

from *The Future of Life*

**E. O. WILSON**

Edward O. Wilson was born in Birmingham, Alabama, in 1929. As a boy he found companionship in nature and was determined early on to become an entomologist. Wilson received his PhD from Harvard University and is recognized as the world's leading authority on ants—he discovered their use of pheromones for

communication. In 1975, he published his first major book, *Sociobiology*. In *On Human Nature*, which was awarded the Pulitzer Prize in 1978, he examined the scientific arguments surrounding the role of biology in the evolution of human culture. Officially retired from teaching at Harvard in 1996, he continues to hold the posts of Professor Emeritus and Honorary Curator in Entomology. Wilson's most recent books include *Creation: An Appeal to Save Life on Earth* (2006); *Nature Revealed: Selected Writings, 1949–2006*; and a novel, *Anthill* (2010). The selection included here is from the final chapter of his 2002 book *The Future of Life*, called "The Solution."

The human species is like the mythical giant Antaeus, who drew strength from contact with his mother, Gaea, the goddess Earth, and used it to challenge and defeat all comers. Hercules, learning his secret, lifted and held Antaeus above the ground until the giant weakened—then crushed him. Mortal humans are also handicapped by our separation from Earth, but our impairment is self-administered, and it has this added twist: our exertions also weaken Earth.

What humanity is inflicting on itself and Earth is, to use a modern metaphor, the result of a mistake in capital investment. Having appropriated the planet's natural resources, we chose to annuitize them with a short-term maturity reached by progressively increasing payouts. At the time it seemed a wise decision. To many it still does. The result is rising per-capita production and consumption, markets awash in consumer goods and grain, and a surplus of optimistic economists. But there is a problem: the key elements of natural capital, Earth's arable land, ground water, forests, marine fisheries, and petroleum, are ultimately finite, and not subject to proportionate capital growth. Moreover, they are being decapitalized by overharvesting and environmental destruction. With population and consumption continuing to grow, the per-capita resources left to be harvested are shrinking. The long-term prospects are not promising. Awakened at last to this approaching difficulty, we have begun a frantic search for substitutes.

Meanwhile, two collateral results of the annuitization of nature, as opposed to its stewardship, and settling in to beg our attention. The first is economic disparity: in relative terms the rich grow richer and the poor poorer. According to the United Nations Human Development Report 1999, the income differential between the fifth of the world's population in the wealthiest countries and the fifth in the poorest was 30 to 1 in 1960, 60 to 1 in 1990, and 74 to 1 in 1995. Wealthy people are also by and large profligate consumers, and as a result the income differential has this disturbing consequence: for the rest of the world to reach United States levels of consumption with existing technology would require four more planet Earths.

Europe is only slightly behind, while the Asian economic tigers appear to be pulling up at maximum possible speed. The income gap is the setting for resentment and fanaticism that causes even the strongest nations, led by the American colossus, to conduct their affairs with an uneasy conscience and a growing fear of heaven-bound suicide bombers.

The second collateral result, and the principal concern of the present work, is the accelerating extinction of natural ecosystems and species. The damage already done cannot be repaired within any period of time that has meaning for the human mind. The fossil record shows that new faunas and floras take millions of years to evolve to the richness of the prehuman world. The more the losses are allowed to accumulate, the more future generations will suffer for it, in some ways already felt and in others no doubt waiting to be painfully learned. 5

Why, our descendants will ask, by needlessly extinguishing the lives of other species, did we permanently impoverish our own? That hypothetical question is not the rhetoric of radical environmentalism. It expresses a growing concern among leaders in science, religion, business, and government as well as the educated public.

What is the solution to biological impoverishment? The answer I will now pose is guardedly optimistic. In essence, it is that the problem is now well understood, we have a grip on its dimensions and magnitude, and a workable strategy has begun to take shape.

The new strategy to save the world's fauna and flora begins, as in all human affairs, with ethics. Moral reasoning is not a cultural artifact invented for convenience. It is and always has been the vital glue of society, the means by which transactions are made and honored to ensure survival. Every society is guided by ethical precepts, and every one of its members is expected to follow moral leadership and ethics-based tribal law. The propensity does not have to be beaten into us. Evidence exists instead of an instinct to behave ethically, or at least to insist on ethical behavior in others. Psychologists, for example, have discovered a hereditary tendency to detect cheaters and to respond to them with intense moral outrage. People by and large are natural geniuses at spotting deception in others, and equally brilliant in constructing deceptions of their own. We are daily soaked in self-righteous gossip. We pummel others with expostulation, and we hunger for sincerity in all our relationships. Even the tyrant is sterling in pose, invoking patriotism and economic necessity to justify his misdeeds. At the next level down, the convicted criminal is expected to show remorse, in the course of which he explains he was either insane at the time or redressing personal injustice.

And everyone has some kind of environmental ethic, even if it somehow makes a virtue of cutting the last ancient forests and damming the last wild rivers. Done, it is said, to grow the economy and save jobs. Done because we are running short of space and fuel. *Hey, listen, people come first!*—and most certainly before beach mice and louseworts. I recall vividly the conversation I had with a cab driver in Key West in 1968 when we touched on the Everglades burning to the north. Too bad, he said. The Everglades are a wonderful place. But wilderness always gives way to civilization, doesn't it? That is progress and the way of the world, and we can't do much about it.

Everyone is also an avowed environmentalist. No one says flatly, "To hell with nature." On the other hand, no one says, "Let's give it all back to nature." Rather, when invoking the social contract by which we all live, the typical people-first 10

ethicist thinks about the environment short-term and the typical environmental ethicist thinks about it long-term. Both are sincere and have something true and important to say. The people-first thinker says we need to take a little cut here and there; the environmentalist says nature is dying the death of a thousand cuts. So how do we combine the best of short-term and long-term goals? Perhaps, despite decades of bitter philosophical dispute, an optimum mix of goals might result in a consensus more satisfactory than either side thought possible from total victory. The people-firster likes parks, and the environmentalist rides petroleum-powered vehicles to get there.

The first step is to turn away from claims of inherent moral superiority based on political ideology and religious dogma. The problems of the environment have become too complicated to be solved by piety and an unyielding clash of good intentions.

The next step is to disarm. The most destructive weapons to be stacked are the stereotypes, the total-war portraits crafted for public consumption by extremists on both sides. I know them very well from years of experience on the boards of conservation organizations, as a participant in policy conferences, and during service on government advisory committees. To tell the truth, I am a little battle-fatigued. The stereotypes cannot be simply dismissed, since they are so often voiced and contain elements of real substance, like rocks in snowballs. But they can be understood clearly and sidestepped in the search for common ground. Let me illustrate a stereotype skirmish with imaginary opponents engaging in typical denunciations.

### **The People-First Critic Stereotypes the Environmentalists**

*Environmentalists or conservationists is what they usually call themselves. Depending on how angry we are, we call them greens, enviros, environmental extremists, or environmental wackos. Mark my word, conservation pushed by these people always goes too far, because it is an instrument for gaining political power. The wackos have a broad and mostly hidden agenda that always comes from the left, usually far left. How to get power? is what they're thinking. Their aim is to expand government, especially the federal government. They want environmental laws and regulatory surveillance to create government-supported jobs for their kind of bureaucrats, lawyers, and consultants. The New Class, these professionals have been called. What's at stake as they busy themselves are your tax dollars and mine, and ultimately our freedom too. Relax your guard when these people are in power and your property rights go down the tube. Some Bennington College student with a summer job will find an endangered red spider on your property, and before you know what happened the Endangered Species Act will be used to shut you down. Can't sell to a developer, can't even harvest your woodlot. Business investors can't get at the oil and gas on federal lands this country badly needs. Mind you, I'm all for the environment, and I agree that species extinction is a bad thing, but conservation should be kept in perspective. It is best put in private hands. Property owners know what's good for their own land. They care about the plants and animals living there. Let them work out*

*conservation. They are the real grass roots in this country. Let them be the stewards and handle conservation. A strong, growing free-market economy, not creeping socialism, is what's best for America — and it's best for the environment too.*

### **The Environmentalist Stereotypes the People-First Critics**

*“Critics” of the environmental movement? That may be what they call themselves, but we know them more accurately as anti-environmentalists and brown lashers or, more locally out west, wise users (their own term, not intended to be ironic) and sagebrush rebels. In claiming concern of any kind for the natural environment, these people are the worst bunch of hypocrites you’ll ever not want to find. What they are really after, especially the corporate heads and big-time landowners, is unrestrained capitalism with land development über alles. They keep their right-wing political agenda mostly hidden when downgrading climate change and species extinction, but for them economic growth is always the ultimate, and maybe the only, good. Their idea of conservation is stocking trout streams and planting trees around golf courses. Their conception of the public trust is a strong military establishment and subsidies for loggers and ranchers. The anti-environmentalists would be laughed out of court if they weren’t tied so closely to the corporate power structure. And notice how rarely international policy makers pay attention to the environment. At the big conferences of the World Trade Organization and other such gatherings of the rich and powerful, conservation almost never gets so much as a hearing. The only recourse we have is to protest at their meetings. We hope to attract the attention of the media and at least get our unelected rulers to look out the window. In America the right-wingers have made the word “conservative” a mockery. What exactly are they trying to conserve? Their own selfish interests, for sure, not the natural environment.*

There are partisans on both sides who actually state their case in this manner, 15 either in pieces or in entirety. And the accusations sting, because so many people on either side believe them. The suspicion and anger they express paralyze further discussion. Worse, in an era when journalism feeds on controversy, its widely used gladiatorial approach divides people and pushes them away from the center toward opposite extremes.

It is a contest that will not be settled by partisan victory. The truth is that everyone wants a highly productive economy and lots of well-paying jobs. People almost all agree that private property is a sacred right. On the other hand, everyone treasures a clean environment. In the United States at least, the preservation of nature has almost the status of a sacred trust. In a 1996 survey conducted by Belden & Russonello for the U.S. Consultative Group on Biological Diversity, 79 percent rated a healthy and pleasant environment of the greatest importance, giving it a 10 on a scale of 1 to 10. Seventy-one percent agreed at the same high level with the statement “Nature is God’s creation and humans should respect God’s work.” Only when these two obvious and admirable goals, prosperity and saving the creation, are cast in opposition does the issue become confused. And when the apparent conflict is in addition reinforced by opposing political ideologies, as it frequently is, the problem becomes intractable.

The ethical solution is to diagnose and disconnect extraneous political ideology, then shed it in order to move toward the common ground where economic progress and conservation are treated as one and the same goal.

The guiding principles of a united environmental movement must be, and eventually will be, chiefly long-term. If two hundred years of history of environmentalism have taught us anything, it is that a change of heart occurs when people look beyond themselves to others, and then to the rest of life. It is strengthened when they also expand their view of landscape, from parish to nation and beyond, and their sweep of time from their own life spans to multiple generations and finally to the extended future history of humankind. . . .

The precepts of the people-firsters are foundationally just as ethical as those of the traditional environmentalists, but their arguments are more about method and short-term results. Further, their values are not, as often assumed, merely a reflection of capitalist philosophy. Corporate CEOs are people too, with families and the same desire for a healthy, biodiverse world. Many are leaders in the environmental movement. It is time to recognize that their commitment is vital to success. The world economy is now propelled by venture capital and technical innovation; it cannot be returned to a pastoral civilization. Nor will socialism return in a second attempt to rescue us, at least in any form resembling the Soviet model. Quite the contrary, its demise was a good thing all around for nature. In most places the socialist experiment was tried, its record was even worse than in capitalist countries. Totalitarianism, left or right, is a devil's bargain: slavery purchased at the price of a ruined environment.

The juggernaut of technology-based capitalism will not be stopped. Its momentum is reinforced by the billions of poor people in developing countries anxious to participate in order to share the material wealth of the industrialized nations. But its direction can be changed by mandate of a generally shared long-term environmental ethic. The choice is clear: the juggernaut will very soon either chew up what remains of the living world, or it will be redirected to save it. 20

### Notes (by paragraph)

- 3 The **income disparities** of the richest and poorest countries are cited from the United Nations' *Human Development Report 1999* and discussed by Fouad Ajami in *Foreign Policy* 119: 30–4 (summer 2000). The consequences of the disparity are explored by Geoffrey D. Dabelko in the *Wilson Quarterly* 23 (4): 14–19 (autumn 1999) and by Thomas F. Homer-Dixon in *Environment, Scarcity, and Violence* (Princeton: Princeton Univ. Press, 1999) and *The Ingenuity Gap* (New York: Knopf, 2000).
- 3 On the **difference in consumption** by rich and poor nations: William E. Rees and Mathis Wackernagel in AnnMari Jansson et al., eds., *Investing in Natural Capital: The Ecological Economics Approach to Sustainability* (Washington, D.C.: Island Press, 1994), pp. 362–90. The four-worlds estimate is from a personal communication from Mathis Wackernagel (January 24, 2000) (Redefining Progress, 1 Kearny St., San Fran-

cisco, CA); see the explanation of the concept of the ecological footprint in chapter 2 of the present book.

- 16 The poll of **American attitudes toward the natural world** and the values that shape them was conducted by the research firm Belden & Russonello and Research/Strategy/Management (R/S/M), commissioned by the Communications Consortium Media Center on behalf of the Consultative Group on Biodiversity, and published as a report, "Human Values and Nature's Future: American Attitudes on Biological Diversity" (October 1996). The results are cited here by permission of the CCMC.
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### Exploring the Text

1. Why does E. O. Wilson begin with an allusion to Antaeus? How effectively does the allusion serve to introduce the author's ideas? Explain your response.
2. Explain the problem that Wilson identifies in paragraph 2. Why does he use economic language to criticize an economic approach to the environment?
3. What are the assumptions underlying the rhetorical question that begins paragraph 6?
4. In paragraph 8, Wilson writes: "We pummel others with expostulation, and we hunger for sincerity in all our relationships. Even the tyrant is sterling in pose, invoking patriotism and economic necessity to justify his misdeeds." How would you explain the relationship between those two sentences?
5. Wilson claims that "when invoking the social contract by which we all live, the typical people-first ethicist thinks about the environment short-term and the typical environmental ethicist thinks about it long-term. Both are sincere and have something true and important to say" (para. 10). Do you agree? Explain your position with examples.
6. In paragraph 12, Wilson uses metaphor and simile to describe the nature of stereotypes. How effectively do these communicate his attitude and meaning?
7. How does Wilson use rhetorical strategies to satirize the "people-first critic" (para. 13)? How does he do so for "the environmentalist" (para. 14)?
8. Are there reasonable statements in either of the stereotyped characterizations? What are they? How could they be more reasonably expressed so as to be rhetorically effective?
9. After presenting the two stereotypes, Wilson writes: "The suspicion and anger they express paralyze further discussion" (para. 15). Do you agree?
10. How effectively does Wilson characterize the precepts of the opposing groups in paragraphs 19 and 20? Do you think his solution is possible? Why or why not?
11. How does the information in the endnotes contribute to the effectiveness of Wilson's argument? Does it appeal more to ethos, logos, or pathos? Explain.