

Diamond in the Rough

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## DIAMOND IN THE ROUGH

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### ABSTRACT

This review of Jared Diamond's new book, *Collapse*, analyses the book in the context of other Malthusian treatments of environmental issues, noting its original and unconventional analysis of the role of environmental factors in the fate of past cultures, but critiquing its lack of imagination for the institutional dimensions of environmental decision-making for our future today.

Jared Diamond, *Collapse: How Societies Choose to Fail or Succeed*

(New York: Viking/Allen Lane, 2005), 575 pages, \$29.95/£20.

The publication of *Collapse*, whose central theme is eco-suicide ('ecocide'), raises a curious question: Why does Jared Diamond want to commit career suicide as an author? As the kids would say, Diamond's newfound Malthusianism is *so last year*. It is beyond so last year; it is rejuvenated Paul Ehrlich-Club of Rome-style eco-apocalypticism, better executed and more supple to be sure, but still a throwback to the 1970s.

It is notable that while *Collapse* quickly rocketed to the number two spot on the *New York Times* bestseller list upon publication, its ranking dropped substantially in subsequent weeks – in sharp contrast to his previous book *Guns, Germs, and Steel*, which today remains a perennial paperback bestseller.

*Collapse* could be the title of a publishing industry examination of how the public no longer grooves to the tom-toms of doomsday. To grasp more fully the collapsing prospects for *Collapse* it is useful to understand the context in which it appears.

Once upon a time eco-apocalypticism warranted cover stories of major news magazines and the occasional national commission to worry officially about the world's environmental prospects, such as the group of individuals who produced the *Global 2000* report for President Jimmy Carter (CEQ, 1980).

Although public opinion surveys today show that a plurality or even a majority hold pessimistic views about our environmental future, it is hard to resist the impression that they don't really mean it, or that the intensity with which people hold their pessimistic views is much diminished. The public seems not as taken in as it was 30 years ago by the prophets of doom and gloom, or at the very least is beginning to apply a hefty discount rate to predictions of eco-doom. As *New York Times* columnist Nicholas Kristof stated in a recent column, "environmental alarms have been

screeching for so long that, like car alarms, they are now just an irritating background noise” (Kristof, 2005). Eco-pessimism is proving to be *unsustainable*.

The best example of this is the trajectory of the author of the *ur-text* of eco-apocalypticism, Paul Ehrlich. His 1968 book *The Population Bomb* sold millions of copies, and was part of the curriculum of countless college courses. With its famous first words – “The battle to feed all of humanity is over. In the 1970s the world will undergo famines – hundreds of millions of people are going to starve to death in spite of any crash programs embarked upon now” (Ehrlich, 1968) – the book applied lessons of natural biology to human populations, alleging that uncontrolled population growth and subsequent demand on the earth’s natural resources would lead to starvation and massive die-offs.

Such was the public fascination – and alarm – with Ehrlich’s vivid thesis that he was a frequent guest on the *Tonight Show* with Johnny Carson, once appearing as the sole guest for the length of the entire show (90 minutes). Subsequently in the 1970s Ehrlich published more bestsellers with first-line trade publishers such as Simon & Schuster.

Ehrlich is still very much with us, having in recent years won several prestigious environmental prizes as well as a MacArthur “genius” grant. He continues to publish his Malthusian doomsaying, and remains a venerated figure among environmentalists. But he no longer publishes with Simon & Schuster, nor does he appear on major network television programs.<sup>1</sup>

Ehrlich’s most recent books have been released by Island Press, a quality but specialized environmental publisher whose books seldom reach the bestseller list. Although these recent books have all been celebrated in the environmental press, they have not captured a wider audience in the same fashion as *The Population Bomb*. They are scarcely reviewed outside specialty environmental journals or in the pages of *Nature* (and there usually by fellow alarmists), which is hardly a mass-market magazine.

Environmentalists consider it bad form to quote the ridiculous predictions Ehrlich and others offered in the 1970s. For instance, citing a 1970 study by the Environmental Protection Agency, *The Limits to Growth* predicted that

It would appear at present that the quantities of platinum, gold, zinc and lead are not sufficient to meet demands. At the present rate of expansion... silver, tin and uranium may be in short supply even at higher prices by the turn of the century. By 2050, several more minerals may be exhausted if the current rate of consumption continues. (Meadows *et al.* 1972, 54-55, citing EPA, 1971).

The Carter Administration’s *Global 2000* report predicted that the world would face an oil shortage of 20 million barrels a day by 2000, and that oil would cost \$100 a barrel. And Ehrlich predicted in 1970 that half the world’s species would be extinct by 2000, and that all would be extinct by 2025, in addition to his more famous prediction that “hundreds of millions” would starve to death in the 1970s despite any crash program to prevent it.

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<sup>1</sup> His most recent television appearance was with me on the syndicated PBS show, “Uncommon Knowledge” ([www.uncommonknowledge.org](http://www.uncommonknowledge.org)).

When Nicholas Kristof (aforementioned columnist for the *New York Times*) mentioned some of these ‘greatest hits’, a commentator on an environmental website (Grist.com) responded: “Enviros, you tsk-tsk, just keep crying wolf about things that don’t pan out. As evidence, you cite three examples from the 70s. It’s 2005, Nic. Is that the best you can do?” (Roberts, 2005).

This dismissive comment reveals two tendencies in orthodox environmentalism today: a studied refusal to reckon with the gross errors of the first generation of eco-doomsayers, and similarly, a refusal to learn from these mistakes. Was it merely a matter of timing, or is there something wrong with the framework of thinking that led to these ‘bloopers’?

Indeed, rather than pondering these serious questions, the successors to the first generation of eco-doomsayers simply avoid making date-specific and quantitative predictions. The environmental journalist Gregg Easterbrook has coined his “First Rule of Environmental Doomsaying,” which holds that any prediction should be made far enough in the future that few people will remember when those predictions fail to occur. (This is one reason why catastrophic global warming is the ideal issue for today’s environmental movement, since no one will be alive to hold today’s doomsayers to account if it fails to happen 100 years from now.)

Today’s purveyors of eco-gloom are more likely to eschew any specific predictions, instead hiding behind gauzy generalities and warnings that “time is running out.”<sup>2</sup>

In the recently updated edition of the *Limits to Growth* (entitled *Limits to Growth: The 30-Year Update*, Meadows *et al.* 2004) the authors seem to climb down from the certain doom of the original report, complaining that the media misunderstood or misinterpreted their findings. More than once in the new edition the authors insist that

We are not predicting that a particular future will take place... We do not believe that available data and theories will ever permit accurate predictions of what will happen to the world over the coming century. (Meadows, *et al.* 2004, xix)

Yet only two pages later this reticence is thrown out the window. After reviewing in two short paragraphs the trajectory of the ‘dot.com’ bubble of the 1990s, the authors conclude: “Sadly, we believe the world will experience overshoot and collapse in global resource use and emissions much the same as was the dot.com bubble—though on a much larger time scale” (*ibid.*).

There are signs that at least a few orthodox environmentalists are growing weary of eco-apocalypticism. For example, *Nature*, a journal which is normally friendly to conventional environmentalism (Ehrlich publishes frequently in *Nature*), published a harsh review of James Gustave Speth’s *Red Sky at Morning*, another neo-Malthusian book published in 2004.

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<sup>2</sup> Speth (2004) says that right now “may be our last chance to get it right before we reap an appalling deterioration of our natural assets.” In 1971 UN Secretary General U Thant said: “Members of the United Nations have *perhaps ten years left* in which to subordinate their ancient quarrels and launch a global partnership to curb the arms race, to improve the human environment, to defuse the population explosion, and to supply the required momentum to development efforts.” (Emphasis added.)

*Nature's* reviewer wrote:

It is perhaps surprising to find a man with Speth's record resurrecting the doctrine of the doomsters of the 1970s that we will soon exhaust Earth's limited resources. Such forecasts have proven wildly inaccurate... Remedies prescribed by doctors who continually misdiagnose diseases should not be swallowed uncritically. Speth shows as little regard for contemporary evidence as he does for the reliability of previous forecasts of doom... Speth raises serious issues, but they deserve a more balanced treatment than the prescriptions in his book" (Taverne, 2004).

Even more stinging was the reaction to Bjorn Lomborg's characterization of the Malthusian pessimism of orthodox environmentalism as "The Litany" in *The Skeptical Environmentalist*:

We are all familiar with the Litany: the environment is in poor shape here in Earth. Our resources are running out. The population is ever growing, leaving less and less to eat. The air and water are becoming ever more polluted. The planet's species are becoming extinct in vast numbers—we kill off more than 40,000 each year. The forests are disappearing, fish stocks are collapsing and the coral reefs are dying. We are defiling our Earth, the fertile topsoil is disappearing; we are paving over nature, destroying the wilderness, decimating the biosphere, and will end up killing ourselves in the process. The world's ecosystem is breaking down. We are fast approaching the absolute limit of viability, and the limits of growth are becoming apparent. (Lomborg, 2001, 3)

Some prominent environmentalists suggested that Lomborg was picking on a "straw man." Allen Hammond of the World Resources Institute, for example, argued at a public forum in October 2001 that Lomborg's Litany "paints a caricature of the environmental agenda based on sometimes mistaken views widely held 30 years ago, *but to which no serious environmental institution subscribes today.*"<sup>3</sup> (Emphasis added.)

Michael Grubb, an environmental figure in Britain, wrote in a *Science* magazine review of Lomborg that "To any professional, it is no news at all that the 1972 *Limits to Growth* study was mostly wrong or that Paul Ehrlich and Lester Brown have perennially exaggerated the problems of food supply" (Grubb, 2001).

These predictions proved wrong because their basic Malthusian logic is static while the real world is dynamic. Food production outpaced population growth over the last 40 to the point that India, once considered a "basket case" nation, is now an exporter of food. Supplies of most natural resources actually increased since the 1970s, while our efficiency in resource use simultaneously increased. Technology and human ingenuity continue to render doomsday scenarios obsolete faster than the doomsters can create new ones.

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<sup>3</sup> Hammond went on to dismiss one of the leading environmental alarmists of our time, Lester Brown: "I would not regard [Brown] in fact as a significant figure in advancing environmental concerns."

## COLLAPSE

This extensive background is useful for posing afresh the question of why Diamond has traveled down this dead end road in *Collapse*. Notably, Diamond seems to be aware of the problem with unmitigated doomsaying, and so he attempts to provide an account that one might refer to as “mitigated doomsaying.”<sup>4</sup>

For instance, Diamond understands that a monistic account of the collapse of ancient civilizations such as Easter Island, the Mayas, and the Anasazi based on environmental stress alone would be a stretch: “I don’t know of any case in which a society’s collapse can be attributed solely to environmental damage: there are always other contributing factors.”(11)

Thus Diamond allows that a more accurate subtitle for the book would be: “Societal collapses involving an environmental component, and in some cases also contributions of climate change, hostile neighbors, and trade partners, plus questions of societal responses.” But with such a subtitle, he might as well bid farewell to any “bestseller” list.

Even with this explicit caveat, orthodox environmentalists are sure to regard *Collapse* as a canonical text of the eco-apocalypse. For example, writing in *Science*, William Rees writes that “What emerges most clearly from Diamond’s analysis is the *central role* played by environmental decay in undermining human societies” (Rees 2005, emphasis added). This element of the book is what has attracted most journalists’ attention, and that of the interested public.<sup>5</sup>

Diamond also rightly dismisses the Rousseau-inspired strain of environmental thought which idealizes ancient indigenous peoples as environmentally harmonious with their natural world. “The believers in a past Eden,” as Diamond calls them, are committing a serious error in viewing such ancient civilizations as fundamentally different from today’s First World people. (9–11)

This is one of several welcome departures from environmental orthodoxy that appear early in *Collapse*. Diamond also departs from a “nature-as-a cathedral” school, writing that “while I do love New Guinea birds, I love my own sons, my wife, my friends, New Guineans, and other people. I’m more interested in environmental issues because of what I see as their consequences for people than because of their consequences for birds.”(16)

Diamond will also disappoint more radical elements of the environmental movement for his hearty embrace of multinational corporations: “My view is that, if environmentalists aren’t willing to engage with big business, which are among the most powerful forces in the modern world, it won’t be possible to solve the world’s environmental problems.”(17)

He provides several detailed examples of what he considers enlightened corporate environmental stewardship, including the practices of some oil and timber companies. Most importantly he ends with a declaration of “cautious optimism” about our environmental prospects, which sets him apart from the typical apocalypse-monger.

<sup>4</sup> Notably, Paul Ehrlich is credited with being one of the book’s primary reviewers.

<sup>5</sup> For instance, based on reader reviews at amazon.com, most reviews have focused on environmental collapse.

### MIXING THE ANCIENT AND THE MODERN

The heart of *Collapse* consists of the same types of synthetic narratives that charmed readers of Diamond's earlier book, *Guns, Germs, and Steel*. He mixes ancient and modern examples of environmental ruin; Easter Island and the Maya appear alongside today's Montana and Australia.

A reflection on Diamond's modern examples points to the beginning of his misapprehension of environmental problems and policy. To be sure, the environmental problems of Montana relate directly to the extractive industries (especially mining) that dominated the state's economy for so many decades.

The growth of environmental sentiment that now makes Montana's environment a subject of national interest is directly related to the economic growth that those extractive industries (and modern economic growth generally) made possible in the first place.

Yet as Also Leopold memorably stated in *A Sand County Almanac*: "These wild things had little human value until mechanization assured us of a good breakfast" (Leopold 1949). Like most of today's orthodox environmental school Diamond acknowledges the importance of economic growth, but is uncomfortable with the seeming paradox it involves.

Can Diamond's account of environmental devastation of past isolated cultures – most of them islands – be generalized to modern, globalized civilization? Diamond is conscious of this threshold question, and argues that it is precisely because we are a global civilization that historical examples such as Easter Island and the Mayas apply directly to our situation today.

According to Diamond, the planet Earth is now like an island civilization of old, as our impacts are global in scale: "Today's interconnectedness [poses] the risk of a global rather than a local collapse." (521)

This is at least arguable, if not doubtful, over the long term. Diamond's approach to this aspect of the environmental question is another illustration of the impasse that exists between orthodox environmentalism and its liberal, market-oriented critics. At any given moment a snapshot of individual nations (China or Australia now, or the United States 50 or 100 years ago) or even the whole planet will reveal an environmental tableau that is unsustainable. J.R. McNeill makes the common sense observation that China has been unsustainable *for 3,000 years* (McNeill, 2001). Yet it is still with us.

China is of immense interest today because of its rapid growth, soaring use of resources, and appalling pollution and other environmental problems. Devotees of the "environmental Kuznets curve" (which holds that economic growth precedes environmental improvement) suggest that China's environmental problems will likely get worse before they get better (see Yandle *et al.* 2004).

Already there are signs – some of which Diamond acknowledges – that China is foreshortening its environmental Kuznets curve, through reforestation programs and efforts to stop and ultimately reverse air pollution.

Diamond and most orthodox environmentalists seldom grapple with the implications of the environmental Kuznets curve, or with the broader point that generalizations about the future of our dynamic world are inherently dubious.

A century ago in the United States, when there was serious public concern about deforestation, few would have believed a projection that by 1950 the U.S. would gain nearly a million acres of forestland annually. Is the example of the U.S. and Europe in the 20<sup>th</sup> century likely to be the experience of the developing world in the 21<sup>st</sup> century? Here Diamond's prodigious imagination fails him. As Gregg Easterbrook noted in the *New York Times Book Review*, Diamond "thinks backward 13,000 years, forward only a decade or two" (Easterbrook, 2005).

It is when Diamond asserts the fitness of his investigations to generalizing about our future, and his summary discussion of potential objections to his views, that *Collapse* indeed collapses.

Despite his sensible caveats at the beginning of the book and his expression of "cautious optimism," Diamond, like many orthodox environmentalists, can't help himself: "Our world today is presently on a non-sustainable course of action... The prosperity that the First World enjoys at present is based on spending down its environmental capital in the bank," Diamond declares in the last chapter, even though the book has established no such conclusion. But he treats us once again to The Litany – the one to which World Resources Institute's Allan Hammond said "no serious environmental institution subscribes today."

In the final chapter, Diamond lists off in quick succession twelve environmental problems such as biodiversity, population, energy, chemicals, and water. Some are indeed serious problems, but they are treated by Diamond with all of the conventional clichés and no fresh insight – especially in light of the book's previous 15 chapters. Diamond's analysis provides additional proof that sweeping doomsday generalizations are as primal to orthodox environmentalism as the swallows returning to Capistrano.

### WHY DO CULTURES FAIL, OR SUCCEED?

Why, Diamond asks, did some ancient cultures adapt and survive while others failed? This is indeed a good question, but one that Diamond seemingly fails to answer.

In attempting to answer it, Diamond rightly rejects the inadequate answer of Joseph Tainter's *The Collapse of Complex Societies*, whose argument Diamond describes as follows: "Complex societies are characterized by centralized decision-making, high information flow, great coordination of parts, formal channels of command, and pooling of resources."

Diamond rejects Tainter's account because of the simple fact that complex societies *have* collapsed – but Diamond seems indifferent to understanding *why* Tainter's argument is completely and utterly wrong from start to finish. A general problem is that Diamond is apparently not familiar with socio-economic literature on the subject, including the numerous critiques of the centralized decision-making advocated by Tainter and others.

Diamond's lack of understanding of the broader picture is made clear in *Collapse* when he says the problem of collapse can be attributed to "failures of group decision-making on the part of whole societies or other groups." (420) After a tour of factors that contribute to this problem, Diamond reduces the matter to a problem of values: "Perhaps the crux of success of failure as a society is to know which core values to hold on to, and which ones to discard and replace with new values when times change." (433)

This is merely a restatement of the rationalist fallacy. It supposes that “society” is a collective entity that can pick and choose its values as easily as a consumer might shop for a faucet at a True Value or B&Q hardware store. The poet Randall Jarrell is supposed to have remarked that all the world’s problems could be solved if only we could get our hands on this fellow named Society who was causing so much trouble.

The collective rationalist fallacy fails to grasp the elementary point that individuals – not “society” – develop values over long time horizons, and the cherished values of some individuals usually clash with the cherished values of other groups of individuals. That’s called “politics.” The apolitical view of Diamond and others that “society” can somehow choose the correct “core values” is a thinly-disguised apologia for having an elite group (guess which one?) impose its environmentally correct values over competing sets of freely-chosen values. It is deeply anti-liberal, though if Diamond recognizes this he is shrewd enough to avoid saying so openly and directly.<sup>6</sup>

Diamond’s careful attention to geographical and anthropological detail is absent in his brisk discussion of modern environmental problems. He is not just sloppy, he is often wrong with basic facts.

For example, he attributes the traffic congestion of the Los Angeles, California, area to the “result of millions of people working in just a few centers of employment.”(500) Here his allegation is exactly backward: employment in the LA area is amazingly *decentralized*. The highest concentration of jobs—downtown LA and the Wilshire corridor—accounts for only 2 percent of the metro area’s total employment. It is precisely *because* of decentralized employment locations that traffic congestion is ubiquitous in LA. This is not esoteric knowledge; planners in Los Angeles have discussed the role of the region’s decentralized economy for nearly 20 years, but Diamond is seemingly unaware of it.

Diamond also makes the obligatory denunciation of sport utility vehicles (SUVs) – that symbol of modern consumer profligacy – and asserts that the “exhaust production of our national car fleet has been going up instead of down.”

Once again this statement is incorrect, despite being easily verifiable. Emissions from the US auto fleet – including SUVs – have been declining steadily. Studies sponsored by the University of California at Berkeley show that emissions from the auto fleet in California have declined as much as 40 percent during the 1990s even as gasoline consumption and total miles driven have increased.

One reason for this decline is that US tailpipe emission standards are based on emissions *per mile*, not by gas mileage or fuel consumption. Starting in 2004, SUVs were required to meet the same emission standards as all other cars. The US Environmental Protection Agency’s own computer emissions models predict a further 90 percent decline in auto emissions in the U.S. over the next 20 years as the auto fleet turns over. While ignorant of these facts, Diamond is not deterred from declaiming about the problem of urban air pollution.

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<sup>6</sup> Other authors in the Malthusian tradition are less circumspect on this point. Anne and Paul Ehrlich, for example, openly argue for resource constraints imposed by national and international bureaucracies that are independent and powerful enough to be “insulated from day-to-day politics.” See Ehrlich (2004).

While some may consider these observations to be ‘nitpicking’, but when an author gets basic facts wrong and simple analysis is lacking, why should we believe that author’s general conclusions – much less their entire framework?

### **MINING EXECUTIVES**

There may be other problems looming at the end of *Collapse*. In a passage deploring the environmental record of American mining companies, Diamond writes:

Civilization as we know it would be impossible without oil, farm food, wood, or books, but oil executives, farmers, loggers, and book publishers nevertheless don’t cling to that quasi-religious fundamentalism of mine executives: ‘God put those metals there for the benefit of mankind, to be mined.’(462)

The “mining executive” who supposedly made this statement is not identified by Diamond, nor is the name of his or her company. (Incidentally, *Collapse* contains no footnotes or source notes for this quote – or any other.) It is not clear from Diamond’s prose whether this is meant to be a verbatim quotation, or a stylized characterization.

The doubt about the authenticity of this quote is deepened by the immediate sequel:

The CEO and most officers of one of the major American mining companies are members of a church that teaches that God will soon arrive on Earth, hence if we can just postpone land reclamation for another 5 or 10 years it will then be irrelevant anyway. (462)

Diamond identifies neither the mining company nor the denomination in question. It is reminiscent of the famous remark attributed to the former Interior Secretary James Watt (who served under the Reagan Administration) that because Jesus was returning soon, we needn’t be concerned with running out of natural resources.

Environmentalists – and some prominent journalists – have repeated this spurious remark for more than two decades; each time this urban legend erupts, a fresh round of retractions and apologies to Watt invariably follow.<sup>7</sup>

These issues do matter: precisely because Diamond is a bestselling author of considerable reputation, his distortion or invention of quotations threatens to inject them into wider circulation.

In fact, this has already started to occur. Reviewing *Collapse* in *Science*, Tim Flannery writes of “the CEO of an American mining company who believes that ‘God will soon arrive on Earth, hence if we can just postpone land reclamation for another 5 or 10 years it will then be irrelevant anyway.’”(Flannery, 2005) Suddenly we’ve gone from executives who attend an unidentified congregation that holds such

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<sup>7</sup> Bill Moyers of PBS television repeated the spurious Watt remark as recently as February 2005, when he wrote in the Minneapolis *Star-Tribune*: “James Watt told the U.S. Congress that protecting natural resources was unimportant in light of the imminent return of Jesus Christ. In public testimony he said, ‘after the last tree is felled, Christ will come back.’” (Moyers, 2005) Watt never said any such thing, before a Congressional committee, or anywhere else. Moyers subsequently issued an apology.

beliefs, to a CEO who “believes” this. The next short step will be for someone to directly attribute this non-quotation to the unnamed CEO.

It is beyond doubtful that any religious denomination believes as a matter of doctrine the simplistic views Diamond describes. In the age of journalistic frauds such as Jayson Blair at the *New York Times* and Stephen Glass at *The New Republic*, no magazine or newspaper would print Diamond’s speculations on miners’ theology without sources.

Diamond owes it to his readers, and the mining company executives in question, to come clean with specifics about who supposedly said this and which exact denomination holds these views, so that other journalists can verify the story. Either someone misled Diamond – or this is a slander reminiscent of the false remark attributed to James Watt.

## CONCLUSION

*Collapse* concludes with a thud. There are several de-contextualized paens about having “the courage to practice long-term thinking, and to make bold, courageous, anticipatory decisions at a time when problems become perceptible but before they have reached crisis proportions.” And don’t forget “the courage to make painful decisions about values.”

This is portrayed as a matter of simple *will*; there is no consideration of institutional problems let alone any acknowledgement of tradeoffs.

These sorts of sentences automatically write themselves into orthodox environmental tracts. I formerly believed that such expressions reflected a radical temperament derived from Rousseau and Heidegger, but increasingly it is evident that orthodox environmentalists resort to these gauzy bromides because – when it comes to difficult problems such as population growth or habitat and biodiversity loss on a global scale – Diamond and others *don’t know what to do*.

The eternal environmental refrain about the need to transform our civilization is revealed ultimately to be a cry for help. Unlike other apocalyptic visions that feature salvation and redemption on the other end, the environmental apocalypse allows no such hope. But its believers want to save us anyway. Is it any wonder they are losing their audience?

## REFERENCES

- Council on Environmental Quality (1980). *The Global 2000 Report to the President of the US: Entering the 21st Century*. Washington, DC: US Government Printing Office.
- Darlington, T.L., et al. (2001). “Comparison of EMFAC2000 and MOBIL6,” 11th CRC On-Road Vehicle Emissions Workshop, San Diego.
- Diamond, J. (2005). *Collapse: How societies choose to fail or succeed*. New York: Viking.
- Easterbrook, G. (2005). “There Goes the Neighborhood,” *New York Times Book Review*, January 30, p. 10.
- Ehrlich, Paul (1968). *The Population Bomb*. New York: Ballantine.

- Ehrlich, Paul and Anne (2004). *One With Nineveh: Politics, Consumption, and the Human Future*. Washington DC: Island Press.
- Environmental Protection Agency (1971). *First Annual Report of the Council on Environmental Quality*. Washington, DC: Government Printing Office.
- Flannery, T. (2005). "Learning from the Past to Change Our Future," *Science*, Vol, 307 (January 7), p. 45.
- Grubb, M. (2001). "Relying on Manna from Heaven"?, *Science* Vol 294 (November 9) p. 1285.
- Leopold, A. (1949). *A Sand County Almanac*. Oxford: Oxford University Press.
- Lomborg, B. (2001). *The Skeptical Environmentalist*, Cambridge University Press, 2001.
- Kean, A.J. et al. (2002). *Trends in Exhaust Emissions from In-Use California Light-Duty Vehicles, 1994-2001*, Warrendale, PA: Society of Automotive Engineers.
- Kristof, N. (2005). "I Have a Nightmare," *New York Times*, March 12.
- Meadows, D. et al. (1972). *The Limits to Growth*. New York: Universe Books.
- Meadows, D. et al. (2004). *Limits to Growth: The 30-Year Update*. White River Jct, VT: Chelsea Green/
- McNeill, J. R. (2001). *Something New Under the Sun: An Environmental History of the 20<sup>th</sup> Century World*. New York: W.W. Norton.
- Moyers, B. (2005). "There is no tomorrow", *Minnesota Star-Tribune*, February 10. Available at <http://www.startribune.com/stories/1519/5211218.html>
- Rees, W. (2005). "Contemplating the Abyss," *Science*, Vol. 433 (January 6), p. 15.
- Roberts, D. (2005). "An open letter to Nicholas Kristof", *grist.com*. Available at <http://gristmill.grist.org/story/2005/3/13/15552/2901> (accessed March 25, 2005).
- Speth, J.G. (2004). *Red Sky at Morning: America and the Crisis of the Global Environment*. New Haven, CT: Yale UP.
- Taverne, D. (2004). "When Greens See Red," *Nature*, November 25, 2004, pp. 443-444.
- Yandle, B. Madhusudan Bhattarai, and Maya Vijayaraghavan (2004). *Environmental Kuznets Curves: A Review of Findings, Methods, and Policy Implications* (Bozeman, MT: PERC, 2004), available at <http://www.perc.org/publications/research/kuznets2.php>.

