**[Green with Ideology](http://reason.com/archives/2002/05/01/green-with-ideology)**

**The hidden agenda behind the "scientific" attacks on Bjørn Lomborg's controversial book, *The Skeptical Environmentalist.***

[Ronald Bailey](http://reason.com/people/ronald-bailey) from the [May 2002](http://reason.com/issues/may-2002) issue

On September 5 the Danish statistician Bjørn Lomborg, author of [The Skeptical Environmentalist: Measuring the Real State of the World](http://www.amazon.com/exec/obidos/ASIN/0521010683/reasonmagazineA/), sat down at a Borders bookstore in Oxford, England, to promote his controversial book. A pie was thrown in his direction. "I wanted to put a Baked Alaska in his smug face," said the perpetrator, "in solidarity with the native Indian and Eskimo people in Alaska."

It was one of the more honest attacks on Lomborg and his book. Filled with scores of charts and graphs, backed by some 2,900 endnotes and 70 pages of references, The Skeptical Environmentalist looks at a host of global environmental issues, including population growth, pollution, deforestation, and climate change. For his trouble in writing it, Lomborg has bec0me the target of an intellectual hate campaign.

The World Wildlife Fund and the World Resources Institute jointly warned journalists to "proceed with caution" in writing about the book. They accused Lomborg of deploying "distorted quotations, inaccurate or misleading citations, misuse of data, [and] interpretations that contradict well-established scientific work." Scientific American was vexed by Lomborg's "presumption," asserting that his analysis of the state of the global environment "is often marred by an incomplete use of data or a misunderstanding of the underlying science." In Nature, Lomborg was denounced as the moral equivalent of a Holocaust denier.

The bitter anti-Lomborg campaign reveals the hidden crisis of what we might call ideological environmentalism. Ideological environmentalism goes far beyond sensible efforts to reduce pollution or protect wilderness. It argues that the modern world fosters institutions and ideas that exploit and oppress people and degrade and destroy the environment. According to this view, the only solution to the supposedly looming ecological crisis is the sweeping, global transformation of the world's economies and political systems. The notion is neatly captured in former Vice President Al Gore's demand that humanity "make the effort to save the global environment the central organizing principle of our civilization."

Unfortunately for the doomsayers, their central predictions are simply not coming true. And so their best and perhaps only defense against a dispassionate analysis of their claims has been to smear the analyst.

The environmental canon is built on doom. In 1962 Rachel Carson's Silent Spring predicted that modern synthetic chemicals, especially pesticides, would cause epidemics of cancer and kill off massive quantities of wildlife. Stanford biologist Paul Ehrlich's infamous The Population Bomb confidently asserted in 1968 that "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." The Limits to Growth, a Club of Rome report published in 1972, coupled the dogma that natural resources were running out with concerns about growing population and rising pollution.

Each of these books was a bestseller. Each, along with the many similar works they inspired, were calls to action: to ban synthetic chemicals, coercively limit births, slash economic growth. The writers justified these goals by claiming that indisputable scientific findings demanded that they be adopted. If their science is wrong, so are their policies.

Today fears of global famines caused by overpopulation are receding. The growth in human numbers is decreasing: If current trends continue, demographers do not expect the world population ever to exceed 10 billion. Food grows ever cheaper and more available. Despite the introduction of thousands of new synthetic chemicals, cancer rates are falling. Synthetic chemicals have not killed off thousands of species -- including those pests at which pesticides are specifically aimed.

Nor is the world running out of any important "non-renewable" fuels or mineral resources. Even the Vital Signs 2001 report from the Worldwatch Institute, an environmental think tank in Washington, D.C., acknowledges that "nonfuel commodities now fetch only about 46 percent as much as in the mid-1970s." Indeed, the editors note that "food and fertilizer prices are about one fourth their 1974 peak" and that metals are "at half their 1974 peak." The price of crude oil, which has risen lately, "nevertheless remains at about half the zenith reached in 1980." Overall, nonfuel commodities cost only a third of what they did in 1900. As we all know, falling prices generally indicate increased supply.

Yet environmental doomsaying remains strong. As recently as the summer of 2001, Earth First! founder David Foreman was defending Ehrlich's The Population Bomb as "misunderstood." The Pesticide Action Network continues to claim that synthetic chemicals are dramatically increasing cancer rates. Princeton geologist Kenneth Deffeyes declared last year in his book Hubbert's Peak that the world will face another "oil crisis" later in this decade.

"The Limits to Growth is but one in a long series of books that have disturbed industrial society," Donella Meadows, a member of the original Limits to Growth team, declared some years ago. The members of Meadows' movement still "treasure and are sustained by all of them, quote from them, assign them to students," she added. "Each book in some way engenders another."

That has indeed been the case. Unfortunately for this juggernaut of doom, the books also engendered The Skeptical Environmentalist, which questions the very foundations of ideological environmentalism. Rather than refute its author, the environmentalist movement has attempted to ruin him.

**The Lash Comes Down**

Bjørn Lomborg, an associate professor of statistics at the University of Aarhus, describes himself as a suburban environmentalist who sent the occasional check to his local Greenpeace chapter. Lomborg naively accepted the conventional tenets of ideological environmentalism,

summarized in his book as "The Litany."

"We are all familiar with the Litany," he writes: "The environment is in poor shape here on 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...and will end up killing ourselves in the process. The world's eco-system is breaking down. We are fast approaching the absolute limit of viability, and the limits of growth are becoming apparent.

"We know the Litany," he adds, "and have heard it so often that yet another repetition is, well, almost reassuring."

Lomborg wrote his book after reading about the economist Julian Simon, who argued that many environmental trends were in fact positive. Lomborg, steeped in the Litany, thought it would be a simple matter to refute Simon. As Lomborg delved further into the economic, demographic, and scientific evidence, however, what he found shocked him: The Litany was wrong. Lomborg discovered that "in terms of practically every measurable indicator...mankind's lot has vastly improved" (his emphasis).

This conclusion is, of course, anathema to the environmental ideologues, especially those whose organizations use scare campaigns to raise money. Thus it is not surprising that the World Wildlife Fund and the World Resources Institute would send out a Lomborg-bashing press release. The release, signed by WRI President Jonathan Lash, claims Lomborg's book is "riddled with misleading arguments and factual errors." It is accompanied by a document titled "Nine Things That Journalists Should Know About The Skeptical Environmentalist."

One of those things is that Lomborg allegedly engages in "pseudo-scholarship." As evidence, the document claims the book cites "articles that have not undergone scientific peer review." If this were enough to dismiss a book, it would sink several of the founding environmentalist books as well. The Population Bomb was sourced with 49 endnotes, only five of which were from peer-reviewed scientific journals. Of the 55 endnotes in The Limits to Growth, only three refer to peer-reviewed journals. More recently, in the Worldwatch Institute's State of the World 2002, the vast majority of endnotes are from newspapers, magazines, non-peer-reviewed books, government reports, and even activist pamphlets.

The Skeptical Environmentalist obviously should be held to high standards of accuracy, but to insist that it read like a scientific paper is both specious and disingenuous. The book is essentially a response to such popular environmentalist tracts as the State of the World report and the reams of misinformation disseminated by Greenpeace, Friends of the Earth, the Union of Concerned Scientists, The Ecologist, the Turning Point Project, Grist, Wild Earth, and the rest of the sprawling eco-media propaganda complex. In his endnotes, Lomborg cites the numerous non-peer-reviewed exaggerations, misleading statements, and outright falsehoods offered up by environmental activists and gullible reporters, then refutes them using peer-reviewed scientific studies. Furthermore, the book broadly surveys a series of ecological, economic, and demographic trends. When Lomborg compiles and summarizes the relevant information from scientific reports and papers and from government agencies, he is obviously using the same sources and information that are generally relied on by all participants in environmental debates.

One example the press release cites of a supposedly nonauthoritative source is work published recently by MIT climatologist Richard Lindzen's team suggesting that clouds in the tropics operate as an "iris." (Warmer sea temperatures in the tropics cause changes in the relative distribution of cumulus and cirrus cloud cover which allows heat to escape, helping to cool the planet.) The press release claims Lindzen's work didn't undergo peer review and belittles it by hinting that it was published in a mere "meteorological bulletin" instead of any "leading scientific journals."

The disparaged "meteorological bulletin" is the Bulletin of the American Meteorological Society. Lindzen was astonished when I told him that the World Wildlife Fund and the World Resources Institute were claiming his work had not been peer-reviewed. The press release also initially claimed the article "had been rejected by at least one such [leading] journal." (This false claim later disappeared from the WWF/WRI anti-Lomborg Web site without acknowledgment.) Lindzen says his team submitted the article only to the Bulletin. New research reported in the February 1, 2002, issue of Science, while not confirming Lindzen's proposed iris effect, does find that the tropics are cooling the earth by expelling more heat than is being trapped by the greenhouse effect.

Against Nature

Well, that was just a press release. Surely scientific publications are safe from this sort of intellectual corruption -- or are they? Sadly, the journals Nature and Science both selected reviewers who, their scientific credentials notwithstanding, are committed ideological environmentalists.

The Nature reviewers, Stuart Pimm and Jeff Harvey, begin their November 8, 2001, piece by attacking me, asserting that Lomborg "rehashes books like Ronald Bailey's The True State of the Planet." Next, they slap Lomborg with the secondary-source red herring. "Like bad term papers," they write, "Lomborg's text relies heavily on secondary sources. Out of around 2,000 references, about 5% come from news sources and 30% from web downloads -- readily accessible, therefore, but frequently not peer reviewed." According to the Nature reviewers, "This bias towards non-peer-reviewed material over internationally reputable journals is sometimes incredible."

This charge is, again, misleading, irrelevant, and hypocritical. Pimm, for instance, has just published The World According to Pimm, an ideologically orthodox work, and a quick look at its 244 endnotes finds that at least half of his sources are from non-peer-reviewed material. There are reports from environmentalist groups such as WRI and the Audubon Society, and from international and government agencies; there are non-peer-reviewed books, such as Cadillac Desert and Guns, Germs and Steel; there are many secondary sources, including reports from The New York Times, Barron's, The Economist, Vanity Fair, and even the Encyclopedia Britannica. As for the "web downloads" Pimm disparages, most of Lomborg's Web references are reports by international and government organizations that collect and publish the environmental statistics that alarmists like Pimm use.

Nature's reviewers also try to refute Lomborg's claims by calling up people he cites and asking them if Lomborg is accurate. Specifically, Lomborg cites Paul Ehrlich and E.O. Wilson as supporting something called the Wildlands Project, which would reserve 50 percent of the North American continent as uninhabited wildlands. Pimm and Harvey asked Ehrlich if he supported such a plan. "I know of no such plan," replied Ehrlich. "If there were one, I wouldn't support it." Q.E.D.

Where could Lomborg have gotten such an idea? From the June 25, 1993, issue of Science. "The principles behind the Wildlands Project have garnered endorsements from such scientific luminaries as Edward O. Wilson of Harvard [and] Paul Ehrlich of Stanford (who describes himself as an 'enthusiastic supporter')," reported an article titled "The High Cost of Biodiversity."

In a particularly breathtaking rhetorical maneuver, Nature's reviewers resort to argumentum ad Hitlerum, likening Lomborg's discussion of extinction rates to the hateful propaganda propounded by Holocaust deniers. "The text employs the strategy of those who, for example, argue that gay men aren't dying of AIDS, that Jews weren't singled out by Nazis for extermination and so on," Pimm and Harvey write. "'Name those who have died!' demands a hypothetical critic, who then scorns the discrepancy between those few we know by name and the unnamed millions we infer." Their assertion is false: Lomborg plainly states that the number of known extinctions is an "underestimate" of actual extinctions because the process of documenting them scientifically is so stringent. In any event, calling someone the moral equivalent of a Holocaust denier is hardly intended to encourage reasoned dialogue. It suggests the desperation of Lomborg's critics.

Blinded by Science

The review of Lomborg's book in the November 9, 2001, issue of Science begins well. It's written by Michael Grubb, a professor of climate change and energy policy at Imperial College in London, who acknowledges that "through much of the first half of the book, [Lomborg] offers a detailed and well-developed antidote to environmental doom-mongering. He establishes a convincing case that, in general, humanity is better off today than it has ever been in terms of standard welfare measures and of many environmental indicators." Grubb comments, "To any modern 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."

Yet Grubb accuses Lomborg of "a stunning lack of attention to cause and effect," claiming he ignores the fact that improvements "have been driven by environmental concerns and the resulting policies." Grubb cites the passage of air pollution control legislation in Britain in 1956 as an example of how environmental policies have had a "dramatic impact."

In fact, it is Grubb who confuses cause with effect. The Skeptical Environmentalist cites many studies that show the rate of improvement in air quality in both Britain and the U.S. did not change with the adoption of such laws. Lomborg demonstrates a different correlation: As average per capita income goes up, environmental measures begin to improve. This is partly because consumers can afford to switch to cleaner technologies -- the source for heating and cooking, for example, moves from wood and dung to coal, then gas, then electricity. As important, wealthier consumers demand that polluters clean up their acts.

Grubb also asserts that Lomborg's book "reaches its nadir when Lomborg turns to climate economics and the Kyoto Protocol." Lomborg argues that the cost of the effort to slow global warming through drastic cuts in the use of fossil fuels -- aimed at reducing carbon dioxide concentrations in the atmosphere -- likely will far outweigh any benefit.

Unfortunately for Grubb, his review appeared in the same issue of Science as "Global Warming Economics," in which Yale economist William Nordhaus presents calculations that generally back Lomborg's position. Nordhaus calculates that had George W. Bush not withdrawn from the Kyoto-Bonn Protocol, implementing it would have cost the United States a total of $2.5 trillion over the next 10 years. Even without American participation, the treaty will cost Kyoto signatories more than $600 billion over the same period. "The Kyoto-Bonn Accord will make little progress in slowing global warming while incurring a substantial cost," Nordhaus concludes.

Not So Warm

Perhaps the most disturbing attack on Lomborg appeared in the popular journal Scientific American in its January 2002 issue. The subhead of the review section, "Science defends itself against The Skeptical Environmentalist," gives the show away: Religious and political views need to defend themselves against criticism, but science is supposed to be a process for determining the facts. Scientific American selected four of Lomborg's chapters -- on global warming, energy, population, and biodiversity -- for separate, detailed review. The package was clearly intended to demolish Lomborg's credibility comprehensively.

Stephen Schneider critiqued Lomborg's treatment of global warming. Schneider is a distinguished climate scientist at Stanford University; he is also a fierce environmental ideologue. His first book, The Genesis Strategy: Climate and Global Survival (1976), offered a sweeping plan to reorganize global governance and the world's economy to meet the purported threats of catastrophic climate change and overpopulation.

Schneider's piece is remarkable for its dishonesty. He first deploys the familiar red herring that "most of his nearly 3,000 citations are to secondary literature and media articles." Lomborg's chapter on global warming features more than 600 endnotes. Nearly half refer to publications from the U.N.'s Intergovernmental Panel on Climate Change (IPCC), and most of the rest refer to studies from such agencies as the World Meteorological Organization and the Organization for Economic Cooperation and Development and to peer-reviewed articles from Science, Nature, the Bulletin of the American Meteorological Society, and the like.

True, IPCC publications are "secondary literature," but Schneider himself calls the IPCC "the most credible international assessment body" dealing with climate change. (Needless to say, Schneider has not followed his own stringent rule about citing only peer-reviewed articles when discussing scientific issues and public policy. In The Genesis Strategy, 80 percent of the endnotes refer to newspaper and magazine articles, government reports, and other secondary sources.)

Schneider makes some more substantive claims. For brevity, let's deal with three of them: that Lomborg gets the basic climate science wrong, that he botches global warming cost-benefit analyses, and that he misrepresents the Kyoto Protocol.

Interestingly, Schneider admits his own "lingering frustration" over the scientific "uncertainties" that surround projections of future global temperatures. In any case, Lomborg does not deny global climate change. As he puts it, he "accepts the reality of man-made global warming" but questions claims such as Greenpeace's assertion that it is "one of the greatest threats to the planet." To support his skepticism, Lomborg analyzes a lot of controversial scientific information and concludes that future global warming is likely to be at the low end of the projections made by the IPCC for the next century. Lomborg agrees with those climatologists who think the earth is more likely to warm only 1.4 degrees Celsius during the next century rather than the 5.8 degrees predicted by the highest projections. He points to research suggesting that computer models that project high temperatures by 2100 do not take proper account of a number of negative feedbacks, such as clouds that tend to cool climate.

Lomborg also makes a persuasive case that due to technological improvements, the amount of greenhouse gases humanity will add to the atmosphere will likely be at the low end of the emissions scenarios put forward by the IPCC. Less greenhouse gases means lower future temperatures.

Schneider demonstrates his misunderstanding of research that contradicts his views when he dismisses Richard Lindzen's work on the iris effect by calling it a mere extrapolation from "a few years of data from a small part of one ocean." In a letter to Scientific American, Lindzen points out that the findings are applicable to the entire tropics. Lindzen also notes that, far from relying excessively on his findings, Lomborg devoted only a quarter of a page to his iris effect paper. "As our paper amply stresses (and as Lomborg acknowledges), there remain uncertainties in our work," he writes. Lindzen concludes that Schneider's critique of Lomborg "misrepresents both the book he is attacking and the science he is allegedly representing."

Schneider makes a number of surprising errors. He attacks Lomborg's analysis of the costs and benefits of trying to slow global warming by limiting the emissions of greenhouse gases, particularly the carbon dioxide produced by burning fossil fuels. Schneider claims that forcing industries to cut back on fossil fuels "could actually reduce some emissions at below-zero costs." He bases this suggestion on engineering estimates that are notoriously overoptimistic. For example, in a 1995 study published in Into the 21st Century: Harmonizing Energy Policy, Environment, and Sustainable Economic Growth, 37 companies agreed to participate in a comprehensive energy audit that the engineers predicted would increase their electricity efficiency by 11.2 percent. A year later, the companies had realized only a 3.1 percent increase in electricity efficiency. Lomborg accepts that energy efficiency can be tightened up marginally, but he is correct that no one seriously believes that efficiency alone can replace the services provided by the energy that would be lost in cutting fossil fuel use by as much as 60 percent.

Perhaps even more misleading is Schneider's discussion of the Kyoto Protocol. Schneider dismisses Lomborg's analysis as a straw man argument. You decide.

Lomborg suggests this thought experiment: Extend to the end of the century Kyoto's provisions for cutting carbon dioxide emissions to around 5 percent below 1990 levels. Then examine the costs. Lomborg knows global warming activists actually intend to force the world to cut back global fossil fuel use by at least 50 percent below model projections. But by looking at what it would cost to implement the comparatively mild Kyoto, one gets a good sense of the magnitude of the problem.

Climatologists widely agree that implementing the Kyoto cuts would reduce the globe's average temperature by an undetectable 0.15 degree Celsius by 2100. Achieving that minimal climatological result could, according to some econometric models, cost as much as $1 trillion. As mentioned earlier, had the United States joined the Kyoto Protocol, overall costs would have been even higher, costing the U.S. $2.5 trillion over 10 years.

The mean estimate of the total cost for the entire world of doing nothing about global warming is around $5 trillion over the next century. In other words, if humanity simply allowed the pace of global warming to proceed, the median estimate is that it would cost $5 trillion to adapt to it. Estimates for different proposed cuts in fossil fuel use aimed at stabilizing the atmosphere at various average temperatures run between $8 trillion and $38 trillion over the next 100 years. Assuming the lower cost, this means it would cost the world $8 trillion to avoid $5 trillion in costs due to global warming.

Concession Stand

Scientific American's second review is by John P. Holdren, a longtime collaborator with Paul Ehrlich who teaches environmental policy at Harvard. His review boils down to a bait-and-switch strategy: He answers a question that has not been asked.

Holdren starts by claiming that Lomborg is "asking the wrong question" about energy. "The energy problem is not primarily a matter of depletion of resources in any global sense but rather of environmental impacts and sociopolitical risks," he claims. Holdren further asserts that "few if any environmentalists" believe "that the world is running out of energy." Earlier in his career, Holdren wasn't so sure. In his 1971 Sierra Club book, Energy: A Crisis in Power, Holdren declared that "it is fair to conclude that under almost any assumptions, the supplies of crude petroleum and natural gas are severely limited. The bulk of energy likely to flow from these sources may have been tapped within the lifetime of many of the present population." Oil and gas are not "energy," but they are the cheapest and most easily transportable sources for it. Nevertheless, Holdren now concedes that Lomborg is right: The world is not running out of energy.

But as Lomborg notes at the beginning of his chapter, some environmentalists are once again warning about impending oil shortages. Kenneth Deffeyes predicts that world oil production will peak between 2004 and 2008 and never rise again. Just two months prior to Holdren's review of Lomborg, Scientific American published a very favorable review of Hubbert's Peak under the title "The End of Oil." The reviewer asserted that "if nothing is done to reduce the increasing global thirst for oil energy prices will soar and economies will be plunged into recession as they desperately search for alternatives." Back in March 1998, Scientific American published "The End of Cheap Oil," which suggested a growing petroleum scarcity.

In his chapter, Lomborg analyzes current trends in coal, oil, and natural gas supplies and prices and explains how the transition to other energy sources is likely to take place over the next few decades. Holdren grudgingly commends Lomborg, declaring that he "has some generally sensible things to say about the large contributions that are possible from increased energy end-use efficiency and from renewable energy." Holdren claims Lomborg selectively quotes the literature on energy, yet he gives no counter-examples of what he thinks the proper literature is. Holdren also complains that Lomborg doesn't delve deeply enough into the politics of energy, particularly the fact that much of the world's oil reserves are in the volatile Middle East. But this is an unreasonable demand; Lomborg's chief goal is to dispel environmentalist misinformation about future resource availability.

The third attack reviewer is John Bongaarts, a vice president at the Population Council. Like Holdren, Bongaarts essentially concedes that Lomborg is right. Bongaarts notes that "people are living longer and healthier lives" and "women are bearing fewer children," among news highlighted by Lomborg. Bongaarts even admits that "environmentalists who predicted widespread famine and blamed rapid population growth for many of the world's environmental, economic, and social problems overstated their cases."

Bongaarts also concedes that "Lomborg correctly notes that poverty is the main cause of hunger and malnutrition" and that despite an increase in world population from 1 billion in 1800 to 6 billion today, "diets have improved. Lomborg and other technological optimists are probably correct in claiming that overall world food production can be increased substantially over the next few decades. Average current crop yields are still below the levels achieved in the most productive countries...."

Yet Bongaarts makes the unsupported claim that future increases in food supplies will cost more, even though food prices have been declining steadily for two centuries. The fact is that all leading agencies, such as the International Food Policy Research Institute, project lower food prices. Sadly, Bongaarts cannot resist deploying the inflammatory accusation from Paul and Anne Ehrlich that humanity is "turning the earth into a giant human feedlot." That is simply not true. Most global food agencies project that the area of the earth's surface devoted to agriculture may grow from 11 percent to 12 percent by 2030. Other analysts, such as agronomist Paul Waggoner, believe improvements in agricultural productivity may be so rapid that less area will be devoted to farming and more land will revert to nature.

Finally, Thomas Lovejoy critiqued Lomborg's biodiversity chapter. Lovejoy was U.S. director of the World Wildlife Fund for more than a decade and is now the chief biodiversity adviser to the World Bank; he's been a biodiversity alarmist for a long time. At a 1979 symposium at Brigham Young University, he announced that he had made "an estimate of extinctions that will take place between now and the end of the century. Attempting to be conservative wherever possible, I still came up with a reduction of global diversity between one-seventh and one-fifth." If Lovejoy had been right, between 15 and 20 percent of all species alive two decades ago would be extinct right now. No one believes that anywhere near that many extinctions have occurred.

In his review, Lovejoy simply ignores the many overblown assertions (including his own) during the past two decades that 40,000 -- or 100,000 or even 250,000 -- species are going extinct each year and that as many as half of all species on Earth would be extinct by the year 2000. Yet he declares that the biologist Norman Myers, who first offered the 40,000 figure, "deserves credit for being the first to say that the number [of species going extinct] was large," even though Myers "did not specify the method of arriving at his estimate." Lovejoy is essentially commending Myers for making up a number to get public attention.

Lovejoy notes that today environmentalists no longer give out a number of species going extinct and that instead "current estimates are usually given in terms of the in-creases over normal extinction rates....That science does not know the total number of species does not prevent an estimation of extinction rates." These estimated extinction rates are derived from the species/area curve relation that predicts that if 90 percent of a habitat is cut down, half of the species living there will go extinct. As Lomborg points out, biologists who have tried to count species in three areas that have undergone such dramatic conversions in habitats -- Eastern North America, Brazil's Atlantic Coast forests, and Puerto Rico -- have not found that the species/area curve relation holds. In other words, the extinction rates of known species are far lower than predicted by theory.

Today the general estimate is that the rate of extinctions is between 100 and 1,000 times the "natural" rate. Lomborg points out in an endnote that "it is worth contemplating how most green organizations today have stopped talking about percentages and started talking about multiples of natural extinctions, although the latter is much less informative. It seems probable that this shift is due in no small respect to the latter sounding more ominous." Lovejoy dismisses this observation as "cynical." Given Lovejoy's easy acceptance of Myers' alarmist claims two decades ago, he should know cynicism when he sees it. Tellingly, Lovejoy does not actually question Lomborg's estimate that some 0.7 percent of species will disappear over the next 50 years if current trends continue. In fact, the rates of species extinction cited by Lovejoy and others are consistent with Lomborg's estimate. The disappearance of 0.7 percent of species is lamentable, but it is a far cry from the extinction of half the world's species.

In a final nasty twist, Scientific American threatened to sue Lomborg for copyright infringement if he did not take down from his Web site, www.lomborg.com, his discussion of its critiques, in which, for easy reference, he interpolated his responses in the text of the reviews. Evidently, Scientific American is not interested in dialogue and peer review of its own work.

Tottering Greens

Ideological environmentalists have simple-mindedly applied concepts from zoology and biology to human societies to create a kind of theory of political ecology. But this theory has failed. Not one of its major predictions has come true: There have been no global famines, no cancer epidemics, no massive resource depletion. The ideologues have been proven wrong because they fail to understand that the economic processes in which human beings engage are radically different from the ecological processes that govern other creatures. Human beings not only consume resources but make new resources with their fertile minds. People do not simply use up resources the way a herd of zebra would; they create new recipes to use resources in ever more effective ways. Coal, tin, fresh water, forests, and so forth may all be limited, but the ideas for extending and improving their uses are not.

"You cannot go to any corner of the globe and not find some degree of environmental awareness and some amount of environmental politics," declared Christopher Flavin, now head of the Worldwatch Institute, at the Earth Summit in Rio de Janeiro 10 years ago. Environmentalism, Flavin concluded, is the "most powerful political ideal today."

Since that Earth Summit, Flavin's brand of environmentalism has indeed grown more powerful. The Kyoto treaty seeks to control projected man-made global warming. The Biosafety Protocol, which regulates international trade in genetically enhanced crops, has been negotiated and adopted. Sweeping plans to reorganize the world's economy along environmentalist lines are being developed and actively pursued.

But at the moment of its political ascendancy, it is environmentalism, not modern civilization, that is tottering. As more critics -- demographers, epidemiologists, toxicologists, climatologists, economists, and, yes, statisticians -- point ever more insistently at the yawning gap between the doomsayers' claims and scientific and economic reality, the ideologues are becoming ever more frantic to deny the growing contradictions.

Their variety of environmentalism is merely the latest totalizing ideology to arise in the West over the past two centuries. Like communism before it, it wants to claim the mantle of objective science to justify its political programs, because in the post-Enlightenment world science is the final arbiter of what is true. But as all totalists eventually discover, an ideology's failure to correspond to reality is ultimately fatal.