lost in the forest. Considering these points the bow is an ecologically responsible way to hunt.

## 3.7 You Eat What You Kill

An important lesson of the land ethic is that one should eat what one kills.[[149]](#footnote-149) Leopold has stated that the most virtuous way to eat is to gather food yourself in the wild. Nowadays, hunters increasingly put the food argument forward as their main justification.[[150]](#footnote-150) Wild meat is hailed as a sustainable source of food, as it is free from antibiotics and does not put pressure on the environment like (industrial) farming does. The idea is that there must be more utility gained from a hunt than “the sturdy pleasure of the chase”[[151]](#footnote-151), as Theodore Roosevelt would have it. Preferably, *maximal* utility is gained, meaning that every part of the animal must be put to use, not just the edible parts. In the context of the Stone Age, especially, there are surprisingly many things you can do with the various organs of an animal. Charles Foster, during an attempt to simulate Palaeolithic life in a Derbyshire forest with his son Tom, describes the things the two of them imagine doing with a hare’s body in order to justify killing it:

…we agree that its skin will be a foraging bag or the back of a jacket for Tom, its femurs flutes, its dried intestines the start of a cagoule (inspired by Inuit seal-gut garments), its ears (which we’ll fray at the end) brushes, its eyes marbles, its shoulder blades knives, its ribs needles and toothpicks, its bladder a doll’s purse, its feet talismans, its skull on a pole outside our shelter for some reason that neither of us can well explain, its vertebrae strung on nettle-fibre string as a necklace, its tendons the string of a fire-bow, its brain a paste for curing its own hide, its buttocks and shoulders roasted, its livers, kidneys and pancreas fried, its lungs bait for crayfish, its body boiled for soup, its dung used to fertilise a plot which will give us flowers in the spring and edible seeds in the summer.[[152]](#footnote-152)

If my scene will be realized, this is more or less the extent to which I plan to utilize the deer’s carcass. As Foster states right after the above quote, “Only if nothing is wasted can this death be excused. It is terribly certain that any waste will bring retribution.” I believe that this is one of the crucial justifications for my plans. Rogier van Rossem, director and founder of the Herpetofauna Foundation, told me at first that he would object fully to making a hunting scene for entertainment purposes. But when I explained that I want the deer’s carcass to be utilized maximally in sight of the camera, he thought it was “surely tolerable policy”.[[153]](#footnote-153)

## 3.8 What This Section Means for My Film Plans

The point of this section was to show that there is a solid justification for hunting certain species of wildlife found in the land ethic: we need to hunt to keep ecosystems healthy. Much attention has gone to this point in this thesis because hunting is a highly contested topic, meaning that to justify hunting for a film scene requires justifying hunting in the first place.

But agreeing with any of the justifications for hunting generally and bowhunting specifically does not necessarily imply that making a fictional film scene with a Stone Age hunt is acceptable. Importantly, by filming it we are changing the intent and context of the hunt. A hunter from Noord-Brabant thought it would be “voyeuristic” to film the animal getting killed, in the sense that the viewer would be deriving pleasure from the distress or suffering of another being. The kill would be ‘for entertainment’ and this seems obviously wrong.

To me, a typical way that animal is killed for entertainment is a Spanish bullfight. Here, a bull is literally teased to death under the eyes of thousands of viewers, the pain a traditional part of the show, which is sometimes even guided by music. It is exciting to watch, because it is dangerous; the toreador plays with death.[[154]](#footnote-154) My reply to the voyeurism objection is that my film is not meant to cause pleasure in the viewer in the way that a Spanish bullfight might. Or, for that matter, many YouTube videos that show hunting.[[155]](#footnote-155) A typical hunter, first of all, often hunts alone, and certainly not with thousands of people watching. The hunter kills, but tries to do it as quickly and painlessly as possible. He does not tease his prey with a red muleta or taunt it with macho gestures. And though the hunt will be filmed, it will not be accompanied by music. It will be a calm and serious endeavour.

The aim of my scene is more like katharsis: empathy with a tragedy leading to learning. The animal will be thanked and treated with respect. Most people live too distant from wild nature to understand the role of death in life, and I believe we therefore need cinema to be confronted with its realities. As stated in the Introduction, a faked scene does not have the impact of a real scene. The voyeurism objection, then, for me points to the importance of making a respectful presentation of the hunt, rather than to an absolute impermissibility of making any type of hunting scene.

As a last consideration, I should note that my film production as a whole will be a commercial enterprise, since I will try to get the film in cinemas. This commercial aspect of the production needs some consideration. In a way, a part of the deer will be sold on the market: its image. This means that if the film turns a profit, we will profit monetarily from an animal’s death. I feel there is a moral burden here that needs to be addressed. As stated in condition (3), the scene will include giving of thanks to the deer, and as stated in condition (1), its body will maximally used onscreen so as to make its death count for as much as possible. In a spiritual and practical way its death will therefore be compensated. But I could do more. Because of the commercial nature of the project, it would make sense to create a financial compensation (condition 4 in the Introduction). The case here is similar to prize hunting (i.e. the hunting done by rich people on the African savannah) which is often justified by referring to the monetary contribution of the sport.[[156]](#footnote-156) It could then be established in the production plans and in the contracts with financiers that part of the film’s profit will go to nature conservation efforts, preferably to the area where the deer was shot. So if (and admittedly, it’s a big if) the film brings in large sums of money, the death of one deer could contribute to the life quality of many other deer, and a whole ecosystem as well.

# 4. Some Indigenous Views on Hunting and Nature

*The greatest peril of life lies in the fact that human food consists entirely of souls. All the creatures that we have to kill and eat, all those that we have to strike down and destroy to make clothes for ourselves, have souls, souls that do not perish with the body and which must therefore be [pacified] lest they should revenge themselves on us for taking away their bodies.*

-Igulikik, Inuit hunter, to Knud Rasmussen[[157]](#footnote-157)

*Hunting is a sacred act with strict do’s and don’t’s. (…) Right when we kill a deer, we gather pine branches and make a bed for the deer. The pine needle bed lifts the dead deer off the ground and offers his spirit respect. It also keeps the hide and meat clean from dirt and other debris. We face the head of the deer towards home, which protects it.*

-Nolan Notah, current-day Navajo hunter[[158]](#footnote-158)

In this section, I will explain how several indigenous groups view(ed) hunting. To be clear, there is no ‘indigenous philosophy’, because the groups behind this umbrella term vary enormously in their culture and beliefs. But highlighting several of them provide highly interesting alternative perspectives on hunting and our relation to the environment.

 In the Introduction, I mentioned that there was one condition that would make my film plans ethically acceptable that I would save until section 4. That condition is that I ask an indigenous actor to perform the hunt. The reader might think that is a disrespectful suggestion, but after reading this section I hope it will have become clear that this condition is posited respectfully.

Before moving on, I must note that indigenous cultures not only provide an interesting standalone perspective on hunting, but also provide inspiration for reconstructing a prehistoric society. There will be remarks here and there in the section indicating this. It is very common in the archaeological literature to explain their findings by referring to indigenous cultures from recent centuries. For a discussion of the methods and epistemological problems of this approach, I must refer elsewhere for lack of space.[[159]](#footnote-159) Another thing I must note is that it might seem inappropriate or perhaps disrespectful to take inspiration from indigenous cultures for a prehistoric film. This is so because indigenous people have suffered from centuries of racist oppression, misrepresentation in media and other types of maltreatment. It is not obvious that my approach is any better. Because of this worry, I travelled trough the USA last year especially so that I could ask this question to Native American people: what would you think of me taking inspiration from your heritage to write a film script about the European Stone Age? With my limited time and budget, I was able to speak to 10 people from 4 different tribes. The response was without exception positive. Though this can hardly be a representative sample (and again, indigenous cultures are not a monolithic whole) my impression was nevertheless that my plans would be positively received by the communities there. I was told by the director of the Museum of Indigenous Cultures in Prescott, Arizona that taking inspiration from Native cultures generally is not a problem, but if I would like to use a specific dance, song or myth that is still in use, I should consult the local Tribal Cultural Commission. So far in the process this is not yet the case, but should it happen, I will certainly seek contact with the right people and undertake my project respectfully.

## 4.1 The Honorable Harvest

So what can we learn from indigenous cultures? Robin Wall Kimmerer, who is of Native American descent, emphasizes the conservationist characteristics of indigenous cultures and the respect they had for nature. A professor in ecology, her explicit goal in the book *Braiding Sweetgrass* is to bring together modern science and traditional knowledge, arguing they can enrich each other.[[160]](#footnote-160) Throughout the book, she contrasts the unsustainable attitude towards nature of industrial societies with that of indigenous groups, which she frames as sustainable and respectful.

Her focus in the book is on “the Teachings of Plants”[[161]](#footnote-161), but she discusses hunting too, in the chapter on the principle called ‘the Honorable Harvest’. According to Kimmerer, this principle is deeply embedded in Native American worldviews and mythology.[[162]](#footnote-162) It holds that it is okay for people to take things from nature to fulfil their needs, including taking an animal’s life for food, as long as they give something in return:

The Honorable Harvest asks us to give back, in reciprocity, for what we have been given. *Reciprocity helps resolve the moral tension of taking a life by giving in return something of value that sustains the ones who sustain us*. One of our responsibilities as human people is to find ways to enter into reciprocity with the more-than-human world. We can do it through gratitude, through ceremony, through land stewardship, science, art, and in everyday acts of practical reverence.”[[163]](#footnote-163) (my italics)

This is highly relevant to my film plans. Since movies are artworks, we could interpret my film as an instance of reciprocity. The core message of my film is about the relation between prehistoric humans and nature: I want to show how they depended on it, moved with it and respected it, and how death is part of this relationship. In return for the death of the animal I will try to show my film to as many people as possible, hopefully inspiring the viewer to behave more respectfully towards nature. I would thereby aid global society a tiny bit in transitioning to a sustainable future. Because we would *really see an animal die*, we are forcefully confronted with the realities that a sustainable relationship to nature requires.

The Honorable Harvest relates to the animistic belief system that many Indians pertained to, meaning that they attributed personhood to non-human entities. Ties between entities are sometimes expressed as kinship ties, with certain species being brother, sister, father, ancestor to each other and to humans. For believers in animism it is possible for humans to communicate with trees, rivers and birds, and these entities can communicate amongst themselves as well. Kimmerer argues that traditional societies, through such communication, were keenly aware of the fact that harvesting plants and hunting animals excessively meant next year would bring fewer of them. You ought to ask, out loud or mentally, if it is okay to harvest a wild onion, cut down a tree or shoot a deer. The onion, tree or deer might say no. You should look for signs that tell whether it is the right time to harvest; and there are signs that say you should refrain from doing so. Kimmerer writes:

The guidelines for the Honorable Harvest are not written down, or even consistently spoken of as a whole – they are reinforced in small acts of daily life. But if you were to list them, they might look something like this:

 *Know the ways of the ones who take care of you, so that you may take care of them.*

*Introduce yourself. Be accountable as the one who comes asking for life.*

*Never take the first. Never take the last.*

*Take only what you need.*

*Take only that which is given.*

*Never take more than half. Leave some for others.*

*Harvest in a way that minimizes harm.*

*Use it respectfully. Never waste what you have taken.*

*Share.*

*Give thanks for what you have been given.*

*Give a gift, in reciprocity for what you have taken.*

*Sustain the ones who sustain you and the earth will last forever.[[164]](#footnote-164)*

These guidelines are inspiring, but as will become clear below, Kimmerer’s presentation of them makes for an idealization of how Native Americans acted historically.

## 4.2 The Ecological Indian Stereotype

I do not doubt that the considerations from the Honorable Harvest were important for traditional Native cultures when they hunted. But, as scholar Shephard Krech has argued in his book *The Ecological Indian*, we shouldn’t idealize indigenous attitudes towards their environment. Rituals and asking permission to the spirits were certainly essential to Indian hunting,[[165]](#footnote-165) and Indians did sometimes use every part of their prey.[[166]](#footnote-166) But Kimmerer only discusses old myths plus anecdotes from individual hunters and trappers of Native descent that she interviewed. She omits all mention of the times that Indians in the past did in fact waste what they had taken, did take more than they needed and did not minimize harm. Krech argues that based on written accounts and archaeological evidence, we know that Indians sometimes didn’t use large amounts of edible meat after a hunt, or even took only the hides and choice cuts from the carcasses. Krech would argue that an honest depiction of Indian life includes mentioning the ‘wasteful’ use of hunted animals.

Krech’s central point is that the idealizations of traditional indigenous life, such as that made by Kimmerer, are a stereotype. He has dubbed it “the Ecological Indian:the Native North American as an ecologist and conservationist.”[[167]](#footnote-167) The Ecological Indian is related to the stereotype of the Noble Savage. The idea has its origin with Rousseau, and it entails that Indians were “peaceful, carefree, unshackled, eloquent, wise people living innocent, naked lives in a golden world of nature.”[[168]](#footnote-168) Some have argued that the term Noble Savage arose when early European explorers observed Indian men hunting, an activity that in the Old World was reserved for the nobility.[[169]](#footnote-169) Since the 19th century, the eco-friendly image has been the predominant version of the Noble Savage. It got linked with nature conservation efforts and it is still highly influential today.

The problem with the stereotypes like the Noble Savage and the Ecological Indian is that they “are ultimately dehumanizing. They deny both variation within human groups and commonalities between them.”[[170]](#footnote-170) After this claim, Krech cites historian Richard White, who writes that the stereotype “demeans Indians. It makes them seem simply like an animal species, and thus deprives them of culture.” Krech further critiques the stereotype on the basis that in many cases, Indians clearly did not act in line with it; and that moreover, modern-day concepts like conservation and preservation did not exist as such in the worldviews of historical indigenous groups.

## 4.3 Explaining Native Hunting by Taking Their Perspective

One type of hunting practiced by Plains Indians was particularly referred to as wasteful in the accounts of contemporary Euro-American observers, namely the communal mass hunt. Indians living on the Plains would drive herds of bison off a cliff, or into a walled enclosure. They would finish off the animals (sometimes dozens, sometimes several hundred or more) with arrows and spears, without regard for age or gender. They preferred females and foetuses, often not touching bull carcasses.[[171]](#footnote-171) This stands in contrast to the wildlife policy common in today’s nation states, according to which young and female individuals ought to be spared to keep up population numbers. Based on written accounts, we know that after hunting single animals too Indians would not always put the carcass to maximal use.

However, rather than judge these groups, Krech explains why this ‘waste’ happened by showing how Indians’ worldviews differed from that of contemporaneous Europeans or later ecological scientists. He writes: “In order to “see” with their eyes, we must also consider their belief systems on the basis of which their rationality formed.”[[172]](#footnote-172) One reviewer put the point of the book succinctly: “Krech argues that tribal beliefs (…) established moral standards that underlie tribal natural resource use in the past even if some practices were interpreted as wasteful and destructive” by outside observers.[[173]](#footnote-173) As will become clear, they held on to different facts about animal behaviour and they did not see a strict line between religion and economy.

First, their animistic worldview helps explain why Plains Indians would kill any and all bison they drove into an enclosure, even when there were more than they could process. The Piegan and Cree Indians believed that if they let some bison escape, they would tell the others in the herd not to return.[[174]](#footnote-174) We cannot know to what degree this belief was shared among other Plains tribes because the historical record is too patchy, but Krech thinks it is plausible that they did. In any case, Indians clearly ascribed communicative abilities to bison that an ecologist would not. It may seem difficult to understand or respect the actions that followed from the Piegan and Cree worldview, but that is exactly the challenge of intercultural exchange.

Of the hunted animals, they would sometimes use every part, but other times, as mentioned, they would only take the hide or a choice cut of meat, leaving the rest of the carcass to rot. They would sometimes leave hundreds of excess carcasses wholly untouched.[[175]](#footnote-175) The point Krech makes is that this is only wasteful as seen from an asset-oriented or commodified perspective on nature. A ‘capitalist’ hunter would take every chance they have to sell commodities to an unsatiable market. Indians also had a trade economy, though nowhere on the scale of industrial nations. Their main priority, Krech notes, would have been to secure a food supply for the whole group.

For hunter-gatherers, practical demands often foreclose what we would deem ethical treatment of animals. Robbert Bleij, a bushcraft expert that I interviewed, told me about his experiences visiting the San hunters in Tanzania: “They would shoot rabbits, then break their legs and hang them on their belt while still alive. To us this seems incredibly cruel, but for them, the consideration is the biological clock that starts ticking. As soon as the animal is dead, it starts rotting.” For the Plains Indians, the problem is that once a herd has started moving, it is not possible to control the number of animals that end up running over the cliff or into the enclosure. Furthermore, bison behaviour, and the fact that the bison herds were so unimaginably large (approximately totalling 30 million individuals on the plains) was probably highly influential on the attitude of Indians. It was common for these animals to die in the thousands from natural causes like frost, drowning, fires or by getting stuck in mud. With such numbers, Krech explains, it perhaps didn’t cause worry to kill dozens or even hundreds more bison than needed.

Excessive killing has in part to do with the belief, common among many indigenous groups, in reincarnation. Meaning that when you kill a beaver, it does not result in a simple reduction of the population. Rather, that beaver will quickly reincarnate as a new beaver, or even several. It was not improper to kill many beavers, but it was possible to act wrongly, like when certain rituals were not performed or when they were performed incorrectly. Among some tribes, one had to refrain from giving beaver bones to dogs, because the reincarnated beaver needed the bones to house its new body. The bones should be placed in a body of water after processing so the spirit of the beaver could find them.

The following belief also sheds light on the attitude of Indians towards their prey. For those tribes living off of bison on the Central Plains, the belief was common that the enormous bison herds came from an underground area somewhere far to the north.[[176]](#footnote-176) Like bees from a hive, they were periodically sent upwards through a lake to roam the grasslands. Whether the herds would show up in great numbers was not a matter of how many of them were killed and born the year before. Instead, this depended on whether spirit-appeasing rituals were performed correctly. If the spirits were angry for some reason, they would keep the herds away.

Considering the beliefs described above, Krech argues Indians didn’t have a strict dividing line between economy and religion. Rather than maximizing asset use, the broader relationship with the environment was more important:

Perhaps conservation and waste should be construed in other than narrowly defined utilitarian terms. It may be that wasting one’s total relationship with buffaloes – a relation expressed in kinship idiom as well as in other ways – was far more risky than wasting a hide or an entire herd. But especially given the incomplete and fragmentary nature of historical evidence, this is a point that can easily be exaggerated. Indians surely did not always react to the buffalo only in sacred idiom just because it figured significantly in myth and ritual. Nor did they all show “respect” to the animated world in exactly the same way everywhere.

(…) [W]hat might have been most important to conserve was not a herd, or an entire buffalo, or even buffalo parts, but one’s economically vital, culturally defined, historically contingent, and ritually expressed relationship with the buffalo.[[177]](#footnote-177)

## 4.4 What This Section Means for My Film Plans

In this concluding paragraph, I will reflect on the condition mentioned in the Introduction, especially the optional condition that entails asking an actor of indigenous descent to perform the hunting scene.

In order to keep things simple, I will only plan one hunting scene with one type of hunt. To keep my production realistic, I will avoid the mass killings of bison or deer that were common among Native Americans, even though many researchers agree prehistoric Europeans undertook similar hunts.[[178]](#footnote-178) Drive hunts, which can involve dozens of animals, are still common in e.g. Germany and France, though people only use guns for these. I am not aware of mass hunts still taking place anywhere using bows or spears. Assuming a Native American-style mass hunt is even legally possible anywhere, hunting a single deer or bison is much easier to organize, while still having potential for a big impact on the viewer.

Further, the question is whether to show either (1) that every part of the carcass is used or to show (2) the actor only taking the hide and/or choice cuts of meat. There is evidence for both having taken place in prehistory and among indigenous people.[[179]](#footnote-179) Which of these to choose depends on the message I want to convey. Choosing either (1) or (2) will shift the emphasis of my message. We could say that (1) contributes to an idealized picture of Palaeolithic people’s relationship to their environment, since using the whole animal seems more responsible and efficient compared to taking only the most convenient bits. As explained in this section, (2) would not be a ‘wasteful’ act from the perspective of several historical Native American groups, but it would be in the eyes of most viewers today. In other words, with (1), the scene gives off a more sympathetic message, because even though the character kills, he makes the most of the animal he killed, increasing the utility against which the moral ballast of the kill is weighed. Because both options are a realistic choice, I prefer (1), as it contributes to the overall message I want to convey. I do not want to idealize, but I believe the emotional ballast of the kill and the visceral view of skinning, gutting and processing the animal will negate any sense of idealization in the viewer.

The final consideration following from this section is that it could be beneficial for the project to ask an actor/bowhunter of indigenous descent to perform the hunt. My motivation to do this is twofold. First, as noted in section 2.2, there is a certain intersectionality at play in the hunting debate, whereby some people make an ethical exception for the hunting done by people from indigenous cultures.[[180]](#footnote-180) Eileen Samshuizen, a municipal parliament member for Partij voor de Dieren whom I interviewed, was against hunting, but respected it when it was done for the sake of indigenous traditions. This could therefore be a setup for the production of the hunting scene that would receive more ethical acceptance in society. In the case of Native Americans, I learned that if I want to ask a tribe member to play in my film, I first have to ask the appointed Tribal Commission for permission. The Commission members would read the script and judge whether they support the message. This was the procedure followed for the production of, for example, *Dances With Wolves* (1990)and *The Revenant* (2015). I cannot make any assumptions, but given that the indigenous perspective is leading for the script, and based on the positive impression I got from my conversations with Native Americans, I estimate that my film plans would appeal to such a Commission.

Still, there might be problems with this suggestion. One Dutch interviewee thought it a bit opportunistic, in the sense that I would ‘piggyback’ on the status of indigenous people. Samshuizen also objected, on the basis that asking an indigenous person to hunt in front of the camera would make their hunt “staged”. But my impression was that the indigenous people I spoke to in the USA were positive about incorporating parts of their heritage in a Stone Age film. An elder woman working at the Chickasaw Council House Museum (OK) told me that a film like mine would be a beautiful way for her heritage to relive in the current day. A Navajo man said he felt that prehistoric cultures and the historical Native Americans were “to me the same.” I was also able to speak to the director of the Museum of Indigenous People in Prescott (AZ). He was positive as well, but he told me I should realize that Natives had been “bamboozled” for generations on end by “white guys coming with promises and contracts.” He felt my plans could work, but I would have to approach people the right way and earn their trust. When I explained that I wasn’t doing this for the money, he was more positive it could work.

# 5. Conclusion

In this thesis, I have explored the ethical dimensions of a niche case: making a film scene set in the Palaeolithic using real hunting. Since hunting in the first place is a highly contested topic, much attention was given to the arguments commonly made for and against it. For animal ethicists like Singer or Regan, hunting is unacceptable because, in their eyes, it is an unnecessary harm. However, their individualistic framing of the debate downplays a crucial point about the role of hunting in our ecosystems: it keeps grazer populations down. In smaller reserves, where durable predator-prey relations cannot arise, hunting is necessary to prevent ecological degradation. As was illustrated by the case of the Amsterdamse Waterleidingduinen, if we stop hunting, species like deer become so numerous that they overgraze their habitat, leading to a dramatic decrease in biodiversity. The ecological argument therefore gives a decisive justification for hunting, in that it makes it necessary to keep ecologies healthy. The land ethic of Leopold makes the ecological argument into an ethical prescription, framing hunting as a morally good activity because of its beneficial contribution to the ecosystem.

 Nevertheless, an important counter-argument to my film plans was that the hunting scene would be voyeuristic, in the sense that the viewer would derive pleasure from seeing an animal suffer. Whether this objection holds depends on how the scene is filmed. The idea of showing animal suffering ‘as entertainment’ is more applicable to a Spanish bullfight than to the scene I have in mind. A calm, realistic depiction of a bowhunt without exciting music or showy editing should hardly count as entertaining in the normal sense. Rather than entertainment, the point of the scene is more like katharsis: an impression of suffering leading to learning. Especially considering the subsequent scene where the animal would be gutted and processed, entertainment in the normal sense is not part of the experience.

 Indigenous cultures gave both inspiration for the message of the scene as well as an alternative perspective on hunting generally. Centring around the idea of giving thanks for what you take from nature, killing wildlife is acceptable as long as proper respect to the prey is given. As the hunting done by indigenous people receives more respect (or less criticism) in public debate than the hunting done by non-indigenous people, I suggested that it might be beneficial for the reception of project to ask an indigenous hunter to play in the film. Based on my conversations with Native Americans, though without wanting to make assumptions, I deem it likely that this would be a well-received proposition in Native communities and that the project might be an interesting opportunity for them to bring their heritage to life on the big screen.

 Considering that my film plans would be legal, that there are strong arguments in favour of it and that the objections have been satisfactorily countered, I believe it is a good idea to continue with them. Not everyone will be convinced of my arguments, for sure, and certainly it will be a difficult scene to make in the first place. But the film will be more unique, honest and impactful because of it. And it will remind the viewer of the ancient life-and-death-relationship between humans and wildlife, a relationship which, though in a different form, has endured until today.

# 6. Bibliography

1. American Humane. *Wildlife Guidelines* (2025). <https://humanehollywood.org/guideline/wildlife-guidelines/> (last visited 21-04-2025).
2. Amsterdamse Waterleidingduinen. "Beheer dieren: Dossier damherten" (n.d.). <https://awd.waternet.nl/beheer/projecten/dossier-damherten/beheer-dieren/> (last visited 24-03-2025).
3. Artiquez, Belen. "Animal holocaust in film: researching the difference in animal welfare in film from 1903 to 2013 with regard to the work of the American Humane Association, established in 1943." (2013).
4. BBC. "<https://www.bbc.com/news/world-us-canada-38659155>"
5. Cahoone, Lawrence. "Hunting as a moral good." *Environmental Values* 18, no. 1 (2009): 67-89.
6. Callicott, J. Baird. "Animal Liberation a triangular affair." *Environmental ethics* 2, no. 4 (1980): 311-338.
7. Callicott, J. Baird. "Should Wilderness Areas Become Biodiversity Reserves?" *The George Wright Forum* 13, no. 2 (1996): 32-38.
8. CBS. "De gebruikswaarde van natuur in Nederland" 20-2-2025. <https://www.cbs.nl/nl-nl/longread/rapportages/2025/de-gebruikswaarde-van-natuur-in-nederland?onepage=true> (last visited 21-04-2025).
9. Chinnadurai, Sathya K., Barbara de Mori, and Jackie Gai. "Free-ranging Wildlife: Veterinary Practice in Wildlife Management Agencies." In *Ethics of veterinary practice*. Hoboken: Wiley, 2022.
10. Clifford, Elle, and Paul Bahn. *Everyday life in the Ice Age: a new study of our ancestors*. Summertown: Archaeopress Publishing, 2022.
11. Costamagno, Sandrine. "Bone grease rendering in mousterian contexts: The case of Noisetier cave (Fréchet-Aure, Hautes-Pyrénées, France)." *Zooarchaeology and modern human origins: Human hunting behavior during the Later Pleistocene* (2013): 209-225.
12. Countryside Alliance. "The Case for Hunting." countryside-alliance.org.uk (2012). [https://web.archive.org/web/20170613192458/http:/www.countryside-alliance.org/ca-flatcap/wp-content/uploads/2016/08/CASE\_FOR\_HUNTING2012.pdf](https://web.archive.org/web/20170613192458/http%3A/www.countryside-alliance.org/ca-flatcap/wp-content/uploads/2016/08/CASE_FOR_HUNTING2012.pdf) (last visited 24-03-2025).
13. Crittenden, Alyssa N., and Stephanie L. Schnorr. "Current views on hunter‐gatherer nutrition and the evolution of the human diet." *American Journal of Physical Anthropology* 162 (2017): 84-109.
14. Cronon, William, ed. "The Trouble with Wilderness." In *Uncommon Ground*. New York: W. W. Norton, 1996.
15. DeGrazia, David. *Taking animals seriously: mental life and moral status*. Cambridge University Press, 1996.
16. Derrida, Jacques and Elisabeth Roudinesco. "Violence against animals." In *For What Tomorrow: A Dialogue*. Translated by Jeff Fort. Stanford, California: Stanford University Press, 2004.
17. Di Minin, Enrico, Nigel Leader-Williams, and Corey JA Bradshaw. "Trophy hunting does and will support biodiversity: a reply to Ripple et al." *Trends in ecology & evolution* 31, no. 7 (2016): 496-498. <https://www.sciencedirect.com/science/article/pii/S0169534716000896> (last visited 09-04-2025).
18. Donaldson, Sue, and Will Kymlicka. *Zoopolis: A political theory of animal rights*. Oxford University Press, USA, 2011.
19. Dounias, Edmond. "From subsistence to commercial hunting: technical shift in cynegetic practices among southern Cameroon forest dwellers during the 20th century." *Ecology and Society* 21, no. 1 (2016). <https://www.jstor.org/stable/pdf/26270329.pdf> (last visited 09-04-2025).
20. Economist, The. "AI is stalking the last lions of Hollywood." *The Economist* (December 20, 2023). <https://www.economist.com/christmas-specials/2023/12/20/ai-is-stalking-the-last-lions-of-hollywood> (last visited 25-10-2024).
21. European Bowhunting Federation (EBF). "Nations." <https://europeanbowhunting.org/nations/> (last accessed 14-01-2024).
22. Everett, Jennifer. "Environmental ethics, animal welfarism, and the problem of predation: A Bambi lover's respect for nature." *Ethics and the Environment* (2001): 42-67.
23. Fagan, Brian. *Cro-Magnon: How the Ice Age gave birth to the first modern humans*. Bloomsbury Publishing USA, 2011.
24. Fagan, Brian. "Chapter 7: The Realm of the Lion Man." In *Cro-Magnon: How the Ice Age gave birth to the first modern humans*. Bloomsbury Publishing USA, 2011.
25. Fernandes, Marcos Rassi, and Aline Ribeiro Pedroso. "Animal experimentation: A look into ethics, welfare and alternative methods." *Revista da Associação Medica Brasileira* 63 (2017): 923-928. <https://doi.org/10.1590/1806-9282.63.11.923>
26. Finn, Stephen Marcus. "Beyond the Fence: A Farmed Animal Rights Manifesto for Film." *Journal of Animal Ethics* 12, no. 1 (2022): 63-75.
27. Foster, Charles. *Being a Human: Adventures in 40,000 Years of Consciousness*. London: Profile Books, 2021.
28. Galgut, Elisa. "A critique of the cultural defense of animal cruelty." *Journal of Animal Ethics* 9, no. 2 (2019): 184-198.
29. Gietman, Conrad et al. *De jacht: een cultuurgeschiedenis van jager, dier en landschap*. Vol. 20. Uitgeverij Verloren, 2022.
30. Graeber, David and David Wengrow. *The Dawn of Everything*. Great Britain: Penguin, 2022.
31. Groot Bruinderink, G.W.T.A. et al. *Damherten en verkeersveiligheid rond de Amsterdamse waterleidingduinen*. Alterra, Wageningen, 2004. <https://awd.waternet.nl/media/dossierdamherten/pdf/Damherten%20en%20verkeersveiligheid%20rond%20de%20AWD_2004.pdf> (last visited 24-03-2025).
32. Gruen, Lori. "The Moral Status of Animals." *The Stanford Encyclopedia of Philosophy* (Summer 2021 Edition), Edward N. Zalta (ed.). <https://plato.stanford.edu/archives/sum2021/entries/moral-animal/>
33. Guynn, Susan Talley. "Exploring and measuring the benefits of hunting." PhD diss., Clemson University, 2015.
34. Haynes, Richard P. "Competing conceptions of animal welfare and their ethical implications for the treatment of non-human animals." *Acta Biotheoretica* 59 (2011): 105-120.
35. Hielkema, David en Tim Wagemakers. "Jachtverbod voor Amsterdam blijft lastig." *Het Parool* (11-12-2024). <https://www.parool.nl/amsterdam/jachtverbod-voor-amsterdam-blijft-lastig-verschrikkelijke-beelden-maar-weinig-aan-te-doen~b9645e30/> (last visited 24-03-2025).
36. Holling, Crawford S. "Resilience and stability of ecological systems." *Annual Review of Ecology and Systematics* 4 (1973): 1-23.
37. Hollywood Reporter. <https://www.hollywoodreporter.com/movies/movie-news/ang-lee-life-pi-tiger-660692/>
38. Holmes Rolston III, *Environmental Ethics* (Philadelphia: Temple university Press, 1988)
39. Huygen, Maarten. "Wrede dierenbeschermers." *NRC* (20-06-1996). <https://www.nrc.nl/nieuws/1996/06/20/wrede-dierenbeschermers-7314314-a270669> (last visited 24-03-2025). Archived: [https://web.archive.org/web/20250324133735/https://www.nrc.nl/nieuws/1996/06/20/wrede-dierenbeschermers-7314314-a270669](https://web.archive.org/web/20250324133735/https%3A/www.nrc.nl/nieuws/1996/06/20/wrede-dierenbeschermers-7314314-a270669)
40. Iacona, Juliet. "Behind closed curtains: the Exploitation of animals in the film industry." *J. Animal & Nat. Resource L.* 12 (2016): 25.
41. Keuper, D.D.J. en J.A. Guldemond. "Waarde van de jacht." CLM Advies (2014). <https://www.jagersvereniging.nl/content/uploads/2015/06/Waarde_vd_Jager_onderzoeksrapport_CLM_2014-2.pdf>
42. Kimmerer, Robin Wall. *Braiding sweetgrass: Indigenous wisdom, scientific knowledge and the teachings of plants*. Milkweed editions, 2013.
43. Kimmerer, Robin Wall. *Braiding Sweetgrass*. Great Britain: Penguin, 2020. (first published 2013).
44. Kolbert, Elizabeth. "Recall of the Wild." *The New Yorker* (16-12-2012). <https://www.newyorker.com/magazine/2012/12/24/recall-of-the-wild> (last visited 28-05-2025).
45. Koppes, Clayton R. "Efficiency, Equity Esthetics." In *The Ends of the Earth*, edited by Donald Worster. Cambridge: Cambridge University Press, 1988.
46. Krech, Shepard. *The Ecological Indian*. New York: W.W. Norton, 1999.
47. Krueger, Wendy J., J. B. McAninich, and D. E. Samuel. "Retrieval and loss rates of white-tailed deer by Minnesota bowhunters." *Proceedings of the First National Bowhunting Conference. Archery Manufacturers and Merchants Organization, Comfrey, Minnesota, USA*. 2002.
48. Kuiper, M.W. and S.E. van Wieren. *Contraceptie in het beheer van hoefdieren*. Report for Wageningen University, 2010.
49. Lovemore Sibanda and Darragh Hare. "Opinions on conservation are more complex than a Global North vs South divide." University of Oxford (19 March 2025). <https://www.biology.ox.ac.uk/article/opinions-on-conservation-are-more-complex-than-a-global-north-vs-south-divide> (last visited 21-04-2025).
50. Meershoek, Patrick. "Afschieten damherten in Waterleidingduinen in laatste fase." *Het Parool* (26-08-2021). <https://www.parool.nl/amsterdam/afschieten-damherten-in-waterleidingduinen-in-laatste-fase~b093e763/> (last visited 24-03-2025).
51. Milburn, Josh. "Beyond Regan, beyond vegan." In *The Routledge Handbook of Food Ethics*. New York: Routledge, 2016, 284-293.
52. Mourik, J. and B.W.J. Oosterbaan. "Invloed van Damherten op de vegetatie in de AWD." Van der Goes en Groot 2020-06. <https://awd.waternet.nl/media/dossierdamherten/pdf/Invloed%20van%20Damherten%20op%20de%20vegetatie%202020%20Van%20der%20Goes%20en%20Groot.pdf> (last visited 24-03-2025).
53. Mutinhima, Yolanda et al. "International disparities in conservation priorities are more complicated than Global North–Global South divisions." *Biology Letters* 21, no. 3 (2025): 20240571. <https://royalsocietypublishing.org/doi/10.1098/rsbl.2024.0571> (last visited 21-04-2025).
54. Nelson, H., & Jurmain, R. *Introduction to physical anthropology*. St. Paul, MN: West Publishing Company, 1988.
55. NH Nieuws. "Tientallen damherten afgeschoten in Amsterdamse Waterleidingduinen." YouTube.com (29-03-2016). <https://www.youtube.com/watch?v=2UysqVGQOUo>
56. Peels, Maarten. "Peter Singer vs the Casuist Approach to Hunting." potenvandebizon.nl (2024). <https://www.potenvandebizon.nl/l/peter-singer-vs-te-casuist-approach-to-hunting/> (last visited 24-03-2025).
57. PETA. "Call to Action: Boycott 'Alpha' Over Animals Deaths." [www.peta.org](http://www.peta.org), August 15, 2018. <https://www.peta.org/media/news-releases/call-to-action-boycott-alpha-over-animals-deaths/> (accessed 14-01-2024).
58. PETA. "The Hobbit: An Unexpected Cruelty." peta.com (2012). [https://web.archive.org/web/20131127072834/https://www.peta.org/features/hobbit-unexpected-cruelty/](https://web.archive.org/web/20131127072834/https%3A/www.peta.org/features/hobbit-unexpected-cruelty/) (last visited 21-04-2025).
59. Pruitt, Tera. "Engaging the Science of Storytelling in Archaeological Communications." *Archaeological Review from Cambridge* 37, no. 2 (2022).
60. Regan, Tom. *The Case for Animal Rights*. 3rd ed. Los Angeles: University of California Press, 2004.
61. Regan, Tom. "Do Animals Have a Right to Life?" *The Canadian Journal of Philosophy* (October 1975).
62. Rijksdienst voor Ondernemend Nederland. "Dierenmishandeling en dierverwaarlozing." rvo.nl (25 September 2023). <https://www.rvo.nl/onderwerpen/dieren-houden-verkopen-verzorgen/dierenmishandeling-dierverwaarlozing> (last visited 21-04-2025).
63. Rolston, Holmes III. "Environmental Ethics." In *The Blackwell Companion to Philosophy*, 2nd ed., edited by Nicholas Bunnin and E. P. Tsui-James. Oxford: Blackwell Publishing, 2003.
64. Saayman, Melville, Petrus van der Merwe, and Andrea Saayman. "The economic impact of trophy hunting in the South African wildlife industry." *Global Ecology and Conservation* 16 (2018): e00510.
65. Singer, Peter. *Animal Liberation*. 1st Ecco pbk. ed. New York: Ecco, 2002. First published 1975.
66. Singer, Peter. "Peter Singer: The Ethics of What We Eat." Video recording of lecture published by Williams College on youtube.com, 14 Dec 2009. <https://www.youtube.com/watch?v=UHzwqf_JkrA&t=3960s> (last visited 25-10-2024).
67. Spek, Vincent van der. "The impact of fallow deer (Dama dama) grazing on the biodiversity of a Dutch coastal dune system." *Lutra* 67, no. 1-2 (2024): 3-20 (Zoogdiervereniging). <https://awd.waternet.nl/media/dossierdamherten/The%20impact%20of%20fallow%20dear%20grazing%20on%20biodiversity_Van%20der%20Spek_2024.pdf> (last visited 24-03-2025).
68. Staatsbosbeheer (2022). Wat zijn alternatieven voor afschot damherten? Op *naturetoday.com*, July 1 2022. <https://www.naturetoday.com/intl/nl/nature-reports/message/?msg=29400> (last visited 25-10-2024)
69. Stephens, Gregory. "Confining Nature: Rites of Passage, Eco-Indigenes and the Uses of Meat in Walkabout." *Senses of Cinema* (July 2009). <http://www.sensesofcinema.com/2009/towards-an-ecology-of-cinema/walkabout/>
70. Stiles, D. (1977). Ethnoarchaeology: A discussion of methods and applications. Man, 87-103
71. Stiles, D. (2001). Hunter-gatherer studies: The importance of context. African Study Monographs. Supplementary Issue, 26, 41-65.
72. Sullivan, Katherine. "Lights, Camera, … Death? Find Out What It Took to Make 'Alpha'." peta.org (August 6, 2018).
73. TallBear, Kimberly. "Shepard Krech's The Ecological Indian: One Indian's Perspective." *The Ecological Indian Review*, IIIRM Publications, September 2000.
74. Teunissen, Paul. "Het tuig van de waterleidingduinen." *Vrij Nederland* (10-03-2016) (last visited 24-03-2025).
75. Thoreau, Henry David. "Walking." In *The Portable Thoreau*, edited by Carl Bode. New York: The Viking Press, 1947.
76. Vereniging van Bos- en Natuurterreineigenaren. "Natuurkwaliteit en PASherstelopgave in relatie tot reeds genomen maatregelen en de damhertenpopulatie in de Amsterdamse Waterleidingduinen (Kennemerland-Zuid)." <https://awd.waternet.nl/media/dossierdamherten/Advies%20OBN%20deskundigenteam%202018.pdf> (last visited 24-03-2025).
77. Waternet. "Historisch overzicht reeën-damherten AWD." <https://awd.waternet.nl/media/dossierdamherten/pdf/Historisch%20overzicht%20beheer%20ree%C3%ABn%20en%20damherten%20in%20de%20AWD.pdf> (last visited 24-03-2025).
78. Wilson, Marc Stewart, and Emma Peden. "Aggression and hunting attitudes." *Society & Animals* 23, no. 1 (2015): 3-23.
79. YouTube. "YouTube Policies: Violent or graphic content policies" (2025). [https://support.google.com/youtube/answer/2802008?hl=en#:~:text=Animal%20abuse%20content%3A&text=Content%20where%20a%20human%20unnecessarily,mistreatment%2C%20or%20harm%20toward%20animals](https://support.google.com/youtube/answer/2802008?hl=en" \l ":~:text=Animal%20abuse%20content%3A&text=Content%20where%20a%20human%20unnecessarily,mistreatment%2C%20or%20harm%20toward%20animals). (last visited 21-04-2025).
1. Gregory Stephens, “Confining Nature: Rites of Passage, Eco-Indigenes and the Uses of Meat in Walkabout” in *Senses of Cinema*, July 2009. <http://www.sensesofcinema.com/2009/towards-an-ecology-of-cinema/walkabout/> [↑](#footnote-ref-1)
2. Jacques Derrida and Elisabeth Roudinesco, “Violence against animals” in *For What Tomorrow: A Dialogue* (Stanford, California: Stanford University Press, 2004), p. 70. [↑](#footnote-ref-2)
3. To read more about the film project, please consult my website: [www.potenvandebizon.nl](http://www.potenvandebizon.nl) [↑](#footnote-ref-3)
4. Tom Regan, *The Case for Animal Rights*, 3rd ed. (Los Angeles: University of California Press, 2004) p. 359 [↑](#footnote-ref-4)
5. For example, the Stone Age adventure film *Alpha* (2019) was the target of a boycott by PETA for using bison carcasses in one scene. See PETA. "Call to Action: Boycott 'Alpha' Over Animals Deaths." www.peta.org, August 15, 2018. [Link](https://www.peta.org/media/news-releases/call-to-action-boycott-alpha-over-animals-deaths/) [↑](#footnote-ref-5)
6. By Socratic, I mean an open conversation in which both participants look for truth and arguments together. The point is to contrast my approach to these interviews with a supposedly neutral or objective measuring of opinion as is common in some anthropological circles. [↑](#footnote-ref-6)
7. Throwing spears were more common for most of the Late Palaeolithic, but spear hunting is legal in very few places and people rarely do it anymore. This made bowhunting the more practical choice for this project. It is contested when exactly the bow and arrow were invented, but for simplicity we can state that the film will take place in an era where they were certainly common. I.e. near the end of the Ice Age, about 15-12 thousand years ago. [↑](#footnote-ref-7)
8. For example *Alpha* (2019) and *Apocalypto* (2006) used CGI and animatronics, respectively, to suggest the kill, with the carcasses we see afterwards being real. [↑](#footnote-ref-8)
9. Eugenie van Heijgen, “De jager of de bejaagde? De ontwikkeling en rol van de jager in het jachtdebat” in *De Jacht: Een cultuurgeschiedenis van jager, dier en landschap*  *landschap* (Hilversum: Verloren, 2022). [↑](#footnote-ref-9)
10. 3 million deer were killed in the USA in the 2023-24 hunting season. The target numbers are set by wildlife authorities. See Deer Report 2025, p. 14. [↑](#footnote-ref-10)
11. ‘Culling’ refers to the practice of shooting the excess amount of animals in a wildlife reserve. It is also referred to as ‘active management’. [↑](#footnote-ref-11)
12. This context-dependency is perhaps best compared to the situation of soldiers on the battlefield: in that context alone society makes a moral exception, meaning some people are temporarily allowed to kill a human. See C. Brown, “Deontology, consequentialism and reciprocity in contemporary just war thinking”, *European Review of International Studies*, *7*(2-3) (2020), 317-337. [↑](#footnote-ref-12)
13. Rijksdienst voor Ondernemend Nederland, “Dierenmishandeling en dierverwaarlozing” on *rvo.nl* (25 September 2023). [Link](https://www.rvo.nl/onderwerpen/dieren-houden-verkopen-verzorgen/dierenmishandeling-dierverwaarlozing). “Houdt u huisdieren, hobbydieren of productiedieren? Dan zorgt u daar goed voor. Als u uw dier mishandelt of verwaarloost, moet u de verzorging verbeteren. Anders kan uw dier in beslag of in bewaring worden genomen.” [↑](#footnote-ref-13)
14. Still, the Dutch lawmaker requires that “Everyone that kills or captures an animal living in the wild, prevents the animal from suffering unnecessarily.” From: Artikel 11.28 Besluit activiteiten leefomgeving: “Een ieder die een in het wild levend dier doodt of vangt, voorkomt dat het dier onnodig lijdt.” [Link](https://wetten.overheid.nl/jci1.3%3Ac%3ABWBR0041330%26hoofdstuk%3D11%26afdeling%3D11.2%26paragraaf%3D11.2.1%26artikel%3D11.28%26z%3D2025-01-01%26g%3D2025-01-01) [↑](#footnote-ref-14)
15. American Humane, *Wildlife Guidelines* (2025) on *humanehollywood.com*. [Link](https://humanehollywood.org/guideline/wildlife-guidelines/) [↑](#footnote-ref-15)
16. See YouTube, *YouTube Policies: Violent or graphic content policies* (2025). [Link](https://support.google.com/youtube/answer/2802008?hl=en" \l ":~:text=Animal%20abuse%20content%3A&text=Content%20where%20a%20human%20unnecessarily,mistreatment%2C%20or%20harm%20toward%20animals.) [↑](#footnote-ref-16)
17. Namely *The Deer Hunter* (1978), *La Regle du Jeu* (1939) and a Spanish film called *The Hunt* (1966). Only one film used a traditional method of hunting, namely *Walkabout* (1971). [↑](#footnote-ref-17)
18. Juliet Iacona, "Behind closed curtains: the Exploitation of animals in the film industry." *J. Animal & Nat. Resource L.* 12 (2016): 25. [↑](#footnote-ref-18)
19. Cora Diamond, the difficulty of reality and the difficulty of philosophy, in Philosophy and animals 2008, p. 72. [↑](#footnote-ref-19)
20. Original Dutch: “Ze veroorzaken verschrikkelijk dierenleed met hun achterlijke hobby.” Cited from David Hielkema en Tim Wagemakers, “Jachtverbod voor Amsterdam blijft lastig,” *Het Parool* (11-12-2024) [Link](https://www.parool.nl/amsterdam/jachtverbod-voor-amsterdam-blijft-lastig-verschrikkelijke-beelden-maar-weinig-aan-te-doen~b9645e30/). [↑](#footnote-ref-20)
21. EIVP37S1. [↑](#footnote-ref-21)
22. Rolston, Holmes. "Environmental ethics." (2003). The Blackwell Companion to Philosophy, 2nd ed. Nicolas Bunnin and E. P. Tsui-James eds. (Oxford: Blackwell Publishing, 2003). [↑](#footnote-ref-22)
23. Peter Singer, *Animal Liberation* (London: The Bodley Head, 2015). [↑](#footnote-ref-23)
24. Tom Regan, *The Case for Animal Rights*, 3rd ed. (Los Angeles: University of California Press, 2004) [↑](#footnote-ref-24)
25. On the back of my edition of *Animal Liberation*, Singer is credited with triggering “the birth of the animal rights movement.” See also Donaldson, Sue, and Will Kymlicka, “Wild Animal Sovereignty” in  *Zoopolis: A political theory of animal rights* (Oxford: Oxford University Press, 2011), p. 159. [↑](#footnote-ref-25)
26. Regan 2004, p. 236. [↑](#footnote-ref-26)
27. Regan 2004, p. 235-7. [↑](#footnote-ref-27)
28. Regan 2004, p. 238. [↑](#footnote-ref-28)
29. Regan 2004, p. 251. [↑](#footnote-ref-29)
30. Regan 2004, p. 247. [↑](#footnote-ref-30)
31. Regan 2004, p. 236. [↑](#footnote-ref-31)
32. Regan 2004, p. 239. [↑](#footnote-ref-32)
33. Regan 2004, p. 151. [↑](#footnote-ref-33)
34. Regan 2004, p. 152. [↑](#footnote-ref-34)
35. Regan 2004, p. 153. [↑](#footnote-ref-35)
36. Regan 2004, p. 243. [↑](#footnote-ref-36)
37. Regan 2004, p. 240. [↑](#footnote-ref-37)
38. Regan 2004, p. 237. [↑](#footnote-ref-38)
39. Regan 2004, p. 248. [↑](#footnote-ref-39)
40. Regan 2004, p. 248. [↑](#footnote-ref-40)
41. Regan 2004, p. 248. [↑](#footnote-ref-41)
42. Regan 2004, p. 272. [↑](#footnote-ref-42)
43. Regan 2004, p. 273. Original italics. [↑](#footnote-ref-43)
44. Regan 2004, p. 249. [↑](#footnote-ref-44)
45. Regan 2004, p. 249. [↑](#footnote-ref-45)
46. Regan 2004, p. 310-1. [↑](#footnote-ref-46)
47. Regan 2004, p. 356. [↑](#footnote-ref-47)
48. Both quotes from Regan 2004, p. 100. [↑](#footnote-ref-48)
49. Regan 2004, p. 354. [↑](#footnote-ref-49)
50. Ibidem. [↑](#footnote-ref-50)
51. Regan 2004, p. 356. [↑](#footnote-ref-51)
52. Regan 2004, p. 355. [↑](#footnote-ref-52)
53. Regan 2004, p. 355. [↑](#footnote-ref-53)
54. Regan 2004, p. 355. [↑](#footnote-ref-54)
55. Regan 2004, p. 355. [↑](#footnote-ref-55)
56. Regan 2004, p. 356. [↑](#footnote-ref-56)
57. Regan 2004, p. 356. [↑](#footnote-ref-57)
58. Regan 2004, p. 356. [↑](#footnote-ref-58)
59. Regan 2004, p. 357. Original italics. [↑](#footnote-ref-59)
60. Regan 2004, p. 293. [↑](#footnote-ref-60)
61. Regan 2004, pp. 113-4. [↑](#footnote-ref-61)
62. Raymond Anthony and Gary Varner, “Subsistence Hunting” in *The Routledge Handbook of Food Ethics*, (New York : Routledge, 2016), 211-222. pp. 213-4. [↑](#footnote-ref-62)
63. Regan 2004, p. 324. [↑](#footnote-ref-63)
64. Tom Regan, “Do Animals Have a Right to Life?” in *The Canadian Journal of Philosophy*, October, 1975. [Link](https://www.animal-rights-library.com/texts-m/regan01.htm) [↑](#footnote-ref-64)
65. Josh Milburn, “Beyond Regan, beyond vegan” in *The Routledge Handbook of Food Ethics* (New York : Routledge, 2016), 284-293. p. 290. [↑](#footnote-ref-65)
66. Regan 2004, p. 359. [↑](#footnote-ref-66)
67. Singer 2015, p. 243. [↑](#footnote-ref-67)
68. Singer 2015, pp. 1-6, 19. [↑](#footnote-ref-68)
69. Singer 2015, p. 20. [↑](#footnote-ref-69)
70. Singer 2015, p. 7. Punctuation, italics and capital letters original. [↑](#footnote-ref-70)
71. Singer 2015, p. 11. [↑](#footnote-ref-71)
72. Singer 2015, p. 174. [↑](#footnote-ref-72)
73. Singer 2015, p. 8. [↑](#footnote-ref-73)
74. Singer 2015, p. 8. [↑](#footnote-ref-74)
75. Singer 2015, p. 8. [↑](#footnote-ref-75)
76. Singer 2015, p. 2. [↑](#footnote-ref-76)
77. Singer 2015, p. 2. [↑](#footnote-ref-77)
78. Singer 2015, p. 20. [↑](#footnote-ref-78)
79. Singer 2015, p. 85. [↑](#footnote-ref-79)
80. Singer 2015, p. 182. [↑](#footnote-ref-80)
81. Maarten Peels, “Peter Singer vs the Casuist Approach to Hunting,” *potenvandebizon.nl* (2024) [Link](https://www.potenvandebizon.nl/l/peter-singer-vs-te-casuist-approach-to-hunting/) [↑](#footnote-ref-81)
82. Singer 2015, p. 230 . [↑](#footnote-ref-82)
83. Peter Singer (Ed.), *In defense of animals: The second wave* (Malden: Blackwell Publishing, 2013). p.1. [↑](#footnote-ref-83)
84. Singer 2015, pp. 22-3. [↑](#footnote-ref-84)
85. Singer 2015, p. 234. [↑](#footnote-ref-85)
86. M.W. Kuiper and S.E. van Wieren, *Contraceptie in het beheer van hoefdieren* (report for Wageningen University, 2010). p. 4. [↑](#footnote-ref-86)
87. Staatsbosbeheer (2022). Wat zijn alternatieven voor afschot damherten? Op *naturetoday.com*, July 1 2022. <https://www.naturetoday.com/intl/nl/nature-reports/message/?msg=29400> (last visited 25-10-2024) [↑](#footnote-ref-87)
88. Sathya K. Chinnadurai, Barbara de Mori, and Jackie Gai, “Free-ranging Wildlife: Veterinary Practice in Wildlife Management Agencies” in *Ethics of veterinary practice* (Hoboken: Wiley, 2022). p. 301 [↑](#footnote-ref-88)
89. Paul Teunissen, “Het tuig van de waterleidingduinen,” *Vrij Nederland* (10-03-2016). [Link](https://www.vn.nl/het-tuig-van-de-waterleidingduinen?srsltid=AfmBOopKQRjWDcEKwEUlinI1adlvnyDiErF4Di8G4WprKTIOpCA9CHM3) [↑](#footnote-ref-89)
90. Kuiper and Van Wieren 2010, p. 14. [↑](#footnote-ref-90)
91. Kuiper and Van Wieren 2010, p. 1. [↑](#footnote-ref-91)
92. Teunissen 2016. [↑](#footnote-ref-92)
93. Peter Singer, “Peter Singer: The Ethics of What We Eat”, video recording of lecture published by Williams College on *youtube.com*, 14 dec 2009 (last visited 25-10-2024). 1:06:01-1:07:47 [↑](#footnote-ref-93)
94. Singer 2015, 244. [↑](#footnote-ref-94)
95. Singer 2015, p. 231. [↑](#footnote-ref-95)
96. Singer 2015, p.160. [↑](#footnote-ref-96)
97. Chinnadurai et al. 2022, p. 301. [↑](#footnote-ref-97)
98. Regan 2004, p. 359. [↑](#footnote-ref-98)
99. Regan 2004, p. 362. [↑](#footnote-ref-99)
100. Countryside Alliance, “The Case for Hunting,” *countryside-alliance.org.uk* (2012), p. 4. [Archived link](https://web.archive.org/web/20170613192458/http%3A/www.countryside-alliance.org/ca-flatcap/wp-content/uploads/2016/08/CASE_FOR_HUNTING2012.pdf) [↑](#footnote-ref-100)
101. Lawrence Cahoone, "Hunting as a moral good." *Environmental Values* 18, no. 1 (2009): 67-89. p. 77. [↑](#footnote-ref-101)
102. William Cronon (ed.), “The Trouble with Wilderness” in *Uncommon Ground* (New York: W. W. Norton, 1996), p. 72;

J. Baird Callicott, “Should Wilderness Areas Become Biodiversity Reserves?” in *The George Wright Forum,* 1996, Vol. 13, No. 2 (1996), 32-38,p. 32;

Clayton R. Koppes, “Efficiency, Equity, Esthetics” in *The Ends of the Earth*, Donald Worster (ed.) (Cambridge: Cambridge University Press, 1988). [↑](#footnote-ref-102)
103. Henry David Thoreau, “Walking” in *The Portable Thoreau*, Carl Bode (ed.) (New York: The Viking Press, 1947). p. 610. [↑](#footnote-ref-103)
104. Cronon 1996, p. 85. [↑](#footnote-ref-104)
105. Cronon 1996, p. 83. [↑](#footnote-ref-105)
106. Regan 2004, p. 357. Original italics. [↑](#footnote-ref-106)
107. Singer 2015, p. 226. [↑](#footnote-ref-107)
108. Jennifer Everett, "Environmental ethics, animal welfarism, and the problem of predation: A Bambi lover's respect for nature." *Ethics and the Environment* (2001): 42-67. [↑](#footnote-ref-108)
109. Aldo Leopold, *A Sand County Almanac* (Great Britain: Penguin, 2020). p. 145. [↑](#footnote-ref-109)
110. Koppes 1988, pp. 230-1. [↑](#footnote-ref-110)
111. Idem pp. 233-5. [↑](#footnote-ref-111)
112. Ibidem. [↑](#footnote-ref-112)
113. Conrad Gietman et al. *De jacht: een cultuurgeschiedenis van jager, dier en landschap* (Hilversum: Verloren, 2022). p. 340. My translation. [↑](#footnote-ref-113)
114. Callicott 1996, p. 33. [↑](#footnote-ref-114)
115. Crawford S. Holling, “Resilience and stability of ecological systems” in *Annual Review of Ecology and Systematics*, Volume 4, 1973, pp. 1-23. [↑](#footnote-ref-115)
116. Idem, p. 2. [↑](#footnote-ref-116)
117. Ibidem. [↑](#footnote-ref-117)
118. Callicott, 1996, p. 32. [↑](#footnote-ref-118)
119. J. Baird Callicott, “Animal Liberation a triangular affair” in *Environmental ethics*, *2*(4) (1980), 311-338. p. 325. [↑](#footnote-ref-119)
120. Holmes Rolston III, “Environmental Ethics” in *The Blackwell Companion to Philosophy*, 2nd ed. eds.

Nicholas Bunnin and E. P. Tsui-James, (Oxford: Blackwell Publishing, 2003). p. 518. [↑](#footnote-ref-120)
121. Callicott 1980, p. 312. [↑](#footnote-ref-121)
122. Sand Country Almanac, p. 204 [↑](#footnote-ref-122)
123. Countryside Alliance, “The Case for Hunting,” *countryside-alliance.org.uk* (2012), p. 4. [Archived link](https://web.archive.org/web/20170613192458/http%3A/www.countryside-alliance.org/ca-flatcap/wp-content/uploads/2016/08/CASE_FOR_HUNTING2012.pdf) [↑](#footnote-ref-123)
124. San Country Almanac p. 224-5. Cited from Callicott p. 320 [↑](#footnote-ref-124)
125. Callicott p. 320 [↑](#footnote-ref-125)
126. Callicott p. 321 [↑](#footnote-ref-126)
127. Callicott animal liberation pp. 320; 324-5; 327. [↑](#footnote-ref-127)
128. Regan 2004, p. 359. [↑](#footnote-ref-128)
129. Maarten Huygen, “Wrede dierenbeschermers,” *NRC* (20-06-1996) [Link](https://www.nrc.nl/nieuws/1996/06/20/wrede-dierenbeschermers-7314314-a270669)  [↑](#footnote-ref-129)
130. Waternet, “Historisch overzicht reeën-damherten AWD” on *https://awd.waternet.nl/* (2013). [Link](https://awd.waternet.nl/media/dossierdamherten/pdf/Historisch%20overzicht%20beheer%20ree%C3%ABn%20en%20damherten%20in%20de%20AWD.pdf) [↑](#footnote-ref-130)
131. Amsterdamse Waterleidingduinen, “Beheer dieren: Dossier damherten” (n.d.) [Link](https://awd.waternet.nl/beheer/projecten/dossier-damherten/beheer-dieren/) [↑](#footnote-ref-131)
132. <https://www.vn.nl/het-tuig-van-de-waterleidingduinen/> [↑](#footnote-ref-132)
133. G.W.T.A. Groot Bruinderink et al., Damherten en verkeersveiligheid rond de Amsterdamse waterleidingduinen (Alterra, Wageningen, 2004). [Link](https://awd.waternet.nl/media/dossierdamherten/pdf/Damherten%20en%20verkeersveiligheid%20rond%20de%20AWD_2004.pdf) [↑](#footnote-ref-133)
134. Vincent van der Spek, “The impact of fallow deer (Dama dama) grazing on the biodiversity of a Dutch coastal dune system,” *Lutra 67* (1-2): 3-20 (Zoogdiervereniging). [Link](https://awd.waternet.nl/media/dossierdamherten/The%20impact%20of%20fallow%20dear%20grazing%20on%20biodiversity_Van%20der%20Spek_2024.pdf) [↑](#footnote-ref-134)
135. Vereniging van Bos- en Natuurterreineigenaren, “Natuurkwaliteit en PASherstelopgave in relatie tot reeds genomen maatregelen en de damhertenpopulatie in de Amsterdamse Waterleidingduinen (Kennemerland-Zuid).” (2018) [Link](https://awd.waternet.nl/media/dossierdamherten/Advies%20OBN%20deskundigenteam%202018.pdf). pp. 18, 21. [↑](#footnote-ref-135)
136. J. Mourik and B.W.J. Oosterbaan, “Invloed van Damherten op de vegetatie in de AWD,” *Van der Goes en Groot* 2020-06. [Link](https://awd.waternet.nl/media/dossierdamherten/pdf/Invloed%20van%20Damherten%20op%20de%20vegetatie%202020%20Van%20der%20Goes%20en%20Groot.pdf). p. 27 [↑](#footnote-ref-136)
137. Teunissen 2016. [↑](#footnote-ref-137)
138. Amsterdamse Waterleidingduinen, “Beheer dieren: Dossier damherten” (n.d.). [Link](https://awd.waternet.nl/beheer/projecten/dossier-damherten/beheer-dieren/). [↑](#footnote-ref-138)
139. Lawrence Cahoone, "Hunting as a moral good." *Environmental Values* 18, no. 1 (2009): 67-89. Pp. 75-6. [↑](#footnote-ref-139)
140. Elizabeth Kolbert, “Recall of the Wild” in *The New Yorker* (16-12-2012). [Link](https://www.newyorker.com/magazine/2012/12/24/recall-of-the-wild) [↑](#footnote-ref-140)
141. Roger King, “Environmental Ethics and the Case for Hunting” in *Environmental Ethics*, *13*(1), 59-85. p. [↑](#footnote-ref-141)
142. Jean-Pierre Geelen, “Er ‘verdwijnen’ wolven in Nederland.” In *De Volkskrant*, 28-01-2025 [Link](https://www.volkskrant.nl/wetenschap/er-verdwijnen-wolven-in-nederland-experts-zien-aanwijzingen-voor-stroperij~b860c27d/?referrer=https%3A%2F%2Fwww.google.com%2F) [↑](#footnote-ref-142)
143. Nettie Dekker, *Jagerslatijn* (Netherlands: KNNV, 2023). Pp. 55, 57. [↑](#footnote-ref-143)
144. Dekker, p. 54. Original italics transferred. [↑](#footnote-ref-144)
145. Rechtbank Den Haag, SGR 16/3458 (2016) [Link](https://awd.waternet.nl/media/dossierdamherten/pdf/Uitspraak%20beroep%20damherten%20december%202016.pdf) [↑](#footnote-ref-145)
146. Chinnadurai et al. 2022, p. 301. [↑](#footnote-ref-146)
147. Callicott 1980, p. 320. [↑](#footnote-ref-147)
148. Krueger et al., “Retrieval and loss rates of white-tailed deer by Minnesota bowhunters” *Proceedings of the First National Bowhunting Conference. Archery Manufacturers and Merchants Organization, Comfrey, Minnesota, USA*. 2002. [↑](#footnote-ref-148)
149. Holmes Rolston III, *Environmental Ethics* (Philadelphia: Temple university Press, 1988). Pp. 88-9. [↑](#footnote-ref-149)
150. Eugenie van Heijgen, “De jager of de bejaagde? De ontwikkeling en rol van de jager in het jachtdebat” in *De Jacht: Een cultuurgeschiedenis van jager, dier en landschap*  *landschap* (Hilversum: Verloren, 2022). p. 336. [↑](#footnote-ref-150)
151. Theodore Roosevelt, *The American Hunter* (Leipzig : Tauchnitz, 1906). Pp. 234-6, p. 267. [↑](#footnote-ref-151)
152. Charles Foster, *Being a Human: Adventures in 40,000 Years of Consciousness* (London: Profile Books, 2021). pp. 46-7. They try to kill the hare by dropping stones on it from a tree, but they both miss in the end. [↑](#footnote-ref-152)
153. Original Dutch: “Zeker gedoogbaar beleid.” [↑](#footnote-ref-153)
154. My impressions of bullfighting are based on a recent documentary called *Tardes de Soledad* (2024). [↑](#footnote-ref-154)
155. It is common to find montages of bow hunts that are far from respectful. I think that YouTube video titles like “Epic Bow Kill Compilation” or “43 kills in 6 minutes!” say enough. [↑](#footnote-ref-155)
156. Saayman, Melville, Petrus van der Merwe, and Andrea Saayman. "The economic impact of trophy hunting in the South African wildlife industry." *Global Ecology and Conservation* 16 (2018): e00510. [↑](#footnote-ref-156)
157. Cited from Charles Foster, *Being a Human: Adventures in 40,000 Years of Consciousness*. Profile Books, 2021. p. 15 [↑](#footnote-ref-157)
158. Nolan Notah “Navajo Traditions: The Deer Hunter.” *Henry E. Hooper* October 18, 2002. [Link](https://henryehooper.blog/navajo-traditions-the-deer-hunter/) [↑](#footnote-ref-158)
159. See Stiles, D. (1977). Ethnoarchaeology: A discussion of methods and applications. Man, 87-103; and Stiles, D. (2001). Hunter-gatherer studies: The importance of context. African Study Monographs. Supplementary Issue, 26, 41-65. [↑](#footnote-ref-159)
160. Robin Wall Kimmerer, *Braiding Sweetgrass*. Great Britain: Penguin, 2020. [↑](#footnote-ref-160)
161. Cited from the subtitle of the book: “Indigenous Wisdom, Scientific Knowledge and the Teachings of Plants.” [↑](#footnote-ref-161)
162. Kimmerer 2020, p. 179: “Cautionary stories of the consequences of taking too much are ubiquitous in Native Cultures, but it’s hard to recall a single one in English.” [↑](#footnote-ref-162)
163. Kimmerer 2020, p. 191. [↑](#footnote-ref-163)
164. Kimmerer 2020, p. 183. [↑](#footnote-ref-164)
165. Krech p. 129. [↑](#footnote-ref-165)
166. Krech p. 132. Using carcasses maximally seems to have been a habit of some prehistoric groups as well. One method to extract as many calories as possible from a carcass that archaeologists can read is by boiling fat from the bones. See Sandrine Costamagno, "Bone grease rendering in mousterian contexts: The case of Noisetier cave (Fréchet-Aure, Hautes-Pyrénées, France)." *Zooarchaeology and modern human origins: Human hunting behavior during the Later Pleistocene* (2013): 209-225. See also Elle Clifford and Paul Bahn. "Everyday life in the Ice Age: a new study of our ancestors." (Summertown: Archaeopress Publishing, 2022), pp. 129-32. [↑](#footnote-ref-166)
167. Krech p. 16. [↑](#footnote-ref-167)
168. Krech p. 17. [↑](#footnote-ref-168)
169. David Graeber and David Wengrow, *The Dawn of Everything* (UK: Penguin, 2021). p. 38. [↑](#footnote-ref-169)
170. Krech p. 26. [↑](#footnote-ref-170)
171. Driving animals into an enclosure with similar selection is also believed to be a strategy in Ice Age Europe. See Clifford and Bahn, p. 132. [↑](#footnote-ref-171)
172. Krech p. 146. [↑](#footnote-ref-172)
173. Kimberly TallBear, “Shepard Krech’s The Ecological Indian: One Indian’s Perspective” in *The Ecological Indian Review*, IIIRM Publications (September 2000). [↑](#footnote-ref-173)
174. Krech p. 147. [↑](#footnote-ref-174)
175. Krech pp. 133-5, 143. [↑](#footnote-ref-175)
176. Krech notes the following quote from a Canadian Indian: “See, it is from under our lake that our buffalo comes. You say they are all gone; but look, they come again and again to us. We cannot kill them all – they are there under that lake. Do you hear the noise which never ceases? It is the buffalo fighting with each other far down under the ground, and striving to get out on the prairie – where else can they come from?” Krech p.149. [↑](#footnote-ref-176)
177. Krech p. 149 [↑](#footnote-ref-177)
178. See Clifford and Bahn, p. 117. [↑](#footnote-ref-178)
179. Clifford and Bahn, p. 130. [↑](#footnote-ref-179)
180. See for example Johnston, G., & Johnston, M. S. (2017). ‘We fight for all living things’: countering misconceptions about the radical animal liberation movement. *Social Movement Studies*, *16*(6), 735-751, p. 742. [↑](#footnote-ref-180)