Policing Nature

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Utility, rights, and holistic standards all point toward some modest steps to limit or check the predatory activity of carnivores relative to their victims. At the very least, we should limit current subsidies to nature's carnivores. Policing nature need not be absurdly costly or violate common-sense intuitions.

I. INTRODUCTION

Issues of animal rights and animal welfare have received increasing attention since the publication of Peter Singer's *Animal Liberation*. Since that time, numerous philosophers and activists have argued that animal issues deserve closer attention. We now find extensive examinations of the ethics of factory farming, animal experimentation, genetic engineering, and many other animal-related issues.

At least one significant issue, however, has failed to receive adequate attention. I refer to "policing nature." The question is simple: if human beings should restrict or regulate their own behavior toward animals, why should humans not also restrict how animals treat each other? To the extent that we reject an anthropocentric world view, restrictions on human treatment of animals might imply corresponding restrictions on animal treatment of other animals. Human beings are, after all, one animal of many. So the question arises whether and when we should stop animals from killing, raping, and otherwise harming each other.

The extant literature has not provided any clear resolution of these issues. Bernard Rollin asks "Must we police creation?" but offers no clear answer to the question.² Many writings on animal welfare and rights do not give the matter detailed attention, including Singer³ and Evelyn Pluhar.⁴ The thorough

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¹ Peter Singer, Animal Liberation: A New Ethics for Our Treatment of Animals (New York: New York Review, 1975).

² Bernard E. Rollin, *Animal Rights and Human Morality* (Buffalo: Prometheus Books, 1981), p. 62.

³ Singer, Animal Liberation.

⁴ Evelyn B. Pluhar, *Beyond Prejudice: The Moral Significance of Human and Nonhuman Animals* (Durham: Duke University Press, 1995).

and systematic bibliography of Charles Magel does not address the issue at all.⁵ Tom Regan briefly presents the "moral agency" argument, which I consider at length below.⁶ Roger Scruton treats the policing nature argument as a *reductio ad absurdum* on vegetarianism and animal rights.⁷ Holmes Rolston, III argues that predation should be judged by ecological standards, not ethical ones.⁸ The lengthiest treatment, by far, is found in Steve Sapontzis.⁹ He rejects the idea that "policing nature" can be used as a *reductio* to defend human carnivorous tendencies or human violations of animal rights. He does not, however, offer a clear stance on the issue itself. He does conclude that humans can probably do more good by limiting their own predation than by policing other animals, though it is not clear why doing so should be the relevant trade-off.¹⁰

Most commentators in the biological sciences simply assume that nature should not be policed, without offering any rationale. Christopher McGowan offers a typical comment in his book on predation: "The sight of a snake killing a mammal, a young defenseless one at that, may not be a pleasant one, but we should not view the scene with sentimental eyes. ¹¹ Predators have to kill to eat, and do so without emotion. Killing and being killed have nothing to do with assailant and victim, good and bad, only with survival."

Through casual conversation I have found that many believers in animal rights reject policing out of hand, though for no firm reasons, other than thinking it does not sound right. Typically these individuals hold two conflicting views. First, animal welfare counts, and people should treat animals as decently as possible. Second, there is a basic presumption against human noninterference with nature. In this paper, I suggest that the two views are less compatible than is commonly supposed. In the terminology of Eugene Hargrove, animal rights and environmental ethics stand in conflict, rather than complete

⁵Charles R. Magel, *Keyguide to Information Sources in Animal Rights* (Jefferson, N.C.: McFarland and Co., 1989).

⁶Tom Regan, *The Case for Animal Rights* (Berkeley: University of California Press, 1983), p. 357.

⁷ Roger Scruton, On Hunting (London: Yellow Jersey Press, 1998).

⁸ Holmes Rolston, III, *Environmental Ethics: Duties and Values in the Natural World* (Philadelphia: Temple University Press, 1988), p. 79.

⁹S. F. Sapontzis, *Morals, Reason, and Animals* (Philadelphia: Temple University Press, 1987), chap. 13.

¹⁰ I read S. F. Sapontzis, "Predation," *Ethics and Animals* 5 (1984): 27–38, an earlier work, as taking the more radical stance that nature should be policed, but the later book as backing away from this view (without rejecting it definitively). In this paper I do not consider whether human interference in the animal world should be limited to police activities. Human governments, after all, do far more than just serve as police forces. One might ask whether humans should, if they could do so at low enough cost, intervene to restore distributive justice to the animal kingdom, or perhaps provide for equality of opportunity across animals. I have not found a literature on these questions.

¹¹Christopher MacGowan, *The Raptor and the Lamb: Predators and Prey in the Living World* (New York: Henry Holt and Company, 1997), pp. 48–49.

harmony. 12 If we care about the welfare and rights of individual animals, we are led to interfere with nature whenever the costs of doing so are sufficiently low. 13

II. SOME PREMISES

I start with the premise that animal welfare matters, though animals may count for much less than human beings. Note that the relevance of the policing issue requires only that animal welfare need receive positive weight with some nonzero probability. Even if the chance of animals "mattering" in moral terms is small, costless forms of nature policing, and there are many (see below), could still bring net benefits in terms of their expected value

Various forms of contractarianism, or legal positivism, may imply that the concept of morality simply does not apply to animal-animal relations, or to human-animal relations, in most or all cases. I take these theories seriously and do not wish to dismiss them out of hand. Nonetheless, as long as there is some chance that these approaches are wrong, we are led back to the possibility that at least the costless forms of nature policing are desirable in terms of expected value.

I adopt an "individualistic" point of view as to why animals matter. I view individual animals as carriers of utility, and possibly rights. The utilities and rights of these individual animals carry moral weight, when we are deciding what is the best policy.

This individualistic perspective differs significantly from many forms of environmentalism, especially holistic doctrines. In these approaches the suffering or rights of the individual animal are secondary to the environment or nature as a whole. We are to evaluate nature in terms of its adherence to particular models or patterns of how the environment should be. These models or patterns might include the idea that human beings should interfere with nature as little as possible, or only according to prespecified criteria, such as preserving endangered species.¹⁴

I do not, in this paper, argue for the superiority of the individualistic doctrines over these more holistic forms of environmentalism; rather, I take the individualistic perspective as a starting point. I argue that if we adopt an individualistic

¹² Eugene C. Hargrove, ed., *Animal Rights/Environmental Ethics Debate: The Environmental Perspective* (Albany: State University of New York Press, 1992).

¹³ Hargrove, *Animal Rights/Environmental Ethics Debate*, reprints many of the seminal pieces in the debate between animal rights/welfare advocates and environmentalists.

¹⁴ Magel, Keyguide to Information Sources in Animal Rights, surveys holistic views and offers a detailed bibliography; see also Hargrove, Animal Rights/Environmental Ethics Debate and Paul W. Taylor, Respect for Nature: A Theory of Environmental Ethics (Princeton: Princeton University Press, 1986) on related issues. J. Baird Callicott, In Defense of the Land Ethic: Essays in Environmental Philosophy (Albany: State University of New York Press, 1989), cites holism to argue that nature should not be policed.

perspective, as much of the animal welfare literature is wont to do, we are led to nature policing. Since most plausible holistic theories have at least some individualistic component, these arguments have implications for holism. In a later section, I show that holism likely calls for some form of nature policing as well.

I do not commit to whether animals matter for utility reasons, for rights reasons, or for some combination of both. In my view, the most plausible accounts of how animals "count" are pluralist and invoke both utility and rights to some extent, albeit a notion of rights that is nonabsolute and tempered by utility considerations. In any case, I show that both utility and rights considerations provide some argument for an appropriately chosen degree of nature policing.

III. UTILITY

Let us start with utility considerations, the framework for animal welfare suggested by Singer. When evaluating animal killings, we must consider whether a carnivorous animal contributes to net utility. In many cases, the answer appears to be no. Some carnivores kill many animals for each animal they sustain. An eagle, for instance, kills hundreds of other animals over a full lifetime. The number of eagles supported by such killing is small, relative to the number of animals that are killed.

A form of "gradated utilitarianism," which weights the utilities of animals according to their intelligence, does not avoid the basic problem. Many carnivores, such as eagles, falcons, snakes, komodo dragons, crocodiles, and sharks kill animals smarter than themselves or of equal intelligence. Furthermore, even if the carnivore is smarter, or for some other reason counts for more in moral theory, the carnivore may not be sufficiently smarter to make up for killing so many victims.¹⁵

In some cases, the prey, taken as a species, may benefit in utilitarian terms from the existence of predators, or at least not suffer. Predators may keep down overpopulation or perhaps encourage the long-run fitness of the species by weeding out weaker species members. These benefits could provide a utilitarian argument (though not a rights argument) for allowing predators to pursue their prey. But this point does not escape the policing issue. First, not all predators benefit their prey at all margins. Many animals flourish when predators are absent, and perish when predators are introduced (the history of Australia, and numerous islands, provides examples). Second, in those cases

¹⁵For general information on predators, see MacGowan, *The Raptor and the Lamb* and Gordon Grice, *The Red Hourglass: Lives of the Predators* (London: Penguin Books, 1998).

¹⁶ Paul Veatch Moriarty and Mark Woods, "Hunting ≠ Predation," *Environmental Ethics* 19 (1997): 391–404, among others, make this point.

where predators truly do benefit their prey, we may wish to intervene and provide greater support for the predators. There is no *a priori* reason to believe that nature has provided a welfare-maximizing balance of power between predator and prey, which again leads us back to the possibility of policing.

Reading about Roman times, when animals were placed in bloody and painful fights to the death, we feel that the Romans committed some injustice, or did something wrong. We feel that the Romans brought about a bad state of affairs, by staging such fights. If we believe "it is bad for human beings to cause X," we might conclude that "X is a bad state of affairs." In other words, we might conclude that the bloody slaughter of one animal by another is a bad thing. Why should our assessment of this outcome depend on whether or not humans set up the conditions of the slaughter? The fight outcome may be worse when humans set it up, but it becomes worse only because the slaughter of one animal by another is bad in the first place.

Some critics cite the potentially high costs of policing nature (Sapontzis notes this argument, without endorsing it). ¹⁷ We can imagine the difficulty of sending human policemen out to the Serengeti or into the Amazon to control animal behavior. Even a large number of policemen would be able to prevent only a very small percentage of animal crimes. At what level should the policemen stop? Should they prevent only carnivorous actions against intelligent mammals? Should they also prevent fish from eating other fish, birds from eating worms, and insects from preying on other insects? The complexities multiply rapidly.

Nonetheless, the cost argument does not eliminate the potential utility gains from nature policing. Most simply, *some* kinds of nature policing can be performed at zero real resource cost to human beings.

Consider tigers. Human beings hunt tigers, and would hunt them even more widely in the absence of legal prohibition. Hunting tigers involves zero net costs to humans and in fact involves significant net benefits to humans, given that tiger products can be sold for profit. The question then arises concerning what prohibitions should be placed on tiger hunting. In this context, *not* policing nature is what brings the net cost. The policing can be done for free, and indeed for profit. The tiger hunters are, in reality, policing nature, even though that may not be their intention. Every time they kill a tiger, they stop that tiger from pursuing a life of violent aggression against other animals, many of which (whom?) are relatively intelligent mammals. Similarly, fox hunting has been a long and popular tradition in England, and in that regard is self-financing.

Most generally, many human policies affect carnivorous mammals, whether we like it or not. So we inevitably perform implicit police actions in one form

¹⁷ Sapontzis, Morals, Reason, and Animals.

¹⁸ Further, below I consider the utilities of those who are disturbed by the fact that tigers are hunted.

or another, and must then weigh the costs and benefits of various interventionist alternatives. We clear land for economic development, drive coyotes off the land, and help or harm many other carnivores. We must in any case decide whether the restriction (and assistance) of carnivorous activity should count as a benefit or a cost of a given policy. My arguments in this paper suggest that we should count negative impacts on carnivores as positive features of the human policy, rather than as negative features, as we usually do. Doing so would make us less likely to support the populations of various aggressive carnivores.

Current policies, in contrast, often subsidize the propagation of carnivorous animals. It is against the law in the United States to kill birds of prey, even if they are not endangered. In recent times, considerable resources have been invested to revitalize the genetic diversity of the Florida panther, to prevent its possible extinction. The Florida state government has imported panthers from Texas and developed special breeding programs, all at real financial cost. ¹⁹ India has set aside wildlife reserves to help tigers and panthers live and breed. It would be easy to limit or eliminate these programs, which again suggests that policing nature need not mean sending out a policeman to stop one group of ants from killing another.

One utilitarian argument can defeat policing fairly simply. Some humans, such as environmentalists, may be made very unhappy when they observe the policing of nature. These costs may outweigh whatever utility benefits nature policing brings. This argument, however, begs the broader question, which is what kind of attitudes toward nature policing human beings should adopt.

IV. RIGHTS APPROACHES

Rights arguments tend to support some policing, just as do the utility arguments. Regan, among others, has suggested that animals hold rights.²⁰ There are many rights theories, and each is complex, but in their simplest form rights theories imply that the rights bearer holds a "protected sphere" against certain kinds of bad treatment. Actions to violate that protected sphere are *prima facie* wrong. Under this premise, carnivore animals would appear to be violating the rights of their victims.

This being said, a rights theory may be unclear as to what is the appropriate remedy for a rights violation. Aggression is wrong, but a rights theory does not necessarily imply that outsiders are obliged to come to the aid of the victim or potential victim. In legal theory this question falls under the heading of the Good Samaritan issue.

The rights approach is thus incomplete as a claim that we are obliged to

¹⁹ See Mark Derr, "Texas Rescue Squad Comes to Aid of Florida Panther," *New York Times*, 2 November 1999, p. D2.

²⁰ Regan, The Case for Animal Rights.

police nature. Nonetheless, we have already seen that many forms of nature policing are available at zero cost. Most plausible rights theories should imply that if we can stop a rights violation at zero cost, we should do so. Stopping the rights violation is plausibly a better state of affairs than not doing so, even if we do not wish to attach a language of strong obligation to such preventive activity.

Very strict rights theories allow no consideration of consequences. Under such theories we might say that the one animal should not violate the rights of another, but that human prevention of such violations does not bring about "a better state of affairs." This approach will in fact stop the policing argument in its tracks. Once we introduce some degree of consequentialist considerations, however, we are led back to policing once more.

Various theories of "distance" might be introduced to limit our obligations to the animal kingdom. Animals are very different from human beings. Human beings and animals can communicate only in limited fashion, if at all. We do not have a very good idea of "what it is like to be a bat," to borrow a phrase from Thomas Nagel. The typical human life does not much resemble the typical animal life, and so on. If we accept this attitude, the human obligation to animals may be very small or perhaps zero. Humans may feel that "it is not their province" to make sure that a tiger does not kill gazelles. But again, unless our distance from animals is seen as infinite, we are still led to endorse the costless forms of nature policing. ²¹

Some "relational" theories may suggest that rights are present only when the relevant entities can potentially cooperate to mutual advantage. Humans can in principle cooperate beneficially, and thus we can speak of human rights vis-à-vis other human beings. In this approach, however, gazelles cannot have rights vis-à-vis tigers, since there is primarily conflict of interest. In some regards this mirrors the contractarian approach, or might have Aristotelian roots, by referring to the "natures" of the entities involved.

This approach also fails to remove nature policing from the agenda. Let us consider three reasons. First, rights theories have a very weak burden. Utility considerations already suggest some *prima facie* reason to police nature in limited fashion. Rights theories need offer only a very weak presumption in the same direction, or no presumption at all. To remove rights from the agenda is not to provide an argument against limited forms of nature policing.

Second, there is some chance that these relational views are wrong. This

²¹ Considerations of "distance" may account for some cases where we *do* police nature. For instance, we police animals in our role as pet owners. If our dog threatens to bite our cat, or our cat threatens to badly scratch the dog, we intervene to prevent the pain and suffering, provided we can do so effectively at low cost. Such interventions do not imply that our pet cat has higher objective moral standing than a tiger in Siberia. Rather, we intervene for the same broad reasons that a mother feeds milk to her baby but not to a starving baby in Haiti. Our cats and dogs are connected to us through the pet relation, whereas the tiger in Siberia is not.

possibility again returns us to the costless forms of nature policing, which will bring positive expected value in utility terms.

Third, and most importantly, the relational view cannot handle a number of plausible analogies. We do not hesitate to stop a human killer of other humans, even if we must kill him in the process of protecting the rights of the potential victim. ²² Stopping a human killer does not rest on whether or not we consider the killer to be a "moral agent," mentally retarded, totally insane, or a vampire, locked in inevitable struggle with human beings. The argument for policing nature is simply the same argument that we use to stop the human killer in these alternative contexts. Carnivorous animals are aggressing against other animals and in principle they are no different from the insane human killer. Few would dispute that we should police murderous fights between human beings, and prevent one human from violating the rights of another, at least if we can intervene at sufficiently low cost. The absence of moral agency does not weaken the case for preventive deterrence. Having accepted this premise for humans, it is not clear why we should reject it for nature.

We might reject the human-animal parallelism implicit in the above analogy and claim that animal aggressors are mere unthinking brutes. Perhaps animal carnivores are not "moral agents," and therefore they cannot commit rights violations. ²³ This move, however, would not make the policing argument less compelling. If the parallels with non-rational human killers, such as the insane, do not convince, let us go one step further and consider a pure natural catastrophe. A tornado obviously has no moral agency and it is an unthinking force of nature. Yet, we would not hesitate to stop a tornado, if we could do so, if that tornado threatened to kill many human beings. Similarly, we would stop the tornado if it threatened to painfully kill large numbers of sentient animals, at least if we could stop the tornado at zero cost. This is not mere speculation, as it is common practice to provide animals with limited protection against natural disasters. If the cost of such protections were zero, we would presumably do more.

Moral agency may make a difference for *ex post* punishment. If we observe that a tiger has killed a gazelle, we do not punish the tiger for retributive reasons. Deterrence is presumably not a consideration either. We may regard "previous tiger murder" as a good predictor of "future tiger murder," and thus stop the tiger for this reason. Nonetheless, the mere fact of a past killing, taken alone, does not matter if the tiger is not a moral agent. It is for this reason that

²² See Mary Anne Warren, *Moral Status: Obligations to Persons and Other Living Things* (Oxford: Clarendon Press, 1997), pp. 112–13.

²³ Sapontzis, *Morals, Reason, and Animals*, chap. 8, discusses many of the relevant issues for whether animals are properly moral agents or not. Regan, *The Case for Animal Rights*, p. 357, and Taylor, *Respect for Nature*, pp. 127–73, cite the moral agency argument for not policing nature. Warren, *Moral Status*, surveys some relational views of animal rights, although not primarily in the context of policing nature.

we reject the medieval practice of trying animals for their "crimes" against human beings in a formal court of law. The issue of moral agency, therefore, is relevant for some decisions. Nevertheless, it does not render policing nature a non-issue.²⁴

Animal victims of carnivores do probably "count for less" than do the human victims of murderers, whether in rights theory or with regard to utility considerations. However, at the same time, the killing carnivores count for less too, which should limit our reluctance to stop them.²⁵

Nor do we appear to hold *per se* objections to stopping animal killing. Even advocates of animal rights typically admit that sheep farmers are justified in shooting coyotes, if those coyotes attack and kill their herds on a sufficiently regular basis. From an animal rights/animal welfare point of view, why should the justification disappear when humans have no material or property interest in the victims?

In sum, the above arguments do not provide a knockdown case for nature policing, as I have taken both individual rights and utilitarian perspectives for granted. Nonetheless, any policy that has both rights and utility on its side may be hard to defeat in moral discourse. In addition, we have seen that nature policing need not bring absurdly high costs and in many cases can be done for free or at a profit.

V. CAN HOLISM IMPLY NATURE POLICING?

So far we have focused on individualistic standards of animal welfare. The alternative approach of holism starts with the premise that attempts to value animals on an individualistic basis will fail. Instead, we should ask whether a given policy produces an appropriate pattern of animal behavior and animal life, taken in the aggregate. We must assess the overall course of nature, rather than the claims of particular animals, be they carnivores or victims.

The ethical philosophy of holism has had numerous defenders in a human context. Most prominently, neo-Hegelians have argued that the social good

²⁴ In medieval times it was common to try animals for crimes against humanity, whether it be a pig that killed a child or a swarm of locusts that ruined a farmer's crop. The offending animal or animals then were often put to death. On this era, see E. P. Evans, *The Criminal Prosecution and Capital Punishment of Animals* (1906; reprint ed., London: Faber and Faber, 1987) and Gary L. Francione, *Animals, Property, and the Law* (Philadelphia: Temple University Press, 1995), pp. 93–94. The Russians once even sent a billy-goat to Siberia, for supposed crimes (see Gerald Carson, *Men, Beasts, and Gods: A History of Cruel and Kindness to Animals* (New York: Charles Scribner's Sons, 1972), p. 31.

²⁵ David DeGrazia, *Taking Animals Seriously: Mental Life and Moral Status* (Cambridge: Cambridge University Press, 1996), argues that carnivorous killing of animals is not "unjustified," given that (some) carnivores need meat to survive, but he does not consider either the rights or utilitarian trade-offs in this context, despite arguing elsewhere in the book that animals deserve equal consideration with human beings.

cannot be expressed as a summation of individual utilities or individual claims to rights. Instead, we must assess whether a given society is aesthetically pleasing, just, capable of expressive self-realization, and so on, depending on the particular values at stake. For our purposes, the important point is that the holistic standards cannot be reduced to more primitive claims about the welfare and rights of individuals.²⁶

Holism, as a policy toward animals, has some roots in human intuitions. We typically regard the death of the last member or members of a species as an especially great tragedy.²⁷ In this regard, holism can explain some of the nature policing that we do in fact perform, such as protection for endangered species.

It is beyond the scope of this article to examine the broader issues behind holism vs. individualism as social theories, whether for human beings or for animals. Nonetheless, some more specific remarks can be made.

Holism does not render the policing issue moot. It simply suggests that we police nature according to some holistic criteria. Depending on the holistic standards at hand, human beings could try to make nature resemble those standards more closely. Plausible holistic standards could require that nature be more "kind," more "balanced," or more "complex." In each case, we can imagine interventions that would further the desired holistic standard. Holism might in fact make nature policing all the more necessary.

Furthermore, plausible holistic criteria will assign some weight to rights and utility considerations, even if our final evaluation of the environmental pattern is not "reducible" to such claims. Considering rights and utility, however, would bring us back to nature policing at the margin. After all, it would be implausible to use holism to argue that human murderers, or human torturers of animals, should not be restrained. The holistic view cannot, on its own terms, account for why violence of animal against animal should be treated differently than violence of human against human. As a result, there is the need for some other standard to address nature policing.

Holism might be used to argue against policing nature on a large scale, given that full-scale policing would lead to widespread extinction. Extinction might (or might not) violate the holistic criteria that have been erected. Nonetheless, holism still does not militate against nature policing on a small scale. At the margin, we can still disfavor another carnivorous predator, without upsetting the overall balance of nature.

We do find many cases in which human beings assist animals, even when no direct human interests are at stake. It is common to expend considerable resources freeing stranded whales, or trying to treat them and then return them to nature. We find cases in which a sandhill crane was fitted with artificial

²⁶ The philosophy of "perfectionism," as applied to entire societies, may yield similar results. Our standards for judging societal perfection may not be reducible to individual claims and utilities.

limbs, a golden eagle was given a cornea transplant, an albatross was given artificial feathers and flown by to the Midway Islands, and a sea turtle (victim of a shark attack) received artificial flippers at a cost of \$200,000. Holism provides no reason why we should not extend such assistance to protection against carnivores, if it can be done sufficiently cheaply, and on a sufficiently modest scale to keep the balance of nature intact.²⁸

THE ARGUMENT FROM IGNORANCE

The argument from ignorance suggests that we should not police nature because we cannot predict the effects of human intervention in nature. Policing nature, for instance, may set off an ecological catastrophe.²⁹

This argument, at most, militates against some forms of policing nature. But in many cases, the most obvious, low-cost means of nature policing does not seem to involve any significant probability of ecological catastrophe. Shooting one tiger or reintroducing one less wolf into a national park is unlikely to noticeably affect the environment. So considerations of ecological catastrophe may curtail the amount of policing we wish to do, but they do not remove the issue from the agenda.³⁰

Many forms of human intervention in nature do not in fact upset the balance of nature in intolerable fashion. The European wolf, a vicious carnivore, was essentially driven to extinction in the nineteenth century, largely because of urban growth and industrialization. Today the European wolf is not missed, least of all by its would-be animal victims. The European wolf remains in Rumania, Albania, Greece, and parts of Yugoslavia, but it is not obvious that its presence is an unmitigated blessing for "the balance of nature," however that term is to be construed.³¹

Nature policing often consists of constraining animals relatively high on the food chain, such as eagles and tigers. While this action may cause the prey of eagles and tigers to proliferate, it is not obvious that an ecological catastrophe will result. In Yellowstone Park rangers have taken deliberate action to reintroduce predators to the park, such as wolves, contrary to what the nature policing argument would suggest. There was no impending ecological problem that

²⁷ Thomas Hurka, "Value and Population Size," Ethics (1983): 496–507.

²⁸ See Rolston, *Environmental Ethics*, pp. 50–53, for some examples of assisting animals.

²⁹ Moriarty and Woods, "Hunting ≠ Predation," p. 394

³⁰ In some chaos theory models, killing even one animal may set off catastrophe through nonlinear dynamics. In these same models, however, the carnivorous actions of the non-killed animal may set off catastrophe as well. When predictability is so low, the result is general uncertainty, not some general presumption against policing carnivores.

³¹ On the wolf, see David W. MacDonald and Luigi Boitani, "The Management and Conservation of Carnivores: A Plea for an Ecological Ethic," in David Paterson and Richard D. Ryder, eds., *Animals' Right: A Symposium* (Sussex: Centaur Press, 1979), p. 166.

required the introduction of wolves, and indeed introducing wolves may have increased the risk of negative ecological repercussions.³²

In other cases, we are interfering with nature, whether we like it or not. It is not a question of uncertainty holding us back from policing, but rather how to compare one form of policing to another. Humans change water levels, fertilize particular soils, influence climactic conditions, and do many other things that affect the balance of power in nature. These human activities will not go away anytime soon, but in the meantime we need to evaluate their effects on carnivores and their victims.

Furthermore, not all ecological disruptions are undesirable, all things considered. Preserving the balance of nature is, at most, one good of many. The relevance of utilitarian and rights standards may imply that some amount of ecological disturbance is good. The argument from ignorance fails to justify why ecological balance should be the dominant value in all cases.

Given the prevalence of change and disequilibria in nature, it is not always obvious what an ecological catastrophe consists of. Perhaps tigers and eagles were bringing on ecological catastrophe, until humans started killing them. If humans can, in principle, bring on ecological catastrophe by murdering tigers, surely tigers can, in principle, bring on ecological catastrophe by killing gazelles. It is not obvious how we should choose a fixed point or optimum against which we might judge human interventions. In eastern Africa, human beings have been a major predator for many millennia. Does this mean that human intervention in this context is "natural" and thus permissible?³³

Note how the nature policing argument forces us to be consistent as to what constitutes an exogenous intervention into nature. On one hand, animal rights/welfare theorists wish to limit the differences between animals and human beings. On the other hand, they wish to think of human intervention as something exogenous to nature, rather than endogenous to nature itself. But insofar as we think of humans as another animal, human intervention is no more catastrophic, in principle, than the intervention of tigers or other animals (though of course the empirical scope of such intervention may differ).³⁴

³² On this episode, see David S. Wilcove, *The Condor's Shadow: The Loss and Recovery of Wildlife in America* (New York: W. W. Freeman and Co., 1999), p. 60–61.

³³ I am indebted to David Schmidtz for this point.

³⁴ Holmes Rolston, III, *Philosophy Gone Wild: Essays in Environmental Ethics* (Buffalo: Prometheus Books, 1986), *Conserving Natural Value* (New York: Columbia University Press, 1994), and *Environmental Ethics* in a number of seminal works, has argued that predation is a part of nature. He uses this point to defend meat eating and hunting, and by implication sees no need for human policing of other predators. Moriarty and Woods, "Hunting ≠ Predation," attempt to draw a distinction between "natural" and "cultural" activities of living entities, which would remove humans from nature somewhat. See also Mark A. Michael, "How to Interfere with Nature." *Environmental Ethics*, 23 (2001): 135–54, and Ned Hettinger, "Valuing Predation in Rolston's Environmental Ethics: Bambi Lovers versus Tree Huggers." *Environmental Ethics* 16 (1994): 3–20, on related issues.

Most fundamentally, the possibility of ecological catastrophe, or simply our mere ignorance, increases our uncertainty about *all* policies, including *inaction* toward tiger killings. It does not militate against nature policing in any special fashion.

The argument from ignorance proves too much. Human beings are interfering with nature in any case, for better or worse. It could be that we have little or no idea of the consequences of these policies on the long-run fitness of nature. That makes it harder to make a good decision, but it should not prevent us from choosing what we believe is best. We face ignorance in any case. Furthermore, if we are truly very ignorant, modest forms of policing may not add significantly to our uncertainty. We should then consider policing on its own merits, while taking a high degree of background uncertainty as given and not affected by our marginal decisions.³⁵

We might interpret holism very strictly, as suggesting that human beings should *never* interfere with inter-animal relations, at least outside of cases of species extinction or other natural emergencies. Holism of this form, however, is simply restating the conclusion that nature should not be policed, rather than justifying it in terms of some more general moral principle. Holism, as commonly understood, is about evaluating aggregates and patterns. Holism does not make strong claims about how to evaluate individual acts or interventions into nature. To rule out nature policing, we would need to add some additional moral theory to holism. Holism *per se* is noncommittal on the policing issue.

VI. CONCLUDING REMARKS

It is difficult to reject the idea of policing nature out of hand. We have no trouble accepting the policing of humans, whether on rights or utilitarian grounds. Given this premise, the policing of animals follows naturally. Animals may "matter less" than humans, for a variety of reasons, but this lesser status will apply to the carnivore aggressor as much as to the animal victim. Rights and utilitarian considerations are hardly the full extent of moral theory, but each pointed in the direction of at least partial nature policing.

We might reject nature policing simply by regarding it as intrinsically bad. If this view is selected as an axiom, so be it. This paper could then be read as arguing that such an axiom is not compatible with other plausible axioms that we hold about animals, such as the view that their welfare matters, they deserve moral consideration, or that the painful death of an animal is a bad thing.

Policing nature implies a particular quandary for advocates of animal rights

³⁵ The argument from ignorance might be used to claim that all utilitarian standards are inadequate, since we can never trace the full results of a single action, or perhaps not even a meaningful subset of them (this epistemic criticism of utilitarianism is well known in the human context). Nonetheless, the rights standard suggests nature policing as well, as noted above.

or animal welfare. For instance, it becomes evident that a belief in animal rights does not automatically imply a ban on the human hunting of carnivores, such as foxes and tigers.

In terms of policy, we should pursue some of the more modest forms of nature policing, which can be done for free, or even at a profit. We should consider cautious and humble attempts to shift the balance of power against nature's carnivores.

Most obviously, we should invest fewer resources in saving endangered carnivores. Furthermore, to the extent that human hunting is regulated, the regulations should differ for carnivores and non-carnivores. The strictures against killing carnivores should be very weak, or perhaps removed altogether, relative to the strictures against killing non-carnivores. If we are trapping animals in the wild for use in laboratory experiments, we should be more willing to trap and remove the carnivore. Most generally, when including animal welfare in a broader social welfare function, we should weight carnivores and non-carnivores differently.

In casual discussion, I find that virtually all individuals find the conclusion of nature policing as one to be avoided. Indeed, I set out to write this paper with that intuition in mind. I hoped to find some clever twist that would resolve the issue and eliminate nature policing as a philosophically viable alternative. It is impossible to prove that such a clever twist does not exist, but at some point we need to consider modifying our original intuition, if the would-be twist proves sufficiently hard to find. Philosophy is in part about subjecting our intuitions to the scrutiny of reason and hoping to improve on them.

The practical conclusions of this paper do not require that we endorse nature policing as the correct theory with certainty. Perhaps predator-prey relations do not matter for moral philosophy, but then there is no harm to engaging in nature policing when the cost is zero. We should take nature policing seriously, and in the process eliminate the subsidies that we are currently offering to nature's carnivores.