

Introduction: Environmental Virtue Ethics

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It is a wholesome and necessary thing for us to turn again to the earth and in the contemplation of her beauties to know of wonder and humility.

—Rachel Carson

When we see land as a community to which we belong, we may begin to use it with love and respect.

—Aldo Leopold

All the wild world is beautiful, and it matters but little where we go . . . everywhere and always we are in God's eternal beauty and love.

—John Muir

Those things of real worth in life are worth going to any length in love and respect to safeguard.

—Julia Butterfly Hill

There is at least one certainty regarding the human relationship with nature: there is no getting away from it. One simply cannot opt out of a relationship with the natural world. On some accounts this is because humans are themselves a part of nature. On others it is because we must breathe, eat, drink, and decompose, each of which involves an exchange with the natural world. But whereas a relationship with nature is given, the nature of that relationship is not. Both human history and the contemporary world are replete with diverse and contradictory ways of conceiving of and interacting with the natural environment. Environmental ethics as a field of inquiry is the attempt to understand the human relationship with the environment (including natural ecosystems, agricultural ecosystems, urban ecosystems, and the individuals that populate and constitute those systems) and determine the norms that should govern our interactions with it. These norms can be either norms of action or norms of character. The project

of specifying the latter is *environmental virtue ethics*, and a particular account of the character dispositions that we ought to have regarding the environment is an *environmental virtue ethic*.

Why Is There a Need for an Environmental Virtue Ethic?

The central ethical question is, “How should one live?” Answering this question of course requires providing an account of what actions we ought and ought not to perform. But an account of right action—whether a set of rules, a general principle, or a decision-making procedure—does not answer it entirely. A complete answer will inform not only what we ought to do but also what kind of person we ought to be. An adequate ethical theory must provide an ethic of character, and our lived ethical experience belies the claim that one’s character is merely the sum of one’s actions. Environmental ethics is simply ethics as it pertains to human–environment interactions and relationships. So an adequate environmental ethic likewise requires not only an ethic of action—one that provides guidance regarding what we ought and ought not to do to the environment—but also an ethic of character—one that provides guidance on what attitudes and dispositions we ought and ought not to have regarding the environment.

Consider the four widely regarded environmental heroes quoted above: Rachel Carson (naturalist and author of *Silent Spring*), John Muir (naturalist and founder of the Sierra Club), Aldo Leopold (wildlife ecologist and author of *A Sand County Almanac*), and Julia Butterfly Hill (activist who lived two years atop a threatened redwood). Why do we admire these individuals? Is it their accomplishments in defense of the environment? Yes. The sacrifices they made for those accomplishments? Of course. Their capacity to motivate others to take action? To be sure. But it is not only what they have done and the legacy they have left that we admire. It is also them—the individuals who managed those accomplishments, made those sacrifices, and have left those legacies. That is, we admire them also for their character—their fortitude, compassion, wonder, sensitivity, respectfulness, courage, love, appreciation, tenacity, and gratitude.

It is not always easy to keep this dimension of environmentalism in mind. Public discourse regarding the environment tends to be framed almost exclusively in legislative and legal terms, so it is tempting to become fixated on what activities and behaviors regarding the environment are or ought to be legal. After all, we might restrict the use of off-road vehicles in an ecologically sensitive area and take legal action against those who fail to adhere to that boundary; but we will not legislate against ecological insensitivity or indifference itself, and no one will be called to court merely for possessing those attitudes. We legislate regarding behavior, not character; policy concerns actions, not attitudes; and the courts apply the standards accordingly.

But as our environmental heroes remind us—both by example and by word—we must not take so narrow a perspective of our relationship with the environment. It is

always *people*—with character traits, attitudes, and dispositions—who perform actions, promote policies, and lobby for laws. So while we decry removing mountaintops, filling wetlands, and poisoning wolves and we make our case against these practices before lawmakers, the courts, and the public, we must also consider the character of persons responsible for them. Indeed, how one interacts with the environment is largely determined by one's disposition toward it, and it seems to many that the enabling cause of reckless environmental exploitation is the attitude that nature is merely a boundless resource for satisfying human wants and needs. In Muir's words, "No dogma taught by the present civilization seems to form so insuperable an obstacle in the way of a right understanding of the relations which culture sustains to wildness as that which regards the world as made especially for the uses of man." So it would seem that any significant change in our environmental practices and policies is going to require a substantial shift in our dispositions toward the environment. In this way proper character is indispensable for facilitating right action and behavior.

But as our environmental heroes also remind us—again, by example and by word—environmental virtue is not merely instrumentally valuable as the disposition to identify and then perform proper actions; it is also valuable in itself. It is life-affirming and life-enhancing. Those who possess it are better off than those who do not, for they are able to find reward, satisfaction, and comfort from their relationship with nature; and it is their character—their capacity to appreciate, respect, and love nature—that opens them to these benefits. "Those who dwell, as scientists or laymen, among the beauties and mysteries of the earth are never alone or weary of life," writes Carson; and according to Muir, "Everybody needs beauty as well as bread, places to play in and pray in, where nature may heal and give strength to body and soul alike." To those who are receptive to it, nature is a source of joy, peace, renewal, and self-knowledge.

Once the need for an environmental virtue ethic is recognized two questions immediately present themselves. First, what are the attitudes and dispositions that constitute environmental virtue? Second, what is the proper role of an ethic of character in an environmental ethic? These two issues—specifying environmental virtue and identifying the appropriate role of virtue in an environmental ethic—are central to environmental virtue ethics and largely orient the philosophical work that appears in this collection. The remainder of this introduction is intended to serve as a primer on these issues and to locate the contributions in this collection within these philosophical themes.

Specifying Environmental Virtue

The environmental virtues are the proper dispositions or character traits for human beings to have regarding their interactions and relationships with the environment. The environmentally virtuous person is disposed to respond—both emotionally and through action—to the environment and the nonhuman individuals (whether inanimate, living, or conscious) that populate it in an excellent or fine way. But although this formal account may be accurate, it does not provide any substantive description of what the environmentally virtuous person will actually be like. So how does one establish which dispositions regarding the environment are constitutive of virtue and

which are constitutive of vice (and which are neither)? That is, how does one go about providing a substantive account of the environmental virtues and vices?

Perhaps the most common strategy for specifying environmental virtue is to argue by extension from standard interpersonal virtues, that is, from virtues that are typically applied to relationships among humans. Each interpersonal virtue is normative for a particular range of items, activities, or interactions, and that range is its sphere or field of applicability. For example, the field of honesty is the revealing or withholding of truth; the field of temperance is bodily pleasures and pains; and the field of generosity is the giving and withholding of material goods. Extensionists attempt to expand the range of certain interpersonal virtues to include nonhuman entities by arguing that the features that characterize their fields in interpersonal interaction or relationships also obtain in (at least some) environmental contexts. The virtues, they conclude, should therefore be normative in those environmental contexts as well. For example, if compassion is the appropriate disposition to have toward the suffering of other human beings and there is no relevant moral difference between human suffering and the suffering of nonhuman animals, then one should be compassionate toward the suffering of nonhuman animals. Or if gratitude is the appropriate disposition toward other human beings from whom one has benefited and one has similarly benefited from the natural environment, then gratitude is also an appropriate disposition to have toward the natural environment. Extension from the substance of the interpersonal virtues is thus one strategy for specifying the environmentally virtuous person.

A second strategy is to appeal to agent benefit. On this approach, what establishes a particular character trait as constitutive of environmental virtue is that it typically benefits its possessor. This is a wide-ranging approach bounded only by the limit to the ways in which the environment benefits moral agents. The environment provides not only material goods—such as clean water and air—but also aesthetic goods, recreational goods, and a location to exercise and develop physically, intellectually, morally, and aesthetically. That the environment can benefit individuals in such ways straightforwardly justifies a disposition to preserve these opportunities and goods. But it does not only justify a disposition toward conservation and preservation. It justifies cultivating the kind of character traits that allow one to enjoy those goods. The natural environment provides the opportunity for aesthetic experience, but that benefit accrues only to those who possess the disposition to appreciate the natural environment in that way. It provides the opportunity for intellectual challenge and reward, but those benefits come only to those who are disposed first to wonder and then to try to understand nature. The natural environment provides plentiful opportunities for meaningful relationships with its denizens, but those relationships are only possible for those who are open to having them. Many religious and environmental thinkers have argued that the natural world provides unique opportunities to commune with the spiritual or divine. But, again, the benefits are only available to those who are disposed to be open to them. So considerations of which environmental dispositions benefit their possessor (and allow their possessor to be benefited by the natural environment) are relevant to the substantive specification of environmental virtue. In this way environmental virtue ethics emphasizes the role that enlightened self-interest can play in promoting or motivating environmental consciousness and its corresponding behavior in

a way that reinforces rather than undermines the other-regarding aspects of environmental ethics. It allows for environmental ethics to be self-interested without being egoistic.

A third strategy for the specification of environmental virtue is to argue from considerations of human excellence. On this approach what establishes a particular character trait as constitutive of environmental virtue is that it makes its possessor a good human being. What it means to be a good human being—to flourish as a human being—is typically understood naturalistically. That is, it is understood in terms of the characteristic features of the life of members of the human species. Human beings are, for example, social beings. Excellence as a human being therefore involves character dispositions that promote the good functioning of social groups and encourage one to maintain healthy relationships with members in the group. A human being who is disposed to undermine social cohesion, disrupt the conditions that make cooperation among individuals possible, and sour relationships with others is properly described as a deviant human being. Such a person fails to be a good human being precisely in virtue of his or her antisocial disposition. Many environmental philosophers have argued that a proper naturalistic understanding of human beings will locate them not only socially (as members of the human community) but also ecologically (as members of the broader biotic community). If this is correct, then excellence as a human being would include dispositions to maintain and promote the well-being of the larger ecological community. Given that the well-being of the ecological community is threatened by further habitation fragmentation and biodiversity loss, a disposition to oppose these would thereby be constitutive of environmental virtue. A human being who lacked these dispositions would, from the perspective of human beings as members of the biotic community, be properly described as deviant. Considerations of human excellence need not, however, be confined to secular or naturalistic accounts of environmental virtue. Human excellence is often understood by religious traditions in a way that transcends the natural by connecting it with divine or cosmic purposes. For example, if it is the divinely proscribed role of human beings that they be stewards of the land, then the environmental virtues will be those character traits or dispositions that make human beings reliable and effective stewards.

A fourth strategy for specifying environmental virtue is to study the character traits of individuals who are recognized as environmental role models. By examining the life, work, and character of exemplars of environmental excellence we may be able to identify particular traits that are conducive to, or constitutive of, that excellence. The lives of John Muir, Rachel Carson, and Aldo Leopold, for example, are not just compelling narratives; they also instruct us on how to improve ourselves and our approach to the natural world. Environmental role models of course need not be such public or renowned figures as Carson, Muir, and Leopold. Exemplars of environmental excellence can be found in local communities and in many organizations working for environmental protection and improvement. No doubt many of us have been benefited by such people, not only by their accomplishments but also by the guidance, inspiration, and example they provide.

These four approaches to the specification of environmental virtue—extensionism, considerations of benefit to agent, considerations of human excellence, and the study of

role models—are not mutually exclusive. A particular disposition might draw support from all four approaches. Indeed, in the contributions in this collection one often finds them working in concert. Collectively they provide a rich variety of resources for thinking about the substance of environmental virtue.

The Role of Environmental Virtue in Environmental Ethics

A complete environmental ethic will include both an account of how one ought to interact with the natural environment and an account of the character dispositions that one ought to have regarding the natural environment. But what is the proper relationship between these two? This is an instance of the more general (and very much live) question in moral philosophy: What is the appropriate role of virtue in ethical theory?

Some moral philosophers believe that the virtues are simply dispositions to do the right thing. In the context of environmental ethics this would imply that environmental virtue is merely the disposition to act according to the rules, principles, or norms of action of the correct environmental ethic. On this account the environmental virtues are strictly instrumental and subordinate to right action. First one determines what the right ways to act or behave regarding the environment are, and then one determines which character dispositions tend to produce that behavior. Those dispositions are the environmental virtues.

I argued earlier that environmental virtue is instrumental to promoting proper action. The environmentally virtuous person—precisely because of his or her virtue—will be disposed both to recognize the right thing and to do it for the right reasons. However, there is more to how one ought to be in the world than the rules, principles, or guidelines of moral action. For example, it might not be morally required that one appreciate the beauty or complexity of the natural environment, but those who are disposed to do so are benefited and so better off than those who are not. So although it is undoubtedly true that the environmental virtues are dispositions to act well regarding the environment, they are not only that. As we have seen, they can be excellences or beneficial to their possessor in their own right, not merely insofar as they tend to produce right action.

Moreover, environmental virtue might provide the sensitivity or wisdom necessary for the application of action-guiding rules and principles to concrete situations. At a minimum, this sensitivity is required to determine which rules or principles are applicable to which situations, as well as for determining what course of action they recommend in those situations where they are operative. But it may also be indispensable in adjudicating between conflicting demands of morality or resolving moral dilemmas that arise from a plurality of sources of value and justification. Indeed, many moral philosophers have argued that it is implausible and unreasonable to believe that there is some finite set of rules or principles that can be applied by any human moral agent in any situation to determine what the proper course of action is in that situation. If

they are correct—if action guidance cannot always be accomplished by moral rules and principles alone—then the wisdom and sensitivity that are part of virtue (including environmental virtue) are in some situations indispensable for determining or identifying right action (including environmentally right action).

Some moral philosophers believe that virtue should play an even more prominent or fundamental role within ethical theory than it is afforded in the previous account. These virtue ethicists consider an ethic of character to be theoretically prior to an ethic of action. On this approach to moral philosophy an action is right if and only if it is the virtuous thing to do, it hits the target of virtue, or it is what the virtuous person would do under the circumstances. So a substantive account of the virtues and the virtuous person informs what actions one ought or ought not to perform. In the context of environmental ethics this would imply that reflections on the content of the virtues and studying the character traits and behavior of environmentally virtuous people are what ultimately inform how we ought to behave regarding the environment.

There is thus a range of roles—from instrumental to foundational—that environmental virtue might play within a complete environmental ethic. This is not, however, to claim that each position is equally defensible. I have, for example, argued that a merely instrumental role for environmental virtue is too narrow. But those arguments notwithstanding, it is very much an unsettled issue what the proper role (or roles) of virtue is in an adequate environmental ethic, and the reader will find a sampling of the range of possibilities in the selections in this collection.

The Selections

The selections—which consist of ten original contributions written specifically for this collection, as well as reprints of four key previously published works on the topic—are divided into four sections. In this first section, “Recognizing Environmental Virtue Ethics,” Louke van Wensveen and Philip J. Cafaro reflect on the roles that considerations of virtue and character have traditionally played in environmental discourse. In “The Emergence of Ecological Virtue Language” Wensveen tracks this history by reviewing the language that environmentalists and environmental ethicists, both secular and religious, have used to characterize their environmental ethics. She finds virtue language ubiquitous in these articulations. Indeed, she writes that she is “yet to come across a piece of ecologically sensitive philosophy, theology, or ethics that does not in some way incorporate virtue language.” Moreover, she finds the discourse to be integral, diverse, dialectic, dynamic, and visionary. Virtue language is not only everywhere in the discourse, it is indispensable to the discourse. Virtue language, Wensveen concludes, puts us in touch with a rich set of evaluative concepts and perspectives, and if afforded sufficient attention, it can expand and enhance our capacity to respond to environmental issues. As she says, “One more language is one more chance.”

In “Thoreau, Leopold, and Carson: Toward an Environmental Virtue Ethics” Cafaro tracks the role of virtue and character in environmental discourse by reflecting on the lives and writings of three widely influential and respected environmental figures: Henry David Thoreau, Aldo Leopold, and Rachel Carson. Although these models of

environmental excellence lived very different lives and expressed their virtue in diverse ways, we nonetheless find among them certain commonalities. These commonalities, Cafaro argues, are characteristic of environmental excellence and must be embraced by any environmental virtue ethic worth the name. They include putting economic life in its proper place, cultivating scientific knowledge, extending moral considerability beyond human beings, promoting wilderness protection, and believing in the goodness of life (both human and nonhuman). Cafaro also emphasizes the importance of these environmental heroes as examples of individuals who live well with nature. Their lives suggest that “greater attention to our true happiness would do as much to protect the environment as the acceptance of the intrinsic value of wild nature.”

In the second section of the collection, “Environmental Virtue Ethics Theory,” Thomas E. Hill Jr., Holmes Rolston III, Laura Westra, Bill Shaw, and David Schmidtz and Matt Zwolinski consider the proper role for environmental virtue ethics within environmental ethics. In “Ideals of Human Excellence and Preserving Natural Environments” Hill argues that there are cases of environmental behavior that are intuitively improper—for example, needlessly paving over a patch of natural landscape—whose impropriety is best understood in the context of an account of human excellence and the dispositions that we ought to express in our environmental interactions. Hill argues that such behavior, or “even [seeing nature’s] value solely in cost/benefit terms,” betrays the absence of traits that are the natural facilitators for developing proper humility and appreciation. If he is correct, then sometimes the answer to the question “What is wrong with treating the environment that way?” is intelligible only against the background of an answer to the question, “What is wrong with the kind of person who would do that?”

However, in “Environmental Virtue Ethics: Half the Truth but Dangerous as a Whole” Rolston warns against casting environmental virtue in too fundamental a role in environmental ethics. Although environmental virtue is an intrinsically good state, valuable to its possessor, and enables attunement to “the flow of nature,” we must not identify human virtue or excellence as the source of natural value. Natural entities do not derive their value from their relationship to human virtue and flourishing; nature and natural entities have value in themselves. Indeed, environmental virtue is only intelligible as a responsiveness to the independent value of nature. After all, “it is hard to gain much excellence of character from appreciating an otherwise worthless thing.” Rolston thus finds environmental virtue ethics dangerous to the extent that its focus on human flourishing distracts us from the intrinsic value of natural entities that makes environmental virtue possible. “Our deeper ethical achievement,” he writes, “needs to focus on values as intrinsic achievements in wild nature. These virtues within us need to attend to values without us.”

Westra, like Rolston, believes that natural value is not derived from the value of humans or human flourishing. However, in “Virtue Ethics as Foundational for a Global Ethic” she argues that virtue ethics has a foundational role nonetheless. It provides an account of flourishing—for humans, nonhumans, and natural systems—which it is the goal of a global ethic to promote. This foundation justifies the need for both ecological integrity and environmental or ecological rights because all individuals (human and nonhuman) depend on ecosystem services for their survival, health, and

optimum functioning. This is true (in regard to humans) not only for Aristotelian accounts of human excellence but also for Kantian accounts that identify human functioning with moral agency, for the cultivation and exercise of moral agency depend on the capacity of natural ecosystems to provide their preconditions (e.g., food, clear air, and clean water). So both ecosystem integrity and human rights are supported by virtue ethics. But because international discourse is largely framed in terms of human rights, Westra urges that “we must emphasize the human rights dimension of this ethic and its implication for international law.”

In “A Virtue Ethics Approach to Aldo Leopold’s Land Ethic” Shaw examines Leopold’s land ethic—that one ought to promote the integrity, beauty, and stability of the biotic community—from a virtue ethics perspective. He argues that operationalizing or enacting the land ethic requires cultivating certain virtues, which he calls “land virtues,” that not only dispose individuals to act in ways that promote the integrity, stability, and beauty of natural systems but also mitigate some of the difficulties that arise when the land ethic is treated strictly as an account of right action. Shaw suggests three land virtues—respect (or ecological sensitivity), prudence, and practical judgment—each of which he considers to be an adaptation of a conventional interpersonal virtue. However, any character trait that contributes to an attitude of community with the land and promotes its integrity, stability, and beauty is properly a land virtue.

In the final contribution of this section, “Virtue Ethics and Repugnant Conclusions,” Schmitz and Zwolinski argue that virtue ethics offers indispensable resources for addressing Derek Parfit’s “repugnant conclusions,” the most notorious of which is that for any number of persons, all with lives well worth living, there is some much larger human population whose existence would be better, even though the lives of its members are only barely worth living. The repugnant conclusions have typically been thought to arise from (and thereby indict) only certain forms of utilitarianism, but Schmitz and Zwolinski argue that they are considerably more insidious and “suggest problems for the whole idea that moral theorizing should culminate in a simple formula for right action.” An appropriate response to the repugnant conclusions will therefore not be found by merely reformulating traditional principles of right action but, instead, must involve considerations of character and human excellence. In so arguing they both embrace and expand on Hill’s claims that the impropriety of some environmental behaviors is best understood by reflecting on the kind of person who would do such a thing. One implication of this for moral theory is that no principle of right action is a replacement for moral wisdom, sensitivity, and experience. “The proper lesson,” they write, “is not that act-centered theories are useless . . . but, rather, that we are better off treating act-centered theory as the sort of thing from which wise persons can gain insight that is useful, even if limited.”

The third part of the collection, “Environmental Virtues and Vices,” contains discussions of the substantive content of environmental virtue and vice by Geoffrey Frasz, Philip Cafaro, Charles Taliaferro, and Louke van Wensveen. Rather than focusing on a detailed account of any specific environmental virtue or vice, the authors aim to provide a general account or typology of environmental virtue and vice from which future work can proceed. In “Benevolence as an Environmental Virtue” Frasz employs an extensionist approach to articulate and defend benevolence as an environmental virtue.

He considers benevolence to be a genus under which fall specific other-regarding environmental virtues such as compassion, friendship, kindness, and gratitude. Among the vices counter to benevolence he considers jealousy, selfishness, greed, and profligacy. Central to benevolence, in both interpersonal and environmental contexts, is a genuine concern for the welfare of another. This concern is made possible by what Frasz calls “an imaginative dwelling on the condition of the other,” which requires understanding the interests of the other. There is thus “an important role for the biological and ecological sciences, for nature writing, and for personal accounts of encounters with wild creatures” in the cultivation and maintenance of environmental benevolence. Frasz concludes with a discussion of the ways in which environmental benevolence benefits its possessor. He argues that “in cultivating the environmental virtue of benevolence we can discover who we really are and what it will take to live in a joyous way with the non-human world of which we are a part.”

If, as Frasz argues, environmental virtue benefits both its possessor and the natural environment, then perhaps the concept of environmental vice is best understood in terms of the frustration of human and environmental flourishing, as well as the connections between them. In “Gluttony, Arrogance, Greed, and Apathy: An Exploration of Environmental Vice,” Cafaro develops such an account. According to Cafaro, “A vice harms the vicious person, those around him or her, or both.” Judgments about the vices are thus derivative on particular conceptions of the “goods” that make up a good human life, a well-functioning society, and a healthy natural environment. Establishing that a particular disposition regarding the environment is a vice thus requires showing how the disposition is detrimental to its possessor, those around him or her, and nonhuman nature. Cafaro applies this standard in the course of elucidating four key environmental vices—gluttony, arrogance, greed, and apathy—each of which, he argues, harms its possessor, other people, and nature.

In “Vices and Virtues in Religious Environmental Ethics” Taliaferro discusses virtues and vices in both theistic (Jewish, Christian, and Islamic) and Buddhist environmental ethics. Taliaferro begins apologetically, arguing that there are several reasons why environmental ethicists should be attentive to religious ethical traditions, not least of which are that at least one religious tradition may be true and that the majority of the world’s population subscribes to some religious tradition; so to be relevant to the actual world an environmental ethic must be able to engage those traditions. Taliaferro then demonstrates how environmental virtues such as gratitude, respect, solidarity, and caring (and the corresponding vices of ingratitude, vanity, and exploitiveness) emerge from the central tenets of theistic environmental ethics: creation, divine ownership, and the identification of natural goods with God’s presence. Regarding the Buddhist traditions, Taliaferro focuses on the emergence of mindfulness and compassion as environmental virtues as part of the Buddhist goal of detachment. He concludes by examining how these religious virtues function both explicitly and implicitly in environmental contexts such as agriculture.

In the final contribution of this section, “Cardinal Environmental Virtues: A Neurobiological Perspective,” Wensveen considers whether the traditional cardinal virtues—practical wisdom, justice, temperance, and courage—are sufficient for providing guidance in this age of ecological crises. She argues that we ought to neither cling to the

traditional account of these virtues nor jettison them entirely. We should instead take a “middle course” and revamp them in light of our improved biological, ecological, and neurological vantage point. After all, we are “now in a better position than the ancients ever were to judge how well the traditional cardinals shape our emotions, allowing us to pursue the goals of our lives in ways that are appropriate within our particular environments.” Wensveen thus advocates putting a contemporary ecological spin on the venerable tradition of the cardinal virtues. She argues that we should consider a particular virtue cardinal “if its cultivation consists of conditioning a particular type of neurobiological system that plays a pivotal role in processes of emotional fine-tuning by which agents are enabled to flourish and let flourish under changing circumstances.” Using this definition she argues for several environmental virtues that are themselves cardinal (for example, sensitivity and tenacity), related to cardinals as constituents (for example, humility, respect, gratitude, benevolence, attentiveness, and loyalty), or particular instantiations of cardinals (for example, friendship, love, frugality, and simplicity).

In the final section of the collection, “The Application of Environmental Virtue,” Peter S. Wenz and I apply environmental virtue ethics to concrete environmental issues and problems. These contributions belie the criticism that environmental virtue ethics is unable to provide guidance regarding actual environmental issues or decisions. In “Synergistic Environmental Virtues: Consumerism and Human Flourishing” Wenz considers the relationship among traditional anthropocentric virtues and vices, nonanthropocentric environmental ethics, and consumerism. He argues that for people in industrialized nations the traditional virtues foster both human and environmental flourishing, whereas the traditional vices diminish both. Anthropocentric and nonanthropocentric accounts of virtue and flourishing are thus synergistic—“each is stronger in combination with the other than alone.” The key to this synergism is a shared repugnance to consumerism, which as practiced in industrialized countries is harmful to both humans and nature. Wenz therefore suggests that individuals in industrialized countries ought to adopt what he calls “the principle of anticipatory cooperation” when making consumer decisions. This principle “calls for actions that deviate from the social norm in the direction of the ideal that virtuous people aspire to for themselves and others but which do not deviate so much that virtue impairs instead of fosters flourishing.”

In “A Virtue Ethics Perspective on Genetically Modified Crops” I propose a virtue ethics approach for assessing the acceptability of the use of genetically modified crops in agriculture. From a virtue ethics perspective, an environmental assessment of a particular genetically modified crop involves determining whether the technology will compromise the capacity of the environment to produce the goods essential to the development and maintenance of human virtue, as well as determining if the technology is contrary to any of the virtues applicable to human interactions with the natural environment. Using these criteria I defend a limited endorsement position regarding genetically modified crops. There is, I argue, a presumption, justified by humility, against the use of genetically modified crops in agriculture. However, if the external goods criterion is met, this presumption can be overcome by other virtue-based considerations. For example, in the case of golden rice (rice genetically modified to produce the precursor to vitamin A), the external goods criterion is met, and the presumption against

the use of genetically modified crops is overcome by compassion for those suffering from vitamin A deficiency.

Although work on environmental virtue has become increasingly visible in recent years, environmental virtue ethics remains a relatively underappreciated and underdeveloped aspect of environmental ethics. Philip Cafaro and I hope that the work collected here will not only help establish the indispensability of this area of environmental ethics but also enhance the breadth and quality of the ongoing discussion of environmental virtue and vice and the role they should play in an adequate environmental ethic. This collection is thus not intended to settle the central issues of environmental virtue ethics but, rather, to provide an impetus and orientation for further work on them. We very much look forward to those discussions.