

Biophilia as an Environmental Virtue

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Abstract Beginning with E. O. Wilson’s notion of *biophilia*, our “innate tendency to focus on life and life-like processes,” I construct an environmental virtue with the same name that meets certain criteria an environmental virtue should meet. I argue that this virtue can have its status as a virtue by its contribution to human flourishing, while having care for live nature as its target, and care about live nature as its affective content. I explore its characteristics as both an individual and a collective virtue, and finally show how cultivation of it might serve to unite various communities in the cause of preserving biodiversity.

Keywords Biophilia · Collective virtue · Environmental virtues · E. O. Wilson · Eudaemonism

Biophilia as an Innate Tendency

In this paper I explore the potential of *biophilia* to function as an environmental virtue. In particular, I ask whether there might be a *eudaemonistic* moral virtue (i.e., one gaining its status as a virtue through its connection with human flourishing) that could plausibly bear this name. In doing so, I want to explore in one particular way how attention to both individual and collective character might help us find our way to a sustainable, environmentally healthy world.¹ I have borrowed the term *biophilia* from biologist Edward O. Wilson, and this paper pays some attention to his views.

¹ I am not claiming that all virtues must be eudaemonistic; that is a topic for another occasion. See Sandler (2007) and Swanton (2003) for theories in which its contribution to human flourishing is not the only justification for calling a trait a virtue.

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However, my primary aim is not to develop or critique those views, but to use them as a jumping-off point for exploration of a particular sort of environmental virtue.²

For purposes of this paper, a eudaemonistic virtue is a trait of character whose possession and exercise is partially constitutive of human flourishing. Like Aristotle, I take such moral excellences to be neither natural nor against nature. We are not born with them, but must acquire them through training and practice. On the other hand, they are naturally based, and without them we cannot reach our full natural potential as flourishing human beings. As eudaemonistic *moral* virtues, they are both satisfying and hard for us in some way, although they become easier as we grow into them. They are satisfying because of their connection with our well-being, and hard because they avoid certain easier or more immediately gratifying attitudes and behaviors that are not in our over-all best interests.

E. O. Wilson first defines *biophilia*, in his book of the same title, as “the innate tendency to focus on life and life-like processes” (Wilson 1984). So defined, it is clearly not a moral virtue, but rather a genetically encoded human propensity. Kellert and Wilson’s (1993) anthology about biophilia is entitled *The Biophilia Hypothesis*, and many of the articles in it focus not on whether biophilia is a morally desirable character trait, but on whether we humans are in fact genetically inclined to prefer certain sorts of landscapes, to feel affinity with animals, and so on. Wilson and others argue that there is indeed such a tendency; it is, says Wilson, a collection of “[w]eak learning rules” (Kellert and Wilson 1993, 32) which predispose us to fear and be fascinated by snakes and spiders, to prefer blue skies and open savannas, and the like. He hypothesizes that these rules most likely evolved by what he calls “bio-cultural evolution.” They go beyond the universal tendency of living things to seek their natural habitat, and constitute a uniquely human trait.

It does not take Wilson long to move his biological hypothesis onto ethical territory. He often talks about biophilia as a characteristic to be cultivated, and one we will need if we are to pass through what he calls “the bottleneck” to which our way of life has brought us and come out the other end accompanied by the maximum amount of present biodiversity. At the end of *Biophilia* the book, he asks “Is it possible that humanity will love life enough to save it?” And he hopes for a new ethic to which the love of life is central. A paper by Michael Soulé closes the 1993 anthology by going further yet, suggesting that we need a biophilic religion.

Wilson gives his views on the connection between genetically human propensities and environmental ethics in his chapter on “The Conservation Ethic”. The goal, he says there, “is to join emotion with the rational analysis of emotion in order to create a deeper and more enduring environmental ethic” (Wilson 1984, 119). He explicitly identifies this, in the *Biophilia Hypothesis* anthology, as “an anthropocentric ethic... based on the hereditary needs of our own species.” The search is on, he says, “not only for a better understanding of human nature, but for a more powerful and intellectually convincing environmental ethic based upon it” (Kellert

² I intend this paper as a contribution to the developing discussion of environmental virtue ethics: see this journal (23.1–2, March 2010) for some excellent examples of recent work in the area. This is not the place to argue the merits of virtue ethics *vis a vis* deontological or consequentialist ethical theories. But since any ethical theory must give some account of virtues and character, I hope my proposals will be of interest to ethical theorists of several stripes, and not only to self-identified virtue ethicists.

and Wilson 1993, 40). While he does not completely write off the idea of intrinsic value in nature, or the rights of other living creatures, he thinks these ideas will not do the job that an environmental ethic needs to do. Most important, they won't persuade enough people, and thus will not protect biodiversity.

Wilson plainly thinks of biophilia as the biological base for this environmental ethic. When he describes the ethic itself, he turns not to its content (I suppose he thinks that's obvious—preserve biodiversity!) but to reflections on what might motivate us to adopt and follow it. In *Biophilia*, he distinguishes a “surface ethics” from a deeper conservation ethic. The motivation to follow the surface ethic includes tried and true incentives: financial reward, the likelihood of undiscovered medical cures or technological secrets, the pleasure we take in natural surroundings. The deeper motivation, he thinks, could derive from understanding and cultivating our innate attraction to nature, and recognizing its connection to our deepest human satisfactions. He puts it this way:

I have argued in this book that we are human in good part because of the particular way we affiliate with other organisms. They are the matrix in which the human mind originated and is permanently rooted, and they offer the challenge and freedom innately sought. To the extent that each person can feel like a naturalist, the old excitement of the untrammelled world will be regained. The drive toward personal expansion – or personal freedom – is basic to the human spirit. But to sustain it we need the most delicate, knowing stewardship of the living world that can be devised. Expansion and stewardship may appear to be conflicting goals, but they are not. (Wilson 1984, 139–140).

I won't attempt to evaluate Wilson's notion of biophilia as a biological hypothesis. While I find it plausible, it is formulated in such a cagey way that it is hard to refute, raising doubts as to its useful content and predictive power. On the other hand, the strong affiliation between us and other forms of life seems almost self-evident. So for the purposes of this paper I will suppose that Wilson is right, and that we are indeed biophilic creatures, having an innate tendency to focus on life and life-like processes. No doubt this tendency manifests itself in different ways and to different degrees in different people. But I will assume with Wilson that we have “a hereditary need” for a flourishing “affiliation with other life forms,” one that is present to some degree in all human beings and not just in those cut out to be biologists.

I find Wilson's ideas about how this tendency can provide a basis for environmental ethics suggestive. I will draw on some of them to develop the case for an environmental virtue that I will also call biophilia, a trait based on the biophilic tendency and its associated needs. Thinking about this virtue suggests some fruitful strategies for environmentalists.

Biophilia as a Eudaemonistic Environmental Virtue: Definition and Conformity with Criteria

To count as a *eudaemonistic* excellence, biophilia must dispose us to the kinds of actions, motives, explorations and relations with nature that will help us to flourish

as human beings. If it is to be an *environmental* excellence, it will need to place us in a good relationship with nature, and dispose us to save as much of the diversity of non-human life as we can. Finally, to count as a *moral* excellence, it will need to involve the will: it must be an achievement and not just a natural disposition, and it must make us good as human beings. The shape of the virtue will emerge as I consider how it meets each of these criteria in turn.

Will Biophilia Help us Flourish?

If an excellence is eudaemonistic, its status as a virtue can be justified by reference to human needs: the “demands of the world”³ that it helps us to meet are those of human flourishing. This is an advantage for the cultivation of an environmental virtue: the rock on which environmentalism founders in the public sea is usually “But it’s not about us! It’s nice to have pets and parks and to save the bald eagles, but we have to meet our human needs first.” I’ll have more to say about the justification of the virtue later. For now, I note that a virtue with a eudaemonistic justification may have other justifications as well. By arguing that biophilia is a moral virtue because of its connection with human flourishing, I’m not excluding the possibility that it may also be a virtue for other reasons. I am, however, defending the view that those other reasons are not necessary in order to justify its status as a virtue. Furthermore, I note that the justification for claiming that some trait is a moral virtue need not be the same as the target at which the virtue aims, nor is it the same as the affective content of the virtue. A biophilic person will honor, appreciate, learn about and seek to protect non-human life. Asked if she is just doing that for the sake of human beings, she will probably deny it, and may even be offended at the suggestion. To put this another way: she may value non-human life for its own sake; but her doing so may be a moral excellence because of its connection with human flourishing.⁴ It seems at best misleading to call such a virtue “anthropocentric,” regardless of how it gains its status as a virtue. Finally, I note that the justification of the virtue, while not the same as its target or its affective content, may play a role in the public defense of it, and in the inculcation of it by parents and teachers.

Now what would biophilia look like as a eudaemonistic environmental virtue? First, it must have a basis in human nature: I’m granting that this is our natural attraction to and interest in non-human life, and will say no more about it here. Second, it must promote human flourishing. Wilson points out the two main ways that maintaining a connection with the natural world does this. The first is that we need live, non-human nature to survive. We get our oxygen from plants, our food

³ The phrase is Christine Swanton’s. See Swanton (2003, 68ff.) for the various demands of the world, some eudaemonistic and some not, to which she thinks virtues correspond. Her fine discussion of the justification of a virtue, the states of character that it expresses, and the target at which it aims has also informed my work in this essay.

⁴ I take John O’Neill to be making a similar point in the last section of O’Neill (1992). By contrast, Ronald Sandler (2007) develops an environmental virtue ethic that explicitly includes non-eudaemonistic justifications for something’s being a virtue, e.g., that it responds with respect to the inherent worth of living things (p. 73).

and many of our other life needs from plants and animals. They provide what the United Nations Environmental Programme calls “ecosystem services,” (Millennium Ecosystem Assessment 2005) and while we are constantly inventing artificial substitutes for such services, and domesticating the ones we can’t synthesize, there is no reason to think we will ever find adequate artificial substitutes for all or even most of them. Even if we did, and even if the substitutions didn’t have an unsustainably high environmental price tag, we have another kind of need for non-human life. One might call it a spiritual, psychological, cognitive, imaginative, or emotional need. Perhaps it is all of these. As a thought experiment, Wilson imagines a world in which we successfully replace live nature with artificial substitutes. In such a world, he says, we would be impoverished simply because there would be no more real elephants, giraffes, ants, or ant-lions, no more wonderfully complex ecosystems that we did not invent and don’t fully understand, no more biosphere both wondrous because it is alien and comforting because it is kin and home to us. Expand Wilson’s thought experiment to include domesticated animals, and those plants and animals that thrive in cities and around farms. We would still be impoverished, for while these species do enrich our lives, much of the wonder of “wild” nature would then be replaced by the more familiar. Development of a biophilic ethic that loves and will protect non-domesticated nature is necessary for the well-being of the human spirit.

Does each individual need to be biophilic, or is just that individuals need to live in a biophilic society in order to flourish? Based on what’s just been said, it would seem that each of us has a spiritual need to be biophilic; each of us whose biophilia is underdeveloped would be to that extent impoverished. By contrast, at Wilson’s first, superficial level each of us has little direct need to be biophilic. My personal lack of biophilia won’t have much effect on my access to ecosystem services. Rather, those services will be preserved or threatened at the collective level. Should one then speak of a collective as well as an individual version of biophilia? And if so, what is the relation between the two? I will address this complicated question briefly here, and return to it from time to time throughout the paper. My approach to collective morality derives from Larry May’s work on the subject (May 1990). May contends that groups are individuals in relationship. In this way he is able to claim that groups have no ontological status apart from the individuals who make them up, while recognizing that groups (through their relationships) can do and be responsible for things beyond those done by their members purely as individuals. Group members may bear shared responsibility for a group’s actions, in which case the responsibility for the action distributes without remainder to the group members. But the group may also bear *collective* responsibility for some of its actions. In that case, it is the individuals *in relationship* who perform the action and bear responsibility for it. While many of them bear individual responsibilities related to their group membership, the responsibility for a particular collective action does not distribute without remainder to the members of the group.⁵

⁵ For a careful exposition of the difference between collective and shared responsibility, see Mellema (1997).

Against this background it makes sense to attribute collective virtues and vices as well as actions and responsibilities to groups. Let us say that a group has a collective character trait if it typically acts according to that trait, or facilitates action according to that trait by its members, or facilitates their acquisition of the trait. We're now ready to answer the question whether, when it comes to "ecosystem services," the individual need for biophilia is for the individual or the collective virtue. The answer is that the need is for the collective virtue (i.e., we, individually and collectively, *need to live in a biophilic society*, and our descendants even more so). But the collective virtue cannot exist unless there are enough biophilic individuals in the collective to create and sustain it.

The human need for collective biophilia is very clear. Only by biophilic policies, practices, and values at the national and international level will human beings be able to halt the rapid destruction of earth's biological diversity in which we are now engaged, and preserve a healthy planetary biome for our descendants and our near and distant non-human relatives. Unfortunately, very few contemporary nations can plausibly be called biophilic. While my own country (the United States) has some biophilic aspects, by and large it lacks that virtue. In many ways it has the corresponding vice of biophobia. The lack of biophilia has a chicken-and-egg character: absent collective biophilia, it is hard for individual biophilia to develop, and without the prevalence of individual biophilia within it, a collective won't become biophilic. This does not make the problem insoluble, but it does mean that like all social change it must happen progressively and interactively among individuals, small groups, larger groups, nations, and cultures, more or less in tandem.

Is Eudaemonistic Biophilia an Environmental Virtue?

In order to be one, biophilia must protect the environment. In particular, it must protect biodiversity. I have claimed that while biophilia may also have a non-eudaemonistic justification, its eudaemonistic credentials qualify it as an environmental virtue. Is that true? Will a virtue that depends on that justification alone be sufficiently oriented to the protection of wild nature? I have already indicated a possible answer to this question, by pointing out that the justification for calling something a virtue is not the same as the target of the virtue, or its affective content. It is the latter that give biophilia its credentials as an environmental virtue, so I now turn to further consideration of them.

The first thing to be said is that biophilia the innate tendency provides a very good start for the right kind of virtue. As Wilson suggests, cultivation of that tendency will draw us deeper and deeper into engagement with nature, and create a sense of loss and apprehension when biological diversity is seen to be at risk. The potential for this biophilic momentum is evidenced by the superficial forms of engagement with nature that already prevail in most of the developed world. That it is so underdeveloped may be due to other pressures that work against it.

If we are biophilic, we will "love life enough to save it." But how should we understand this requirement? In a rough way, one might say that the target of biophilia is to care *for* non-human life, and its affective content is to care *about* non-

human life. But of course this *is* rough. What does it mean to care for non-human life? “Nature” does not have interests, nor (on most accounts) do species and ecosystems. Individual living creatures do have interests; but there are notorious difficulties in basing an adequate environmental ethic on the claims of those interests alone.⁶ Perhaps our target can be better identified by saying that biophilia seeks a harmony between human and non-human life, such that human needs are met, while allowing large scale natural processes like speciation and extinction to continue at their own pace.⁷ Notice that this target emerges from the virtue’s justification, since this is what is needed to meet the long-term human need for biodiversity, at both the superficial “ecosystem services” level and the deeper, spiritual level.

It might be suggested that if biophilia is to be an environmental virtue, its target should specifically be care for “wild” nature. I have mostly avoided this term so far, for two reasons. First, there is every reason to think biophilia should govern our relationship with domesticated animals and plants, as well as with those we consider “wild.” Not only does that make sense in terms of the natural roots of the virtue, it also seems necessary for its environmental usefulness, since it must aim for a sustainable harmony between human beings and the whole natural world. Secondly, wildness and wilderness are contested notions in environmental philosophy. Some staunchly defend them. Others note that much “wilderness” has been shaped by previous human habitation, and that human activity has altered the whole biosphere. Others in the developing world argue that preserving the “wild” in separation from the human produces “wilderness” parks that attract human tourists but don’t preserve biodiversity well, are relatively inaccessible to the poor, and disrupt stable, long-standing patterns of human-nature harmony (Callicott and Nelson 1998). It seems unnecessary to take sides in this debate in order to limn the contours of biophilia. For we have already seen that in order to meet our deeper human needs, that virtue must act to preserve as much of nature’s living diversity as we can.

Putting the matter this way places a necessary emphasis on the collective dimension of biophilia, that is, on the nature of a biophilic society. Such a society will correct those patterns that are now causing biodiversity loss (pollution, destruction of habitat, overuse of resources, excess production of waste, anthropogenic climate change and its adverse biological consequences). It will seek and widely disseminate knowledge of other living things, and their relationship with us. And it will maximize opportunities for its members to have rewarding interactions with non-human life, without threatening the continuation of that life. That it will characteristically do these things follows from the two ways biophilia contributes to human flourishing, namely by protecting the “ecosystem services” we need, and by fostering those connections with the biosphere that feed the human spirit. For both

⁶ Among them is the fact that the preservation of ecosystems and the protection of species may mean culling or exterminating certain living individuals. Such situations arise, for example, when an ecosystem is threatened by invasive species, or by ballooning populations of certain prey species like deer in the absence of top predators (wolves and cougars) whom we have replaced. See Sarkar (2005 2–4, 71–74) for some examples.

⁷ See Sarkar (2005, 47–52), for a more detailed lists of adequacy conditions that might be taken as an expansion of those stated here.

of those ends are jeopardized by the continued loss of biodiversity, and the second is jeopardized by the uninformed cognitive and emotional distance from the biosphere that characterizes most citizens of the “developed” world.

If this is what the biophilic society looks like, what will be the nature of the biophilic individual? Every virtue has cognitive, affective, and volitional components, and is a disposition to act in certain ways under certain sorts of circumstances. The affective dimension is prominent in the name of this virtue: the biophilic individual is a lover of non-human life. But the cognitive dimension is important as well: someone who has this virtue will be aware of her connections with non-human life, and will seek more such knowledge. If she is a jungle dweller or a farmer she will hardly be able to avoid such knowledge; but if a modern urbanite she will work hard to seek it out. Biophilic goals include both protecting the diversity of non-human life and drawing inspiration from it. So she will be wise about the best ways to pursue such goals in the context of her own virtuous life plan. She will be willing to pursue those goals at some personal cost, and she will take satisfaction in doing so. Both the biophilic collective and the biophilic individual, by acting in these ways, will certainly be manifesting an environmental virtue.

An accurate description of most virtues will be unavoidably vague in a certain way, because virtues are traits of character. They dispose us to act *according to that character* in situations that call them forth. They are not, in general, dispositions to follow certain rules, and are not defined by a list of the actions they will typically produce. Furthermore, all virtues include an element of practical wisdom, and there is no formula by which one can determine exactly what wisdom will dictate in every individual circumstance. So discussions of the virtues frequently resort to phrases like “as appropriate” or “from the right desires, for the right reasons, on the right occasions” (NE 1106b20–25). My description of biophilia has been appropriately vague in just this way. However, it is still *inappropriately* vague in an important way that has to do with the collective dimension of the virtue. The challenges biophilia faces are first and foremost challenges that we (the human species) face collectively. We (collectively) have also created them. But as individuals we contribute to them mostly by living normal lives. We can rarely trace a direct causal connection between our individual actions and their effects on non-human life. It is at the level of nations, cultures and forms of life that we are impacting biodiversity. How shall we specify the character of a biophilic individual against this collective background? In addition to the traits described above, I suggest that the biophilic individual will also be aware of her membership in a variety of human groups, each of which has or lacks biophilia to some degree, and of her potential influence within these groups. She will have an effect on these groups, sometimes in formal ways (e.g., by how she votes), sometimes in less formal ways (e.g., by the ripple effect of things she may not even remember saying or doing). Groups change primarily by the cumulative impact of individual choices. So even if the biophile feels alienated or impotent within her biophobic country or social group, she will not stop promoting the biophilic cause in the most effective ways she can find. In short, a biophilic individual will not only have an actively life-loving disposition, but will seek opportunities to imbue her groups with this same character, and will act on the

assumption that her words and actions may have that effect even without her knowledge.

Is Biophilia a Moral Excellence?

Aristotle correctly remarks that all excellences, including the moral virtues, are about what is hard for us (NE 1105a10). The third requirement a eudaemonistic moral virtue of biophilia must meet is that its possession must be an achievement.⁸ As a moral excellence, it must be more than the genetic predisposition with which Wilson begins, more than an affection for pets and national parks, more than ecological knowledge, more than curiosity about nature and wonder at its marvels. It must somehow involve the training of the will and the emotions, so that its possessor avoids certain easier or more immediately gratifying behaviors that are not in our over-all best interests and don't promote ecosystem health, and replaces them with more difficult but rewarding and environmentally beneficial actions. In what way might biophilia be a moral accomplishment, and not merely a trait that suits one to be a biologist or an amateur naturalist?

The answer to this question is implicit in what has already been said, but drawing it out highlights the historically situated character of this virtue, and perhaps of virtue in general. Biophilia is hardest for modern people because a biophilic individual must buck the trends of the society in which he lives. He must seek out knowledge that is, to be sure, at his fingertips (what a difference the internet makes!). All the same, he must sift and sort that mass of information, trying his best to identify the most important dangers to ecosystem health. He must seek understanding of his own and his society's role in causing or defending against these dangers, and choose the sort of biophilic life best suited to his particular situation, interests and abilities. He must resist the pressures of advertising images, and the propaganda that minimizes environmental harm or its importance, and shape his life in ways that counter his society's consumer lifestyle. Biophilia is harder for him to acquire and to practice than it would be in a biophilic society. In these ways it also shows its relationship with such other virtues as wisdom, critical awareness, courage and moderation, for to act in the ways just mentioned he needs these virtues as well.

Would biophilia also be hard for us in a similar way to that in which benevolence and friendship are hard? These three virtues don't have the familiar structure of wise self-control over passionate excess found in virtues like moderation and courage. So there is no formula for describing their difficulty. But they bear illuminating similarities to each other. Benevolence is difficult for reasons that derive both from other people and from ourselves. It must be more than a sunny disposition and an outgoing personality. It must dispose us to wish people well and think and do the best of them, for the right sorts of reasons, exactly while they are being unlovable pains in the neck, or when we are wrapped up in meeting our own needs. It must be an *achievement* to be benevolent.

⁸ I don't mean to imply that only a fully virtuous person is virtuous at all. I agree with Swanton (2003 63ff.) that virtue is a "threshold" concept, where one must meet some minimum to have a virtue, but can then have it in varying degrees.

How similar would biophilia be to benevolence? The parallel could not be exact. With few exceptions, we are not face-to-face with non-human creatures in the same personal way that we are face-to-face with human beings, and we cannot owe them respect or care *in the same way* as we owe persons respect.⁹ Someone who learned, with difficulty, to love (or at least wish the best for and act on behalf of) the AIDS virus, the Guinea worm, and the *Anopheles* mosquito would have a vice rather than a virtue. We properly do our best to eradicate these scourges of human life. Yet this virtue must be more than the enchanted fascination with life's innovative fecundity that makes Wilson's nature meditations such a delight to read. It must hit the collective target described above, promoting human wellbeing in harmony with a naturally flourishing biosphere rather than imposing our own "better" substitutes. Some of the difficulty of it will involve going beyond the easy attractions of natural wonders to an appreciation of the less flashy and even initially repulsive aspects of live nature. So perhaps our relationship with the aforementioned horrors should, after all, be part of the difficulty of this trait. Biophilia should probably dispose us to a kind of respect even for them, since they, too, are living things entangled with the lives of other beings. And this will be hard for us, since they are harmful to us, and we are genetically disposed to find them disgusting and hateful. Yet as contemplative agents, we have the capacity to explore, learn from, perhaps reluctantly admire the nature of diseases and parasites, even while we defend humanity against them. The analogy with benevolence is really quite strong. Recent attention to the human microbiome and its positive relation to our health may contribute to such a deepened understanding of our interdependence with the less attractive forms of non-human life (Ackerman 2012).

Other ways in which biophilia might be hard for us include the purely situational. As already mentioned, many modern people are cut off from much direct contact with the world of non-human life. Yet for most developed-world urbanites, lack of ready access to "wild" nature is not an insuperable obstacle to becoming biophilic. Rather, overcoming this difficulty requires attention to the wildlife that is present almost everywhere (birds, insects, small mammals, plants), and a process of deliberately seeking information about our indirect connections with non-human life. All virtues have a cognitive dimension: part of the cognitive dimension of biophilia is this acquisition of knowledge about our relation to the natural world, as well as about the ecological interrelations of non-human life, whether remote or in our backyards. Biophilia is hard partly because it takes some work to acquire that knowledge. At the same time, the amount of such knowledge necessary for individual possession of the virtue cannot be too great. As a moral virtue it must be accessible to the average person, and not only to specialists.

The difficulty of biophilia the virtue is beginning to look more like that of benevolence. Liking people is easy when they are nice, admire us, do what we want and give us what we need. But this easy reaction doesn't display the virtue of benevolence. Similarly, love for pets and admiration for charismatic flora and fauna

⁹ But see DeGrazia (2006) for a convincing argument that in some important cases we actually are in this position. DeGrazia argues that wild great apes and cetaceans are quasi-persons, and that language trained great apes and dolphins are persons, full-stop.

are common in contemporary society, and do little to restrain our destructive effect on the non-human world. So just as benevolence must reach to our relation with people who are hard to like, or whom we have reason to hate, so biophilia as a virtue must get beyond the cute and dramatic to appreciation of the marvelous, complex interactions of organisms in their environment.¹⁰

Biophilia is also hard for us in about the same way that it is hard for us to exercise benevolence toward people we have never met, people with whom our nation is at war, and people in the distant future. It is hard to focus on people in these different groups as human beings like ourselves, and to wish and do them well at some cost to ourselves. Similarly, though for different reasons, it is hard to care about the well-being of non-human life. Except where we eat it, pet it, or use it for research, its immediate importance to us is not obvious. In fact it often seems that the well-being of non-human life conflicts with our own (think of conflicts between environmentalists and mining and lumber companies over preservation of endangered species). Here it may help to make the comparison with friendship, and its collective cousin, a sense of community. Friendship is a moral excellence, and not merely a rewarding kind of relationship, because it takes wisdom and practice to become a good friend. Maintaining and developing a friendship requires a balance of autonomy and giving over, a combination of self-respect and self-care with respect and care for the character and needs of the other. It also takes wisdom to recognize the limits of a friendship, and not to press it beyond those limits. A form of this same dynamic is at work in any successful community. Its members must give over to one another, or the community will cease to exist. But they must also develop individually, and not simply submerge themselves in the community, or they will begin to lose their humanity, and the community will head toward totalitarianism. Furthermore, most of us belong to several communities, whose demands we must balance against one another.

In the same way, our relationship with the natural world needs to be a balanced harmony, a combination of respecting our own, and giving over to the natural other. In “The Land Ethic,” Aldo Leopold has suggested that a sense of community is the essential foundation of ethics, and that the next step in our ethical development must be to see ourselves as members of a biotic community (Leopold 1949, 201–225). The notion may seem odd to most modern Westerners, because we think of community relationships as personal ones, and non-human life is not fully personal. But if we think of our lives as bound together with other life forms, which they surely are, perhaps the analogy of community may help us live up to the role we have claimed for ourselves as the global keystone species. Biophilia, in its collective dimension, could then resemble an active sense of community with the biosphere, and a corresponding sense of obligation to play one’s proper part in that community.

If the nature of biophilia becomes clearer when considered at the collective level, its greatest difficulty is also revealed there. A biophilic society would be very different from the social world in which we now live. There is good reason to

¹⁰ See Berndt Heinrich’s wonderful nature meditations for an example of this more difficult love of nature, including the interaction of parasitic wasps with other insects—and with each other—and their essential role in ecosystems. See especially Heinrich (2009).

believe that it is a physically possible world, and one in which human life would flourish.¹¹ It is the social possibility of getting there from here that presents the biggest challenge.¹² Our cities and towns, our transportation systems, our food and clothes, our industries and activities, and our economic structures would be transformed in ways that we can hardly now envision.¹³ Tackling this transformation is the major problem that policymakers in many countries are unwilling to address. It is easy to understand why; imagine what would happen to someone who campaigned for election on a platform of “limits to growth!” Perhaps this is the true measure of biophilia’s difficulty. It requires such a major transformation of our way of life that there is resistance to it at every level, individual and corporate, local, national and international. And it is at each of those levels that the change must come.

Recommending Biophilia

I have tried to show that biophilia, a character trait whose target and affective content consist of caring for and about non-human life, can be defended as a eudaemonistic moral virtue. If this is true, it means that there is fertile ground on which the virtue can grow, even where people are not convinced of abstract views that environmentalists have sometimes defended (for example, the equality of all forms of life). In making this defense, I have operated against an implicit background story, major elements of which are Aristotle’s account of the virtues, along with modern scientific understanding of the natural world, and particularly of ecology. But I have not fleshed that story out. I have not placed biophilia in a fully-formed theory of the virtues, nor committed myself on the wide range of theoretical questions doing so would bring up. I have not given a detailed account of human flourishing, and have been (deliberately) slippery in my use of terms like “spiritual” when talking about it. And I have not articulated a full-fledged worldview within which I would locate these pieces of conceptual furniture. These are important omissions. Without a broader context, a motivating back-story, no-one is likely to become a consistent biophile, or indeed to acquire any other virtue. Of course one can have moral virtues without having an explicit knowledge of moral theory, or being able to clearly articulate a worldview. Nevertheless virtues are rooted in

¹¹ For some recent briefs that make the case, see Daly (2005), Speth (2008), and Braungart and McDonough (2002).

¹² I don’t mean to dismiss the real tension between the physical needs of our growing human population and the needs of the rest of the biosphere. Until the human population plateaus, there are likely to be tradeoffs in reaching a sustainable state of harmony. In a report commissioned by the Convention on Biodiversity, the Netherlands Environmental Assessment Agency estimates that even under a rather optimistic scenario of global environmental action, biodiversity loss will continue until at least 2050, due to the need to bring more land under cultivation to feed the still growing human population (CBD 2006). The virtue of biophilia is necessary to make these tough decisions well, but even its prevalence on a global level would not make them instantly go away.

¹³ For a persuasive attempt to envision it, and the road there, see James Gustave Speth, *The Bridge at the Edge of the World* (Speth 2008).

understandings of what the world is like, what makes life worth living, and what kind of a life is admirable.

I could not provide an account of those things in a paper of this length, except by referring to fuller views articulated elsewhere and saying that I share them (as I have done with Larry May's work on the nature and responsibility of groups). I bring the matter up for another reason. To quote Aristotle again, the purpose of studying ethics is not just to know about goodness, but to be good (NE 1103b30). Earth's biological diversity is in crisis due to human activity, and what we do about that is a moral matter. So it is also a moral matter to talk and think about it in the correct and most morally effective way. I want to close by making two points about how to do that with respect to biophilia. The first is that is important for ethical theorists, as for anyone else, to try to determine what is actually true about matters of the sort I've been discussing, and to act on what they determine to be true. Work on ethical theory, and serious reflection on fundamental convictions, matters by contributing to the conversation through which values are formed and transformed, and through which human behavior changes.

My second point may seem to cut in the opposite direction. It's the rather obvious point that seeking general agreement on a basic worldview or basic "back-story" is a losing proposition as a route to environmental goals, since it is obvious that no such agreement will be achieved. Yet virtues cross lines of culture and belief more readily than theories. This may give environmental virtue ethics an advantage in making progress for the environmental cause, by proposing a ground for agreement where theories differ. I believe Alasdair MacIntyre is right in thinking that the virtues grow best in smaller, more coherent communities of character and conviction (MacIntyre 1981, 244–245, 1999, 129–146). Yet the same virtues (perhaps with different "accents") may appear in several of these communities, and that may contribute to the acquisition of such virtues by a pluralistic democracy.

To foster biophilia a modern community must rely on current scientific knowledge about ecology, biodiversity loss, and human environmental impact. That excludes a few communities, but leaves room for very many others. So a member of the Evangelical Environmental Network (<http://creationcare.org/>) will be a biophile; the back-story here, rooted in evangelical Christianity, will be stewardship of God's creation. Rutgers Biology professor David Ehrenfeld is a biophile. His motivation, in addition to his love for biology, is his Jewish sense of stewardship of creation (Ehrenfeld and Bentley 1985). Neo-Pagan author and activist Starhawk (<http://www.starhawk.org/>) grounds her biophilia in the sacredness of the earth, along the lines of ancient goddess religions. Vietnamese Buddhist monk and teacher Thich Nhat Hanh roots his biophilia in Buddhist compassion, mindfulness and non-attachment (Nhat Hanh 2008). *Humanist Manifesto* author Paul Kurtz has recently proposed a biophilic humanist planetary pledge of allegiance (find it in this review of Kurtz (2010): <http://paulkurtz.net/writings.htm>). In each of these cases, the biophilia is strongly connected to the back-story.

In short, the cultivation of biophilia is shared by communities of conviction whose foundational beliefs are very different. The same point could be made about other environmental virtues (e.g., moderation). By its emphasis on cultivation of virtues, environmental virtue ethics holds a significant advantage over some other

approaches in being able to invite all of these communities into a common discussion. To put this another way, a pluralistic society might prize many of the same virtues and reject many of the same vices.

I am not making a theoretical case for moral pluralism. My point is pragmatic. The virtues need to be embedded in a story about the nature of the universe, the purpose of human existence, and what makes a life worth living. The story needs to be taken as *true* or it won't work. There are many such stories, and they cannot all be right, nor can they be reconciled with each other in one grand story that has any substance to it. Fortunately this is not necessary, for diverse communities can share environmental virtues, act in accord with them, and form alliances to promote such actions.

It is a mistake, I think, to treat these different back-stories as mere private opinions that shouldn't be publicly expressed. Especially in the USA, the crucial separation of church and state, without which pluralist democracy would be impossible, is often used to dismiss public expression of faith (or anti-faith) based reasons for a position. I believe such dismissals are a mistake. The issue is not your reasons for taking a position, but whether you can identify reasons that will persuade me and others to join with you. We may be able to make common cause on various matters of public policy, while heartily rejecting each other's reasons for doing so. But we will not reach such agreement, or commit ourselves firmly and passionately to it, unless our most basic convictions and values drive our commitments.

I'm happy to close this essay by returning to E. O. Wilson as a model of the strategy I'm recommending. His (2006) book *The Creation* begins with a letter to an evangelical pastor; it is a direct appeal to a community to which Wilson no longer belongs. Raised a Southern Baptist, he identifies himself as a secular humanist, and appreciates the work of Richard Dawkins and Sam Harris. He thinks their militant atheism provides a necessary foil to militant contemporary fundamentalism. Nevertheless, his own approach has been different from that of Dawkins and Harris. "[W]hat I'm interested in," he says,

is the new humanism. It's an approach no less skeptical than militant atheism, but is, at least as I have conceived and practiced it, based on finding common ground. Call it the diplomacy wing if you will....

[M]y primary purpose in writing *The Creation* wasn't to promote humanism. I had an entirely different ambition: to save biodiversity by bringing people of all beliefs into the environmental movement; to get them to pay particular attention to the rest of life on Earth.

and so, in *The Creation*,

To the believers I said, let us talk. Let us try to be friends and, without proselytizing, find common ground.
(Wilson 2007).

There is fertile ground for the virtue of biophilia to grow in many of the different communities and value traditions that make up modern pluralist democracies. That

is reason for opening dialogues, forming coalitions, and doing everything possible together to build more biophilic societies around the globe.

In this essay, I have presented a possible way of justifying a nature-regarding virtue on the basis of human flourishing. One might see that as a kind of theoretical bootstrapping, getting to the goal of respect for nature without the machinery of biocentrism. I think it works; but there will certainly be disagreement as to whether I'm right about that, and whether a eudaemonistic foundation is enough to do the necessary job. John O'Neill approaches nature-regarding virtue more or less as I have done (O'Neill 1992). By contrast, Ronald Sandler (2007) and Christine Swanton (2003, 92–95), in different ways, classify nature-regarding virtues as non-eudaemonistic. These differences matter in the way that good ethical theory matters; but however it is justified, I believe we will agree on cultivating a virtue that “loves life enough to save it.”

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