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**Anthropocentrism in Climate Ethics and Policy**

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## Introduction

These days, most ethicists agree that at least some nonhumans have interests that are of direct moral importance.[[1]](#footnote-1) That is to say, there are at least some nonhuman interests that make a moral claim on us. Yet with very few exceptions, both climate ethics and climate policy have operated as though only human interests should be considered in formulating and evaluating climate policy. In this paper I argue that the anthropocentrism of current climate ethics and policy cannot be justified in light of well-explored and widely accepted understandings of the relevant concepts and principles within contemporary ethics. In what follows, I first describe the ethical claims upon which my analysis rests, arguing that they are no longer controversial within contemporary ethics. Next I review work in climate ethics and policy, demonstrating the absence of consideration of nonhuman interests in both domains. Finally, I consider five possible justifications for omitting nonhuman interests in the evaluation climate policy options, arguing that none of these arguments succeeds.

## Anthropocentrism in ethics

Anthropocentrism is the view that only human interests make a direct claim on moral agents, i.e., only human interests directly matter morally. The interests of all other things, according to the anthropocentrist, are at best of indirect moral importance: they matter morally only to the extent that they affect human interests. On this view, if one were thinking about doing something that might harm another human, that fact ought to matter to one's decision about whether to do it. All things equal, one should avoid doing things that would be harmful to humans. However, according to the anthropocentrist, if one were thinking about doing something that might harm a chimpanzee, that fact ought to matter to one only insofar as the effect on the chimpanzee would affect the interests of some human. If it would have such an effect, then since human interests matter, the chimpanzee's interests would thereby gain a kind of indirect importance. However, if the effect on the chimpanzee would not affect any human interests, then it would be acceptable to treat the chimpanzee however one wished.

Under this description of anthropocentrism, very few ethicists these days are in fact anthropocentrists. Most ethicists accept that chimpanzees, for example, can be harmed, that all else equal we ought to avoid doing things that are harmful to chimpanzees, and that this is true even in cases where harming the chimpanzee would pose no threat to any human interests. Of course, not every ethical theory explicitly distinguishes between direct and indirect moral consideration of a thing's interests. Virtue ethicists, for example, rarely talk about something's interests making a "direct moral claim" on us; that language is more at home within deontological approaches. Many of the virtues, however, rest on differences in moral orientation toward things that run along similar lines: beneficence and justice are virtues that are appropriately expressed toward some things (people) and not others (cars). Likewise, utilitarian theories distinguish between things that have a welfare which must be counted in our utilitarian calculations and things that do not have a welfare that must be so counted (i.e., between things that are moral patients and things that are not). Thus while the language used and the concepts invoked often differ, the question of whether and how a thing's needs or interests should matter to us is an important issue across ethical theories.

The rejection of anthropocentrism as defined above has not always been the consensus view in ethics. In fact, fifty years ago the consensus might have been the opposite. The reason for the change is threefold. First, contemporary theories of well-being tend to rely on the centrality to welfare of preferences, suffering, or functioning, and these are states that at least some nonhumans are now understood to have.[[2]](#footnote-2) Second, arguments made by animal ethicists such as Peter Singer and Tom Regan in the 1970s and 1980s were largely successful in convincing ethicists that the simple fact of species membership is not alone enough to justify ignoring the interests of animals.[[3]](#footnote-3) Third, many ethicists, in wanting to avoid the conclusion that infants and others lacking abstract reasoning skills (so-called "marginal cases") do not have morally important interests, have often focused on reasons for including them that have often brought with them the inclusion of at least some nonhumans.

This is not to say that there is no disagreement about the moral status of nonhumans within ethics; there is in fact quite a bit. Ethicists disagree about exactly what capacities or relations a thing must have in order to be a bearer of interests and about exactly which nonhumans have them. While there is broad agreement that chimpanzees, elephants, whales, dogs, and many other sophisticated mammals, at least as adults, have what it takes to be a bearer of morally significant interests, less sophisticated animals such as fish, mussels, and insects are more controversial, and nonanimals such as plants, ecosystems, and species are more controversial still. Likewise, while there is widespread agreement that the interests of chimpanzees, etc. are morally important, there is considerable disagreement about both *how* these interests should matter and about *how much* they should matter in our moral deliberations. A utilitarian might tell us to include chimpanzee suffering in our utilitarian calculations, while a deontologist might tell us that the interests of chimpanzees have lexical priority over certain other considerations in our deliberations. An egalitarian might regard the interests of chimpanzees as equally important to those of humans, while a nonegalitarian might regard them as less important (or, conceivably, more important) than our interests. What is worth noting, however, is the absence of absolute denial— i.e., of the view that the interests of chimpanzees make no claim on us at all, that they do not have any direct moral importance.[[4]](#footnote-4)

For the purposes of this paper, I will rely on what I take to be the least controversial form of nonanthropocentrism, namely that there exist at least some nonhuman animals that have what it takes to be bearers of morally important interests. I will not take a stand here on what criteria they must meet in order to have this status; that is to say, I will not give an argument for a particular nonanthropocentric theory. I will presuppose this very minimal version of nonanthropocentrism not because I reject extending moral concern further, but rather because it is the minimal version that I take to be the object of widespread consensus among ethicists. It might be true that plants and ecosystems have morally important interests too, but that is not a debate I will engage with here.

These days, then, the view that at least some animals have morally important interests is the subject of broad agreement among ethicists, not unlike the consensus among climate scientists that human activities are changing the Earth's climate. In both cases, of course, a robust consensus is not the same thing as perfect unanimity: just as 3% of scientists apparently doubt the reality of anthropogenic climate change, so there are still some ethicists who deny the moral significance of animal interests.[[5]](#footnote-5) Further, we should remember that in both cases what ultimately matters is not the consensus, but the reasons for it. In both ethics and science, it is possible for experts to agree on the truth of claims that turn out to be false. But at the very least, such broad agreement within ethics that a claim is true does suggest that policymakers should not assume it to be false without at least investigating the matter further. That, however, is precisely what seems to be happening when it comes to nonhuman interests in climate policy.

## Anthropocentrism in climate policy

This consensus among ethicists that the interests of at least some nonhumans are directly morally important has not been reflected at all in climate policy discussions, and it has mostly been ignored even within the climate ethics literature.[[6]](#footnote-6) For evidence of the truth of this claim, consider first the following examples from the agreements, bodies, documents, and fora that are most central to climate policy today.

Within international climate policy, the United Nations Framework Convention on Climate Change (UNFCCC), now signed by 197 countries, is the international treaty under the authority of which most international climate policy negotiation takes place. It established the Conference of Parties (COP), an assembly with representatives from each signatory country, as the highest decision-making authority within it. Most international climate agreements come out of the annual meetings of the COP. Given its centrality to climate policy, it is worth noting that the text of the UNFCCC describes its aim in explicitly anthropocentric terms, stating that its goal is to "protect the climate system for the benefit of present and future generations of humankind" (UNFCCC 1992: Article 3, Principle 1).[[7]](#footnote-7)

The Intergovernmental Panel on Climate Change (IPCC) is a body separate from the UNFCCC. It was established by the United Nations in 1988 and is responsible for gathering and synthesizing the latest information about climate change. This includes not only information about what is currently happening to the climate and what is likely to happen in the future, but also information about the social impacts of various mitigation and adaptation strategies, including both economic and ethical considerations. Its reports are meant to provide accurate and up-to-date information to world leaders and policymakers, including the COP, so that climate policy can be made on the basis of the best available understandings of the problem. The IPCC has said very little about anthropocentrism; among the few existing discussions, its expressed position on anthropocentrism has varied. Sometimes it describes itself as adopting an anthropocentric framework.[[8]](#footnote-8) Other times it describes itself as adopting a neutral position, though it then goes on to describe the threat posed by climate change and evaluate various courses of action solely in terms of their impact on humans. [[9]](#footnote-9) Criticisms of this *de facto* anthropocentrism have occasionally been raised in committee reports or in "expert review" comments on drafts of its assessments. However, the most that has come of these comments is that the possibility of nonanthropocentric perspectives has been acknowledged in reports, which then go on to assess the impacts of climate change entirely from an anthropocentric perspective.[[10]](#footnote-10)

Interestingly, when nonanthropocentric perspectives have been acknowledged at all, it is the most controversial forms of nonanthropocentrism that have been presented as the alternatives to anthropocentrism: the view that "nature," biodiversity, or ecosystems have intrinsic value, or that we have "duties toward species" IPCC (2007: 2.6.3). For example, in the Second Assessment Report, the only alternative to anthropocentrism presented is ecocentrism.[[11]](#footnote-11) Likewise, in the expert meeting on economic analysis and ethics, the worry expressed is that economic valuation cannot capture claims about the intrinsic value of nature (IPCC 2011: 6). The forms of nonanthropocentrism that are least controversial, e.g., that some animals have a welfare that ought to matter to us morally, are not mentioned at all. Perhaps this is because alternatives to anthropocentrism are mentioned in these places in order to note the limitations of the anthropocentric analysis offered in the rest of the report. After all, the claims furthest away from anthropocentrism are the ones that the report's anthropocentric analyses are least likely to be able to capture. But it is worth noticing the effect of presenting the alternatives in this way. If we think that the only alternative to anthropocentrism is ecocentrism or a view about the intrinsic value of nature, then it might seem obvious that analyses meant to capture claims about human welfare, justice within human communities, and consideration of human stakeholder interests won't be able to say much about the values expressed by these alternative views. However, if we think of the alternatives as including views that are not such a stark contrast with claims we want to make about humans – for example, that the welfare interests of chimpanzees should also matter in our decisions about what to do – then we are less apt to think it unreasonable to expect policy analysis designed for humans to include this kind of consideration. This problem aside, however, it is worth noting how infrequently any alternative to anthropocentrism is even mentioned in discussions of climate policy. The IPCC, for example, has over 4 million public documents; within them only about 20 paragraphs in total even acknowledge the existence of nonanthropocentric claims.

To date, the most detailed discussion of alternatives to anthropocentrism is in the Fifth Assessment Report, where they get a bit more than half a page ((IPCC 2014b: 220-21). The inclusion of this discussion is a welcome development and is the result of pressure on the IPCC to include a more thorough assessment of ethical issues in its discussions of mitigation and adaptation. However, while the discussion there does acknowledge debate within ethics about which nonhuman entities matter morally, it describes the importance of nonhumans in terms of their value (rather than welfare, rights, etc.), noting the view that such things might have value beyond the ways in which they serve human interests. The report goes on to note how difficult it is to measure such value and proposes that economic existence value might capture some of it, but suggests that this this might not be enough, since "nature may have additional value, over and above the values placed by individual humans" (IPCC 2014b: 3.4.1).[[12]](#footnote-12) The subsequent section, about well-being, says nothing at all about nonhumans, and existence value is not in fact used in any of the assessments of climate impacts in the rest of the report. While this is clearly a more serious attempt to notice that there are ethical issues concerning the moral significance of nonhumans, the considerations raised in this discussion in no way affect the content of the ensuing analyses. This is a strategy all too common in such documents: dealing with criticisms by acknowledging the existence of "alternative perspectives," describing their claims, and then proceeding with business as usual, entirely ignoring the content of the criticisms made.

Within climate ethics, ethicists have also mostly left unchallenged the anthropocentric focus of climate policy, directing their efforts instead at solving the considerable ethical problems that exist within an anthropocentric framework. The topics that have gotten the most attention within climate ethics are questions about the just distribution of the costs of mitigation and adaptation, the kind of participation that justice requires in policy decisions, how to include consideration of the interests of future generations in decision-making, which basic human rights are involved in climate ethics, and how to understand individual, state, and corporate responsibility for addressing climate change. None of the major anthologies or special issues on climate ethics contain papers – or even sections of papers – about the interests of nonhuman animals.[[13]](#footnote-13)

## Possible justifications for anthropocentric climate policy

This section considers five arguments that one might give to justify the anthropocentric approach to analyzing and evaluating climate policy alternatives. In each case, I argue, that attempt at justification fails.

***1. Climate policymakers are not endorsing anthropocentrism; they are remaining neutral between anthropocentrism and nonanthropocentrism.***

One might argue that the policy approach described above has not in fact been anthropocentric but rather has been neutral between anthropocentric and nonanthropocentric positions. Nowhere in the above documents does it say that nonhumans do not have morally important interests; in some places it is even mentioned that some people think they do. Moreover, ethicists who accept that nonhumans have morally important interests do not deny that humans have morally important interests. In restricting the analysis to humans and their interests, then, these assessments might be seen as focusing on the area where there is the broadest agreement: that human interests matter. In an area of policy where it is very important to get policy agreement among parties with very different value commitments, it might be wisest to focus on areas where there is the most agreement among parties.

I think, however, that this argument fails. To ignore a set of considerations is not to remain neutral about them; it is to treat them as unimportant. Imagine that someone were to argue for excluding the interests of women from climate policy assessments on the same basis. In the world we live in, such a person might argue, there is still some controversy about whether the interests of women matter independently of the interests of men. The world still contains many sexists, some of whom are even the heads of powerful countries, whose agreement on climate policy is very important.[[14]](#footnote-14) There is a broad consensus among ethicists that such sexist attitudes are wrong. But perhaps to achieve a broader agreement on policy, we should officially remain "neutral" about the interests of women and evaluate climate policy alternatives entirely based upon their impacts on men. "We're not saying that women don't have morally important interests," a defender of this approach might argue, "we're just focusing on the area where everyone agrees: that the interests of men are morally important."

Such a defense would be regarded as completely unacceptable, and in fact laughably so. The reason for its unacceptability isn't simply that the independent importance of women's interests is enshrined in other UN documents and treaties; it would be unacceptable even if women's interests did not have that kind of official status. The reason is that adopting as a goal of international climate negotiations policies aimed at the benefitting men and assessing strategies for mitigation and adaptation based solely on their impact on the interests of men is not at all neutral about the moral importance of women's interests; it in fact treats them as not important – as having no bearing on decisions about what we ought to do. If this sort of reasoning would not be regarded as even remotely adequate as a justification for ignoring the interests of women, it is unclear why we should accept the very same reasoning as a justification for ignoring the interests of nonhumans. In both cases, the pragmatic rationale for avoiding consideration of certain interests is not the same thing as remaining neutral about their importance. It treats them as unimportant, and in both cases doing so is not morally unjustified.

***2. Concerns about biodiversity incorporate nonhuman interests.***

A different attempt to vindicate the current policy approach might be to argue that nonhuman interests are already taken into account in policy discussions through the focus on the biodiversity loss that will result from climate change. Extinctions are indeed a matter of great interest in policy assessments: the rate and type of extinction of nonhuman species under various scenarios is explored both globally and regionally in some detail. Climate change is a global problem, one might argue, and so a concern for biodiversity is just the way we assess impacts on the interests of nonhumans on a large scale.

However, a concern for biodiversity is not at all the same as a concern for the welfare of individual animals, and promoting biodiversity does not necessarily promote the interests of the individual animals involved. Increasing biodiversity can cause great suffering: e.g., in programs involving captivity and forced breeding. Protecting endangered species through assisted colonization or through the elimination of invasive species can also involve deliberate harm to the animals involved. Aiming to protect biodiversity is aiming to ensure that there remains a certain amount of variability within a given population. This might focus our attention on how much the features of individuals vary from one another, but that is not the same thing as focusing on the welfare of those individuals. Biodiversity and the interests of animals may well be related, in that extinctions of particular species can threaten both. But attention to preventing biodiversity loss will not necessarily protect the interests of animals. We can see this easily through a human analogy: a concern for cultural diversity is not the same thing as a concern for the well-being of people. Famine or genocide could well threaten both things, but working to ensure cultural diversity will not necessarily succeed in promoting individual welfare.

***3. Convergence: helping humans will help animals***

A third way of defending the anthropocentric orientation of climate policy might be to argue that by advancing the interests of humans, we will thereby advance the interests of nonhumans. While it might not always be true that human and nonhuman interests converge (for example, in decisions about land use human and nonhuman interests could be more likely to conflict), one might argue that when it comes to climate policy, what is good for us is good for them. We all have an interest in preventing – or at least minimizing – changes to the climate. Since human interests are easier for to assess, the argument might go, we can make policy choices based on those interests knowing that what satisfies them will also satisfy the interests of nonhumans.

There are two problems with this line of reasoning, however. First, it is an empirical question whether our interests and the interests of nonhumans will in fact converge: whether what is best for us will be what is best for chimpanzees. Clearly human interests *can* conflict with those of nonhumans, and so some empirical support for the claim that they will not do so in the case of climate change is needed. The IPCC has not been willing to take other important empirical claims on faith, but rather has been scrupulous about explaining the scientific basis for such claims as well as giving assessments of their certainty in terms of confidence and likelihood. An empirical claim with implications as drastic as this one should be treated with similar empirical scrutiny. Second, there are some good reasons for thinking that there will not in fact be a convergence of interests. A stronger case could perhaps have been made in an earlier era, when the policy choices the world faced were mostly about mitigation, and when mitigation did not need to happen so drastically or so quickly in order to avoid the worst effects of climate change. But today, our choices are about adaptation as well as mitigation (and the tradeoffs between them), and climate change has already produced significant ecological changes. We seem to be locked into a certain degree of climate change even if we pursue maximal mitigation strategies right now. That means a future with more flooding and more desertification, leading to more migration of human populations, leading to more pressures and conflicts around land use. Having failed to make the choices that would benefit everyone a generation ago, we now face more difficult choices with higher-stakes tradeoffs. That we might have to choose between preserving chimpanzee habitat and housing climate refugees no longer seems implausible.

***4. Our job is too overwhelming to include consideration of nonhuman interests***

The fairly dire situation we now face, however, also suggests a fourth defense of the anthropocentric approach. Given how much human suffering is at stake in our policy choices and given how urgently we need to make them, one might argue that we simply don't have time to add another layer of complexity to our assessment of alternatives. Dealing with the impacts of our choices on human beings is a massive enough task as it is; we haven't even assessed those adequately. There is no way we can add to this task an assessment of the impacts of our policy choices on nonhumans, nor should we introduce into our negotiations a new issue to fight over. Adding the consideration of the interests of nonhumans to our job would only make our international efforts less likely to succeed.

There are two problems with this defense. First, we would not accept a parallel argument for the exclusion of any other group whose welfare we take to be morally important. "Women make things too complicated; we can barely assess the needs of men as it is" would not be an acceptable reason for excluding women's interests from policy evaluation. Second, information about the effects of climate change on nonhuman animals is quite readily available these days. Animal welfare organizations, scientists who study particular animal populations, and a variety of NGOs have been gathering data, publishing studies, and publicizing results about this issue for quite some time now.[[15]](#footnote-15) Thus, taking into account effects on the interests of animals would not be an entirely new project; it would simply involve reviewing the scientific data available in much the same way that the IPCC, for example, reviews the scientific data in other domains.

***5. Nonhuman animals aren’t represented by the UN; they aren’t parties to the framework convention***

A final argument for not assessing climate policy in terms of its impact on the welfare of nonhumans is political rather than ethical. Chimpanzees and other nonhuman animals, however morally important their interests may be, are not parties to the UNFCCC. In fact, they are not represented by the United Nations at all. The UN is a political body that gives political representation to human beings for the sake of sorting out conflicts among them. In the same way that the German government is not responsible for promoting the interests of U.S. citizens, so the UN is not responsible for promoting the interests of chimpanzees.

In many ways, this is the strongest of the arguments presented here. Not only would we accept this kind of reasoning in the case of humans, we in fact do accept it all the time. Most people agree that political bodies have a special obligation to attend to the interests of those whom they represent and that they do not have the same obligation to attend to the interests of others. The German government does not have an obligation to consider how salary might be affected when deciding on its national policies; the U.S. government does. Likewise, one might think, the UN has no obligation to consider how chimpanzee interests will be affected when deciding on climate policies, though a chimpanzee government would.

This kind of reasoning has been influential in international policymaking, where it has helped to legitimate the nation-state system that forms the organizational structure for bodies such as the UN. However, its limitations are not always taken as seriously as they ought to be. The reference to "chimpanzee government" in the previous paragraph can help us start to understand those limitations. There is, of course, no chimpanzee government, nor an elephant government, nor a whale government. The COP is not one representative body among others, each advocating for the interests of its own species-members and negotiating with the others to arrive at policies that will best serve all interests. Rather, the COP stands alone as the highest-level organization in the formulation of climate policy. The COP agreements under the UNFCCC are not simply the starting point for negotiations with members of other species; rather, they determine *what the Earth's global climate policy will be*. Likewise, the IPCC does not study the effects of climate change on humans, while arrogating to the Chimpanzee Panel on Climate Change the job of studying the effects on chimpanzees, etc. Rather, the IPCC aims "to provide the world with a clear scientific view on the current state of knowledge in climate change and its potential environmental and socio-economic impacts" (IPCC 2016). This description involves no species-specific qualifications.

The point might seem obvious, but here is why it matters. The idea that it is morally acceptable for states to ignore the interests of noncitizens is subject to important constraints. First, states may not violate the basic human rights of any people, regardless of their citizenship. Thus any interests relevant to basic rights must still be attended to, even when they are the interests of noncitizens. The issue of whether animals have moral rights is a vexed one; much depends on one's theory of rights. I will not take up that issue here. Suffice it to say that were animals to have basic moral rights, this constraint would also apply to their interests: states would be obligated to consider animal interests insofar as they bear on the satisfaction or violation of animal's basic rights.

Second, the moral justification for a system of "bounded political communities," in which states have obligations to attend to the interests of their own citizens that they do not have to noncitizens, relies on the idea that everyone has the opportunity have their interests represented somehow.[[16]](#footnote-16) To put the point another way, the ethical justification offered for systematically ignoring the morally important interests of some group presupposes an "ethical division of labor" according to which it isn't *my* job to attend to their interests; it's someone else's job. Consider an analogy: within an adversarial legal system, it is not the prosecutor's job to point out all of the evidence for a defendant's innocence to the jury or to promote the defendant's interests; that is the defense attorney's job. The system allows the prosecutor to focus instead on the evidence of guilt not because the evidence of innocence is not important, but rather because it is someone else's job to point it out. Likewise, as long as my basic rights aren't violated, the German government needn't consider my interests even in doing something that might affect them. This is not because my interests aren't important, but rather because it is the U.S. government's job to represent and advocate for my interests.

From the point of view of ethics, then, it is acceptable for one to ignore morally important interests affected by one's action only insofar as one can assure oneself that those interests will be represented in some other way. If there is a division of labor according to which some other party or body represents your interests, then I might be justified in ignoring them. As an aside, it is worth noticing how many contemporary criticisms of such divisions of labor are based on their failure to meet this requirement. Critics of the nation-state system claim that it leaves the interests of stateless people, indigenous people, and groups oppressed within their nation-states unrepresented or inadequately represented. Critics of adversarial legal systems claim that exculpatory evidence is often not brought to juries' attention, leaving defendants' interests unrepresented. To the extent that these that these claims are correct, the "it's not my job" excuse for ignoring such interests is ethically unjustified.

In the case of nonhumans, it is clear that there is no political body that will represent their morally important interests in decisions about climate policy. There is no Conference of Chimpanzees or Chimpanzee Panel on Climate Change. This means that either the COP and the IPCC must find a way to include consideration of these interests, or that these bodies are not ethically justified in making decisions about what the Earth's climate policy should be.[[17]](#footnote-17)

This fifth claim thus fails to relieve climate policymakers of responsibility for including consideration of morally important animal interests in their formation of climate policy. Though the reasoning behind this fifth claim might typically remain unquestioned within contemporary political discourse, the ethical constraints on the acceptability of such reasoning show that this does not make it ethically acceptable to ignore the morally important interests of nonhumans.

## Conclusion

Ethics requires that we consider any morally important interests of nonhumans in making decisions that will affect those interests. Yet our decisions about climate policy have systematically ignored the interests of nonhumans in assessing various policy alternatives. In virtue of ignoring the morally important interests of nonhumans, our methods for determining climate policy are ethically unjustified. If our policy-making institutions insist on ignoring the morally important interests of nonhumans, this undermines such institutions' claims to legitimacy as formulators of climate policy. That is to say, insofar as the political institutions by which we assess formulate climate policy ignore morally important nonhuman interests, it is not acceptable to give these political institutions the last word on what we ought to do about climate change. Conversely, if we do give these political institutions the task of formulating climate policy, their ethical legitimacy depends on their inclusion of morally important nonhuman interests in assessing alternatives.

More practically, we might ask what a serious inclusion of the morally important interests of nonhumans in climate policy analysis would look like. Here are three suggestions. First, just as international policies are currently evaluated in part by looking at their impact on children, so we can assess such policies by looking at their impact on nonhuman animals. Like children, animals have a welfare, not just "existence value," and the impacts of various policy alternatives on their welfare ought to be included in the assessment of such alternatives. As noted above, considering the interests of animals and considering the consequences for biodiversity are not the same thing.

Second, standard economic methodology is not currently well suited to the task of measuring the welfare of nonhumans. While many animals do have preferences that can be satisfied or not, none of our current methods for assessing the strength of people's preferences can be easily applied to the preferences of animals. Animals are not market participants, and so market behavior cannot be used to reveal their preferences. Nor can they respond to contingent valuation surveys meant to capture nonmarket values, so the most common method for eliciting expressed preferences would not work in their case either. Alternative methodologies, already being taken more seriously in climate policy, should therefore be of considerable interests to those concerned to measure impacts on animal welfare.[[18]](#footnote-18)

Third, as our policy assessments consider basic issues of justice among humans, it is important also to consider how these apply to animals. This is a complicated matter. If animals should be counted as bearers of rights or objects of direct duties, then claims about justice straightforwardly apply to them. The case of rights in particular is a controversial matter. Whether animals are bearers of rights is controversial; much depends on one's theory of rights. I will not take up this issue here. Suffice it to say that if we can treat animals in ways that are unjust, then any ethical analysis of our policies should include considerations of their justice or injustice toward nonhumans as well as humans.

There is much more to be said about how to assess the morally important interests of nonhumans: what they are, who has them, and what to do when they conflict with the morally important interests of humans. But if the arguments here are sound, then neither climate policymakers nor climate ethicists are justified in ignoring the interests of nonhumans altogether. An honest and responsible consideration of these matters in both climate policy and climate ethics is long overdue.

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1. Among consequentialists, see for example Tooley (1972), Norcross (2004), Broome (2006: 43), Hooker (1995: 23), and Kagan (2016), as well as animal ethicists Singer (1990) and Varner (2012). Among deontologists, see for example Wood and O'Neill (1998); Korsgaard (2004), Garthoff (2011), and Kriegel (2013), as well as animal ethicists Taylor (1981) and Regan (1985). Among virtue ethicists, see for example, Baier (1995: 269), Swanton (2005: 38), Hursthouse (2006), and Driver (2011), as well as animal ethicists Sandler (2007) and Abbate (2014). Among feminist and care ethicists, see for example Walker (2007: 267-68), Slote (2007: 31), and Noddings (2013: 148-58), as well as animal ethicists Donovan (1990), Donovan (2006), and Deckha (2012). Even contractualism, the view one might think least likely to accommodate nonhuman animals, does in fact make room for their direct moral importance. On this point, see Scanlon (1998: 177-88). [↑](#footnote-ref-1)
2. For examples of such theories of welfare, see Griffin (1986), Crisp (2006), and Sen (1993). [↑](#footnote-ref-2)
3. See Regan (1985) and Singer (1990). [↑](#footnote-ref-3)
4. There is some evidence that public opinion also supports this view. In a 2015 Gallup poll, only 3% of U.S. respondents said that animals deserved no protection "since they are just animals," while a 32% of respondents said that animals should have the same rights as people (Riffkin 2015). A 2011 survey in China showed 65% favoring laws to improve animal welfare (You et al. 2014), while a 2007 survey in the EU showed 77% support for such improvements (Eurobarometer 2007). [↑](#footnote-ref-4)
5. See, for example, Carruthers (1992). [↑](#footnote-ref-5)
6. The exceptions have all occurred in the area of climate ethics. See Palmer (2011), Nolt (2011), and Mathews (2011). See also Attfield (2009). [↑](#footnote-ref-6)
7. While some of the text does seem to leave an opening for the independent importance of ecosystemic welfare (e.g., "adverse effects of climate change" are defined as those that " have significant deleterious effects on the composition, resilience or productivity of natural and managed ecosystems or on the operation of socio-economic systems or on human health and welfare" [Article 1, emphasis added], and in the preamble it describes the parties as "concerned that" warming "may adversely affect natural ecosystems and humankind" [emphasis added]), it nonetheless clearly states that it aims to remedy these problems for the benefit of humans (UNFCCC 1992). [↑](#footnote-ref-7)
8. See, for example, IPCC (1995: 2.2.3.1). [↑](#footnote-ref-8)
9. See, for example, the response to comment 12769 in IPCC (2014c: 71). [↑](#footnote-ref-9)
10. For concerns raised, see IPCC (2014d:77), IPCC (2012:62), and IPCC (2011: 6). For acknowledgement of nonanthropocentric perspectives, see IPCC (1995: 2.2.3.1), IPCC (2014b: 3.1), and IPCC (2014a: 2.2.1.4). [↑](#footnote-ref-10)
11. The report unhelpfully defines ecocentrism as the view that "*homo sapiens* [is] just one of the species on Earth, expected to share the biosphere in balance with others," a description that does not distinguish it from most anthropocentric views (IPCC 1995: 61). For a more detailed description of ecocentrism, see McShane (2014). [↑](#footnote-ref-11)
12. This approach to capturing the moral importance of nonhumans is also found in the recent Technical Paper on Loss and Damage, commissioned as part of the Warsaw International Mechanism on Loss and Damage. Since that paper was explicitly commissioned to assess non-economic values, it is perhaps more understandable that it uses a value framework to assess the moral importance of nonhumans and their interests (UNFCCC 2013). [↑](#footnote-ref-12)
13. See, for example, Gardiner (2011) and Gardiner et al. (2010). Gardiner (2010) does mention animal interests in passing, but does not take up the matter further. [↑](#footnote-ref-13)
14. See, e.g., Agence France-Press in Istanbul (2014). [↑](#footnote-ref-14)
15. See, for example, Stirling and Derocher (1993), Chapman et al. (2005), McMahon and Burton (2005), Koneswaran and Nierenberg (2008), Humane Society International (2012), Shields and Orme-Evans (2015), and Sesink Clee et al. (2015). For further discussion of this issue, see Harrop (2011), Fraser and MacRae (2011), and Marchant-Forde (2015). [↑](#footnote-ref-15)
16. As of 2010, there were now about 12 million stateless people (Hanes 2010). For a discussion of bounded political communities and their drawbacks, see Donaldson and Kymlicka (2011). [↑](#footnote-ref-16)
17. Whether such policies could be politically justified but not ethically justified is an open question. Much depends on one's theory of political justification and its relationship to ethics. While there is not room to pursue theories of political justification here, I take it to be a problem for an institution or policy if it turns out to be ethically unacceptable. [↑](#footnote-ref-17)
18. For a discussion of such methodologies in the context of loss and damage, see UNFCCC (2013). [↑](#footnote-ref-18)