

Are All Species Equal?

DAVID SCHMIDTZ

ABSTRACT *Species egalitarianism is the view that all species have equal moral standing. To have moral standing is, at a minimum, to command respect, to be something more than a mere thing. Is there any reason to believe that all species have moral standing in even this most minimal sense? If so — that is, if all species command respect — is there any reason to believe they all command equal respect?*

The article summarises critical responses to Paul Taylor's argument for species egalitarianism, then explains why other species command our respect but also why they do not command equal respect. The intuition that we should have respect for nature is part of what motivates people to embrace species egalitarianism, but one need not be a species egalitarian to have respect for nature. The article closes by questioning whether species egalitarianism is even compatible with respect for nature.

I. Respect For Nature

Species egalitarianism is the view that all species have equal moral standing[1]. To have moral standing is, at a minimum, to command respect, to be something more than a mere thing. Is there any reason to believe that all species have moral standing in even this most minimal sense? If so — that is, if all species command respect — is there any reason to believe they all command *equal* respect?

The following sections summarise critical responses to the most famous philosophical argument for species egalitarianism. I then try to explain why other species command our respect but also why they do not command equal respect. The intuition that we should have respect for nature is part of what motivates people to embrace species egalitarianism, but one need not be a species egalitarian to have respect for nature. I close by questioning whether species egalitarianism is even compatible with respect for nature.

II. The Grounding of Species Egalitarianism

According to Paul Taylor, anthropocentrism 'gives either exclusive or primary consideration to human interests above the good of other species'[2]. The alternative to anthropocentrism is biocentrism, and it is biocentrism that, in Taylor's view, grounds species egalitarianism:

The beliefs that form the core of the biocentric outlook are four in number:

- (a) The belief that humans are members of the Earth's Community of life in the same sense and on the same terms in which other living things are members of that community.
- (b) The belief that the human species, along with all other species, are integral elements in a system of interdependence.

(c) The belief that all organisms are teleological centres of life in the sense that each is a unique individual pursuing its own good in its own way.

(d) The belief that humans are not inherently superior to other living beings[3].

Taylor concludes, 'Rejecting the notion of human superiority entails its positive counterpart: the doctrine of species impartiality. One who accepts that doctrine regards all living things as possessing inherent worth — the *same* inherent worth, since no one species has been shown to be either higher or lower than any other.'[4]

Taylor does not claim that this is a valid argument, but he thinks that if we concede (a), (b), and (c), it would be unreasonable not to move to (d), and then to his egalitarian conclusion. Is he right? For those who accept Taylor's three premises (and who thus interpret those premises in terms innocuous enough to render them acceptable), there are two responses. First, we may go on to accept (d), following Taylor, but then still deny that there is any warrant for moving from there to Taylor's egalitarian conclusion. Having accepted that our form of life is not superior, we might choose instead to regard it as inferior. More plausibly, we might view our form of life as noncomparable. We simply do not have the same kind of value as nonhumans. The question of how we compare to nonhumans has a simple answer: we do not compare to them.

Alternatively, we may reject (d) and say humans are indeed inherently superior but our superiority is a moot point. Whether we are inherently superior (that is, superior as a form of life) does not matter much. Even if we are superior, the fact remains that within the web of ecological interdependence mentioned in premises (a) and (b), it would be a mistake to ignore the needs and the telos of the other species referred to in premise (c). Thus, there are two ways of rejecting Taylor's argument for species egalitarianism. Each, on its face, is compatible with the respect for nature that motivates Taylor's egalitarianism in the first place.

Taylor's critics, such as James Anderson and William French, have taken the second route. They reject (d). After discussing their arguments, and building on some while rejecting others, I explore some of our reasons to have respect for nature and ask whether they translate into reasons to be species egalitarians.

III. Is Species Egalitarianism Hypocritical?

Paul Taylor and Arne Naess[5] are among the most intransigent of species egalitarians, yet they allow that human needs override the needs of nonhumans. William C. French argues that they cannot have it both ways[6]. French perceives a contradiction between the egalitarian principles that Taylor and Naess officially endorse and the unofficial principles they offer as the real principles by which we should live. Having proclaimed that we are all equal, French asks, what licenses Taylor and Naess to say that, in cases of conflict, nonhuman interests can legitimately be sacrificed to vital human interests?

French has a point. James C. Anderson[7] makes a similar point. Yet, somehow the inconsistency of Taylor and Naess is too obvious. Perhaps their position is not as blatantly inconsistent as it appears. Let me suggest how Taylor and Naess could respond to French. Suppose I find myself in a situation of mortal combat with an enemy soldier. If I kill my enemy to save my life, that does not entail that I regard my enemy as inherently inferior (i.e., as an inferior form of life). Likewise, if I kill a bear to save my life, that does not entail

that I regard the bear as inherently inferior. Therefore, Taylor and Naess can, without hypocrisy, deny that species egalitarianism requires a radically self-effacing pacifism.

What, then, does species egalitarianism require? It requires us to avoid mortal combat whenever we can, not just with other humans but with living things in general. On this view, we ought to regret finding ourselves in kill-or-be-killed situations that we could have avoided. There is no point in regretting the fact that we must kill in order to eat, though, for there is no avoiding that. Species egalitarianism is compatible with our having a limited license to kill.

What seems far more problematic for species egalitarianism is that it seems to suggest that it makes no difference *what* we kill. Vegetarians typically think it is worse to kill a cow than to kill a potato. Are they wrong?[8] Yes they are, according to species egalitarianism. In this respect, species egalitarianism cannot be right. I do believe we have reason to respect nature. But we fail to give nature due respect if we say we should have no more respect for a cow than for a potato.

IV. Is Species Egalitarianism Arbitrary?

Suppose interspecies comparisons are possible. Suppose the capacities of different species, and whatever else gives species moral standing, are commensurable. In that case, it could turn out that all species are equal, but that would be quite a fluke.

Taylor says a being has intrinsic worth if and only if it has a good of its own. Anderson does not disagree, but he points out that if we accept Taylor's idea of a thing having a good of its own, then that licenses us to notice differences among the various kinds of 'good of its own.' (We can notice differences without being committed to ranking them.) For example, we can distinguish, along Aristotelian lines, vegetative, animal, and cognitive goods of one's own. To have a vegetative nature is to be what Taylor, in premise (c), calls a teleological centre of life. A being with an animal nature is a teleological centre of life, and more. A being with a cognitive as well as animal nature is a teleological centre of life, and more still. Cognitive nature may be something we share with whales, dolphins, and higher primates. It is an empirical question. Anderson's view is that so long as we do not assume away this possibility, valuing cognitive capacity is not anthropocentric. The question is what would make *any* species superior to another (p. 348).

As mentioned earlier, Taylor defines anthropocentrism as giving exclusive or primary consideration to human interests above the good of other species. So, when we acknowledge that cognitive capacity is one valuable capacity among others, are we giving exclusive or primary considerations to human interests? Anderson thinks not, and surely he is right. Put it this way: if biocentrism involves resolving to ignore the fact that cognitive capacity is something we value — if biocentrism amounts to a resolution to value only those capacities that all living things share — then biocentrism is at least as arbitrary and question-begging as anthropocentrism.

It will not do to defend species egalitarianism by singling out a property that all species possess, arguing that this property is morally important, and then concluding that all species are therefore of equal moral importance. The problem with this sort of argument is that, where there is one property that provides a basis for moral standing, there might be others. Other properties might be possessed by some but not all species, and might provide bases for different kinds or degrees of moral standing.

V. The Multiple Bases of Moral Standing

Taylor is aware of the Aristotelian classification scheme, but considers its hierarchy of capacities to be question-begging. Taylor himself assumes that human rationality is on a par with a cheetah's foot-speed[9]. In this case, though, perhaps it is Taylor who begs the question. It hardly seems unreasonable to see the difference between the foot-speed of chimpanzees and cheetahs as a difference of degree, while seeing the difference between the sentience of a chimpanzee and the nonsentience of a tree as a difference in kind.

Anthropocentrists might argue that the good associated with cognitive capacity is superior to the good associated with vegetative capacity. Could they be wrong? Let us suppose they are wrong. For argument's sake, let us suppose *vegetative* capacity is the superior good. Even so, the exact nature of the good associated with an organism's vegetative capacity will depend upon the organism's other capacities. For example, Anderson (p. 358) points out that even if health in a human and health in a tree are instances of the same thing, they need not have the same moral standing. Why not? Because health in a human has an instrumental value that health in a tree lacks. John Stuart Mill's swine can take pleasure in its health but trees cannot. Animals have a plant's capacities plus more. In turn, humans (and possibly dolphins, apes, and so on) have an animal's capacities plus more. The comparison between Socrates and swine therefore is less a matter of comparing swine to non-swine and more a matter of comparing swine to 'swine-plus' (Anderson, p. 361). Crucially, Anderson's argument for the superiority of Socrates over swine does not presume that one capacity is higher than another. We do not need to make any assumptions about the respective merits of animal or vegetative versus cognitive capacities in order to conclude that the capacities of 'swine-plus' are superior to those of swine.

We may of course conclude that *one* of the grounds of our moral standing (i.e., our vegetative natures) is something we share with all living things. Beyond that, nothing about equality even suggests itself. In particular, it begs no questions to notice that there are grounds for moral standing that we do not share with all living things.

VI. In Praise of Speciesism

William French invites us to see species rankings not 'as an assessment of some inherent superiority, but rather as a considered moral recognition of the fact that greater ranges of vulnerability are generated by broader ranges of complexity and capacities' (p. 56). One species outranks another not because it is a superior form of life but rather because it is a more vulnerable form of life. French, if I understand correctly, interprets vulnerability as a matter of having *more* to lose. This interpretation is problematic. It implies that a millionaire, having more to lose than a pauper, is by that fact more vulnerable than the pauper. Perhaps this interpretation is forced upon French, though. If French had instead chosen a more natural interpretation — if he had chosen to interpret vulnerability as a matter of *probability* of loss — then a ranking by vulnerability would not be correlated to complex capacities in the way he wants. Ranking by probability of loss would change on a daily basis, and the top-ranked species often would be an amphibian.

If we set aside questions about how to interpret vulnerability, there remains a problem with French's proposal. If having complex capacities is not itself morally important, then

being in danger of losing them is not morally important either. Vulnerability, on any interpretation, is essentially of derivative importance; any role it could play in ranking species must already be played by the capacities themselves.

Yet, although I reject French's argument, I do not reject his inegalitarian conclusion. The conclusion that mice are the moral equals of chimpanzees is about as insupportable as a conclusion can be. Suppose that, for some reason, we take an interest in how chimpanzees rank compared to mice. Perhaps we wonder what we would do in an emergency where we could save a drowning chimpanzee or a drowning mouse but not both. More realistically, we might wonder whether, other things equal, we have any reason to use mice in our medical experiments rather than chimpanzees. Species egalitarianism seems to say not.

Suppose we decide upon reflection that, from our human perspective, chimpanzees are superior to mice and humans are superior to chimpanzees. Would the perceived superiority of our form of life give us reason to think we have no obligations whatsoever to mice, or to chimpanzees? Those who believe we have fewer obligations to inferior species might be pressed to say whether they also would allow that we have fewer obligations to inferior human beings. Lawrence Johnson, for example, rhetorically asks whether it is worse to cause a person pain if the person is a Nobel Prize winner[10]. Well, why not? Echoing Peter Singer[11], Johnson argues that if medical researchers had to choose between harvesting the organs of a chimpanzee or a brain-damaged human baby, 'one thing we cannot justify is trying to have it both ways. If rationality is what makes the basic moral difference, then we cannot maintain that the brain-damaged infant ought to be exempt from utilisation just because it is human while at the same time allowing that the animal can be used if utility warrants' (p. 52).

Does this seem obvious? It should not. Johnson presumes that rationality is relevant to justification at the *token* level when speciesists (i.e., those who believe some species, the human species in particular, are superior to others) presumably would invoke rationality as a justification at the *type* level. One can say rationality makes a moral difference at the type level without thereby taking any position on whether rationality makes a moral difference at the token level. A speciesist could say humanity's characteristic rationality mandates respect for humanity, not merely for particular humans who exemplify human rationality. Similarly, once we note that chimpanzees have characteristic cognitive capacities that mice lack, we do not need to compare individual chimpanzees and mice on a case by case basis in order to have a moral justification for planning to use a mouse rather than a chimpanzee in an experiment.

Of course, some chimpanzees lack the characteristic features in virtue of which chimpanzees command respect as a species, just as some humans lack the characteristic features in virtue of which humans command respect as a species. It is equally obvious that some chimpanzees have cognitive capacities (for example) that are superior to the cognitive capacities of some humans. But whether every human being is superior to every chimpanzee is beside the point. The point is that we can, we do, and we should make decisions on the basis of our recognition that mice, chimpanzees, and humans are relevantly different types. We can have it both ways after all. Or so a speciesist could argue.

VII. Equality and Transcendence

Even if speciesists are right to see a nonarbitrary distinction between humans and other species, though, the fact remains that, as Anderson (p. 362) points out, claims of superiority do not easily translate into justifications of domination[12]. We can have reasons to treat nonhuman species with respect, regardless of whether we consider them to be on a moral par with *homo sapiens*.

What kind of reasons do we have for treating other species with respect? We might have respect for chimpanzees or even mice on the grounds that they are sentient. Even mice have a rudimentary point of view and rudimentary hopes and dreams, and we might well respect them for that. But what about plants? Plants, unlike mice and chimpanzees, do not care what happens to them. It is literally true that they could not care less. So, why should we care? Is it even possible for us to have any good reason, other than a purely instrumental reason, to care what happens to plants?

When we are alone in a forest wondering whether it would be fine to chop down a tree for fun, our perspective on what happens to the tree is, so far as we know, the only perspective there is. The tree does not have its own. Thus, explaining why we have reason to care about trees requires us to explain caring from our point of view, since that (we are supposing) is all there is. In that case, we do not have to satisfy *trees* that we are treating them properly; rather, we have to satisfy *ourselves*. So, again, can we have noninstrumental reasons for caring about trees — for treating them with respect?

One reason to care (not the only one) is that gratuitous destruction is a failure of self-respect. It is a repudiation of the kind of self-awareness and self-respect that we can achieve by repudiating wantonness. So far as I know, no one finds anything puzzling in the idea that we have reason to treat our lawns or living rooms with respect. Lawns and living rooms have instrumental value, but there is more to it than that. Most of us have the sense that taking reasonable care of our lawns and living rooms is somehow a matter of self-respect, not merely a matter of preserving their instrumental value. Do we have similar reasons to treat forests with respect? I think we do. There is an aesthetic involved, the repudiation of which would be a failure of self-respect. (Obviously, not everyone feels the same way about forests. Not everyone feels the same way about lawns and living rooms, either. But the point here is to make sense of respect for nature, not to argue that respect for nature is in fact universal or that failing to respect nature is irrational[13].) If and when we identify with a Redwood, in the sense of being inspired by it, having respect for its size and age and so on, then as a psychological fact, we really do face moral questions about how we ought to treat it. If and when we come to see a Redwood in that light, subsequently turning our backs on it becomes a kind of self-effacement. The values that we thereby fail to take seriously are *our* values, not the tree's.

A related way of grounding respect for nature is suggested by Jim Cheney's remark that 'moral regard is appropriate wherever we are *able* to manage it — in light of our sensibilities, knowledge, and cultural/personal histories . . . The limits of moral regard are set only by the limitations of one's own (or one's species' or one's community's) ability to respond in a caring manner.' [14] Should we believe Cheney's rather startling proposal that moral regard is appropriate whenever we can manage it? One reason to take it very seriously is that exercising our capacity for moral regard is a way of expressing respect for that capacity. Developing that capacity is a form of self-realization.

Put it this way. I am arguing that the attitude we take toward gazelles (for example)

raises issues of self-respect insofar as we see ourselves as relevantly like gazelles. My reading of Cheney suggests a different and complementary way of looking at the issue. Consider that lions owe nothing to gazelles. Therefore, if we owe it to gazelles not to hunt them, it must be because we are *unlike* lions, not (or not only) because we are *like* gazelles.

Unlike lions, we have a choice about whether to hunt gazelles, and we are capable of deliberating about that choice in a reflective way. We are capable of caring about the gazelle's pain, the gazelle's beauty, the gazelle's hopes and dreams (such as they are), and so forth. And if we do care, then in a more or less literal way, something is wrong with us — we are less than fully human — if we cannot adjust our behaviour in the light of what we care about. If we do not care, then we are missing something. For a human being, to lack a broad respect for living things and beautiful things and well-functioning things is to be stunted in a way.

Our coming to see other species as commanding respect is itself a way of transcending our animal natures. It is ennobling. It is part of our animal natures unthinkingly to see ourselves as superior, and to try to dominate accordingly; our capacity to see ourselves as equal is one of the things that makes us different. Thus, our capacity to see ourselves as equal may be one of the things that makes us superior. Coming to see all species as equal may not be the best way of transcending our animal natures — it does not work for me — but it is one way. Another way of transcending our animal natures and expressing due respect for nature is simply to not worry so much about ranking species. This latter way is, I think, better. It is more respectful of our own reflective natures. It does not dwell on rankings. It does not insist on seeing equality where a more reflective being simply would see what is there to be seen and would not shy away from respecting the differences as well as the commonalities. The whole idea of ranking species, even as equals, sometimes seems like a child's game. It seems beneath us.

VII. Respect for Everything

Thus, a broad respect for living or beautiful or well-functioning things need not translate into equal respect. It need not translate into universal respect, either. I can appreciate mosquitoes to a degree. My wife (a biochemist who studies mosquito immune systems) even finds them beautiful, or so she says. My own appreciation, by contrast, is thin and grudging and purely intellectual. In neither degree nor kind is it anything like the appreciation I have for my wife, or for human beings in general, or even for the rabbits I sometimes find eating my flowers in the morning. Part of our responsibility as moral agents is to be somewhat choosy about what we respect and how we respect it. I can see why people shy away from openly accepting that responsibility, but they still have it.

Johnson says speciesism is as arbitrary as racism unless we can show that the differences are morally relevant (p. 51). This is, to be sure, a popular sentiment among radical environmentalists and animal liberationists[15]. But are we really like racists when we think it is worse to kill a dolphin than to kill a tuna? The person who says there is a relevant similarity between speciesism and racism has the burden of proof: go ahead and identify the similarity. Is seeing moral significance in biological differences between chimpanzees and potatoes anything like seeing moral significance in biological differences between races? I think not.

Is it true that we need good reason to *exclude* plants and animals from the realm of things

we regard as commanding respect? Or do we need reason to *include* them? Should we be trying to identify properties in virtue of which a thing forfeits presumptive moral standing? Or does it make more sense to be trying to identify properties in virtue of which a thing commands respect? The latter seems more natural to me, which suggests the burden of proof lies with those who claim we should have respect for other species.

I would not say, though, that this burden is unbearable. One reason to have regard for other species has to do with self-respect. (As I said earlier, when we mistreat a tree that we admire, the values we fail to respect are our values, not the tree's.) A second reason has to do with self-realisation. (As I said, exercising our capacity for moral regard is a form of self-realisation.) Finally, at least some species seem to share with human beings precisely those cognitive and affective characteristics that lead us to see human life as especially worthy of esteem. Johnson describes experiments in which rhesus monkeys show extreme reluctance to obtain food by means that would subject monkeys in neighbouring cages to electric shock (p. 64n). He describes the case of Washoe, a chimpanzee who learned sign language. Anyone who has tried to learn a foreign language ought to be able to appreciate how astonishing an intellectual feat it is that an essentially nonlinguistic creature could learn a language — a language that is not merely foreign but the language of another species.

Johnson believes Washoe has moral standing (p. 27–31), but he does not believe that the moral standing of chimpanzees, and indeed of all living creatures, implies that we must resolve never to kill (p. 136). Thus, Johnson supports killing introduced animal species (feral dogs, rabbits, and so forth) to prevent the extermination of Australia's native species, including native plant species (p. 174).

Is Johnson guilty of advocating the speciesist equivalent of ethnic cleansing? Has he shown himself to be no better than a racist? I think not. Johnson is right to want to take drastic measures to protect Australia's native flora, and the idea of respecting trees is intelligible. Certainly one thing I feel in the presence of Redwoods is something like a feeling of respect. But I doubt that what underlies Johnson's willingness to kill feral dogs is mere respect for Australia's native plants. I suspect that his approval of such killings turns on the needs and aesthetic sensibilities of human beings, not just the interests of plants[16]. For example, if the endangered native species happened to be a malaria-carrying mosquito, I doubt that Johnson would advocate wiping out an exotic but minimally intrusive species of amphibian in order to save the mosquitoes.

Aldo Leopold[17] urged us to see ourselves as plain citizens of, rather than conquerors of, the biotic community, but there are some species with whom we can never be fellow citizens. The rabbits eating my flowers in the back yard are neighbours, and I cherish their company, minor frictions notwithstanding. I feel no sense of community with mosquitoes, though, and not merely because they are not warm and furry. Some mosquito species are so adapted to making human beings miserable that mortal combat is not accidental; rather, combat is a natural state. It is how such creatures live. Recall Cheney's remark that the limits of moral regard are set by the limits of our ability to respond in a caring manner. I think it is fair to say human beings are not able to respond to malaria-carrying mosquitoes in a caring manner. At very least, most of us would think less of a person who did respond to them in a caring manner. We would regard the person's caring as a parody of respect for nature.

The conclusion that *all* species have moral standing is unmotivated. For human beings, viewing apes as having moral standing is a form of self-respect. Viewing viruses as having moral standing is not. It is good to have a sense of how amazing living things are, but being

able to marvel at living things is not the same as thinking all species have moral standing. Life as such commands respect only in the limited but nonetheless important sense that for self-aware and reflective creatures who want to act in ways that make sense, deliberately killing something is an act that does not make sense unless we have good reason to do it. Destroying something for no good reason is (at best) the moral equivalent of vandalism.

IX. The History of the Debate

There is an odd project in the history of philosophy that equates what seem to be three distinct projects:

1. determining our essence;
2. specifying how we are different from all other species;
3. specifying what makes us morally important.

Equating these three projects has important ramifications. Suppose for the sake of argument that what makes us morally important is that we are capable of suffering. If what makes us morally important is necessarily the same property that constitutes our essence, then our essence is that we are capable of suffering. And if our essence necessarily is what makes us different from all other species, then we can deduce that dogs are not capable of suffering.

Likewise with rationality. If rationality is our essence, then rationality is what makes us morally important and also what makes us unique. Therefore, we can deduce that chimpanzees are not rational. Alternatively, if some other animal becomes rational, does that mean our essence will change? Is that why some people find Washoe, the talking chimpanzee, threatening?

The three projects, needless to say, should not be conflated in the way philosophy seems historically to have conflated them, but we can reject species equality without conflating them [18]. If we like, we can select a property with respect to which all species are the same, then argue that that property confers moral standing, then say all species have moral standing. To infer that all species have the same standing, though, would be to ignore the possibility that there are other morally important properties with respect to which not all species are equal.

There is room to wonder whether species egalitarianism is even compatible with respect for nature. Is it true that we should have no more regard for dolphins than for tuna? Is it true that the moral standing of chimpanzees is no higher than that of mosquitoes? I worry that these things are not only untrue, but also disrespectful. Dolphins and chimpanzees command more respect than species egalitarianism allows.

There is no denying that it demeans us to destroy species we find beautiful or otherwise beneficial. What about species in which we find neither beauty nor benefit? It is, upon reflection, obviously in our interest to enrich our lives by finding them beautiful or beneficial, if we can. By and large, we must agree with Leopold that it is too late for conquering the biotic community. Our most pressing task now is to find ways of fitting in. Species egalitarianism is one way of trying to understand how we fit in. In the end, it is not an acceptable way. Having respect for nature and being a species egalitarian are two different things.

David Schmidtz, Philosophy Department, University of Arizona, Tucson, AZ 85721-0027, USA.

Acknowledgement

I thank Stephen Clark, Austin Dacey, Robert Hood, Dale Jamieson, Lawrence Johnson, Bill Kline, Steve Scalet, and Ian Young for helpful comments.

NOTES

- [1] A species egalitarian may or may not believe that individual living things all have equal moral standing. A species egalitarian may think a given whooping crane matters more than a given bald eagle because the cranes are endangered, despite believing that the differences between the two species qua species are not morally important. I thank Stephen Clark for this observation.
- [2] PAUL W. TAYLOR (1983) In defense of biocentrism, *Environmental Ethics*, 5: 237–43, here p. 240. Taylor takes pains to distinguish anthropocentrism from the trivial and unobjectionable position that human beings make judgments from a human point of view.
- [3] PAUL TAYLOR (1986) *Respect for Nature* (Princeton: Princeton University Press) p. 99ff. See also TAYLOR (1994) The ethics of respect for nature, *Planet in Peril*, edited by Dale & Fred Westphal (Orlando, Harcourt Brace) 15–37.
- [4] TAYLOR (1994), op. cit., p. 35.
- [5] ARNE NÆSS (1973) The shallow and the deep, long-range ecology movement: a summary, *Inquiry*, 16: 95–100.
- [6] WILLIAM C. FRENCH (1995) Against biospherical egalitarianism, *Environmental Ethics*, 17: 39–57, here pp. 44ff.
- [7] JAMES C. ANDERSON (1993) Species equality and the foundations of moral theory, *Environmental Values*, 2: 347–65, here p. 350.
- [8] I thank Austin Dacey for raising this question.
- [9] TAYLOR (1994), op. cit., p. 33.
- [10] LAWRENCE JOHNSON (1991) *A Morally Deep World* (New York, Cambridge University Press), p. 52.
- [11] PETER SINGER (1990) *Animal Liberation*, 2nd edition (New York, Random House), pp. 1–23.
- [12] James Sterba evidently thinks otherwise, for he considers it true by *definition* that ‘To treat humans as superior overall to other living beings is to aggress against them by sacrificing their basic needs to meet the nonbasic needs of humans (definition).’ JAMES P. STERBA (1995) From biocentric individualism to biocentric pluralism, *Environmental Ethics*, 17: 191–207, here p. 194.
Sterba does not say whether regarding chimpanzees as superior to mice is, by definition, a way of aggressing against mice.
- [13] Thus, the objective is to explain how a rational agent could have respect for trees, not to argue that a rational agent could not fail to have respect. In utilitarian terms, a person whose utility function leaves no room to derive pleasure from respecting trees is not irrational for failing to respect trees, but people whose utility functions include a potential for deriving pleasure from respecting trees have reason (other things equal) to enrich their lives by realising that potential.
- [14] JIM CHENEY (1987) Eco-feminism and deep ecology, *Environmental Ethics* 9: 115–45, here p. 144.
- [15] See PETER SINGER (1994) All animals are equal, in DALE & FRED WESTPHAL, eds, *Planet in Peril* (Orlando: Harcourt Brace), 175–94, here p. 189.
- [16] Johnson believes ecosystems as such have moral standing and that, consequently, ‘we should always stop short of entirely destroying or irreparably degrading any ecosystem’ (p. 276). ‘Chopping some trees is one thing, then, but destroying a forest is something else’ (p. 276). But this is impossible to square with his remark that there ‘is an ecosystem in a tiny puddle of water in a rotting stump’ (p. 265). Thus, when Johnson says ecosystems should never be destroyed, he does not mean ecosystems per se. Rather he means forests, deserts, marshes, and so on — ecosystems that are recognisable as habitat either for humans or for species that humans care about.
- [17] LEOPOLD ALDO (1966, first published in 1949) *Sand County Almanac* (New York, Oxford University Press) p. 240.
- [18] Will Kymlicka notes that Mary Midgley makes a similar point in a critique of Karl Marx. *Contra* Marx, Midgley says, what constitutes a good life for a human being is not a question ‘about biological classification. It is a question in moral philosophy. And we do not help ourselves at all in answering it if we

decide in advance that the answer ought to be a single, simple characteristic, unshared by other species, such as the differentia is meant to be. MARY MIDGLEY (1978) *Beast and Man: The roots of human nature* (New York, New American Library) p. 204.