Life on the Brink
Environmentalists Confront Overpopulation
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2012
THE UNIVERSITY OF GEORGIA PRESS
ATHENS AND LONDON
CHAPTER 1

Human Population Growth as If the Rest of Life Mattered

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Reflecting on the environmental challenges faced by humanity, political activist and writer Tom Hayden (2010) asks: “Can we continue to overcrowd and over-consume without losing the very things that have given us joy, kept us safe, and provided inspiration for as long as we’ve been a species?” The answer can only be a resounding “No.”

We find joy in the abundant beauty and variety that Earth provides. We find safety in a relatively predictable climate and reliable food sources. We find inspiration in the grandeur of this extraordinary planet. The scale of humanity’s presence—let alone our continued growth—imperils these sources of our well-being and the very existence of innumerable other lifeforms. We thus are called, even at this late hour, to find the clarity and courage to shift into a new relationship with Earth, before we diminish irrevocably the greater-than-human world, our own lives, and the lives of future generations.

The explosion of humanity has decimated many animal and plant populations, extinguished species and subspecies, and caused collapsing ecologies, spreading bio-homogeneity, and the shrinking and fragmentation of wild places. The engine of this ruin has been the virtually unlimited appropriation of the natural world to serve a human project out of bounds. Ocean life has been reduced to food and bycatch; rainforests razed for meat, soybeans, palm oil, and timber; boreal and temperate forests cut down and exploited for their wood, pulp, and energy resources; mountains and underground shale detonated for coal and natural gas; deep-sea
floors punctured for oil; grasslands overgrazed or converted into strictly human breadbaskets; and freshwaters channelized, dammed, dumped in, and overfished. Worldwide, animals are being exterminated at an unprecedented pace, either displaced or killed for their meat and lucrative body parts. Where natural areas and nonhuman beings do not suffer directly, they take indirect hits from climate change and pollution.

The biological heritage of the Holocene has received an enormous blow. In a recent overview, Peter Raven, Jonathan Chase, and J. Chris Pires (2011) write that “biodiversity is diminishing at a rate even faster than the last mass extinction at the end of the Cretaceous Period, sixty-five million years ago, with possibly two-thirds of existing terrestrial species likely to become extinct by the end of this century.” If humanity is to avoid committing interspecies genocide in the twenty-first century, we will have to make revolutionary changes in how we live on Earth—including limiting how many of us inhabit it.

While we may disagree about many matters of tactic and strategy, all the contributors to Life on the Brink: Environmentalists Confront Overpopulation are committed to such radical change. Above all, we seek to create a civilization that preserves the continued flourishing of wild nature: its biological diversity, ecological complexity, and evolutionary dynamism. In various voices, the contributors affirm that humanity must find its appropriate, limited niche within the larger living world rather than persist on our current biosphere-destroying path. Doing so, we argue, is a matter of basic moral decency.

Typically, population issues are discussed in anthropocentric terms, with a focus on how much people can take from the planet: its “carrying capacity” for human beings. As Joel Cohen (1995) titled his well-received book, the key question is How Many People Can the Earth Support? Readers who are environmental activists can probably think of analogous “maximizing” questions: How much water can we take out of that river? How many board feet of lumber can we cut from that forest? How many houses can we shoehorn onto that last undeveloped parcel of land?

Our authors reject the selfishness and conceit of this way of putting matters. It is unjust toward other species. And it points toward a dreary, depauperate future that will be bad for human beings as well. Maximizing the sheer tonnage of human flesh on Earth, by turning the whole world into Resource World, is an ignoble and unjust goal. Humanity can

and should pursue a better way. If you believe this too, then you should read on.

Between 1960 and 2012, the human population more than doubled, from three billion to over seven billion, while the size of the global economy increased at least sevenfold. Over this same period, we have come to understand that human demographic and economic growth is inversely related to the autonomy, integrity, and diversity of Nature. Yet we have also tended to regard the ecological impacts of “population” and “consumption” as virtually independent factors. Conventional environmental wisdom would have it that overconsumption is the failing of the affluent, as if their numbers were negligible; while overpopulation has been regarded as the plight of the poor, if they did not consume in ecologically unsustainable ways. As humanity has burgeoned in both affluence and numbers, and the natural world has receded apace, controversies have raged over whether consumption growth or population growth is most culpable.

This has always been a false dilemma. The ecological crisis is the consequence of the consumption patterns of a huge and growing human population. Yet a leftist cadre of the environmental movement has contended that overconsumption in the global North is disproportionately responsible for the biosphere’s degradation, leaving the global South, where population is growing most rapidly, largely off the hook. Partly as a consequence of this widely rehearsed reasoning, in the last two decades population growth became a nonissue—or worse, taboo—while Western consumerism, corporate malfeasance, and neocolonial policies have been excoriated as the main drivers of inequity and ecological destruction. While these criticisms contain much truth, the ideology behind them has masked as much as it has revealed. Crucially, it has tended to obscure the detrimental effects of population growth in several ways.

First, little attention has been given to the fact that the rich and the poor often have different kinds of environmental impacts. The destructive reach of the affluent is global—the most glaring case being climate change, for which the North does indeed bear primary responsibility. But the destructive reach of the poor tends to be more local or regional, involving, for example, deforestation for subsistence agriculture and fuel,
rampant killing of animals for subsistence or markets, overfishing, desertification, and sewage and chemical pollution of fresh waters and coastlines.

Dangerous chemical pollutants originating in the developed world have found their way into the geographically remote flesh of polar bears and the breast milk of Inuit women. But swelling numbers of dispossessed people in Africa and elsewhere have mounted such an aggressive assault on forest animals (bushmeat) that conservation biologists coined the term empty forest syndrome to describe the ecological reckoning. While the destructiveness of American carbon dioxide pollution cannot be contained within U.S. borders, Madagascar’s poverty- and population growth–driven deforestation and species extinctions represent equally tragic and irreversible losses from Earth’s commonwealth.

Second, when Western consumers and their corporate and political tools are held culpable for environmental woes, via exploiting the raw materials of poor countries, such exposures regularly omit that the products derived from third-world resources are products for mass consumption. Several billion people comprise the upper and middle classes of the world: voracious consumers in the North and now, increasingly, in the global South as well. Sugar, coffee, tea, cocoa, bananas, paper, wood, oil, natural gas, coal, gold, diamonds, iron ore, soybeans, palm oil, meat, shrimps, cut flowers, and so forth—these are or go into commonly used products throughout the world. The stainless steel cookware made in China, sold en masse in big box stores, and found in tens of millions of middle-class households worldwide may well contain iron mined in the Amazon. The oil production degrading Nigeria’s coasts and forests fuels large and growing car fleets in the United States, India, Brazil, and Europe. Jewelry donned not just by the gilded class but by all classes, except the dispossessed lowest quintile of humanity, may be made of gold or diamonds extracted at a high ecological price from wild places in Africa and elsewhere. The palm oil in the cosmetics, food, and biodiesels of billions in Asia, Europe, and North America is harvested from slashed-and-burned rainforests in Indonesia and Malaysia.

In brief, to scrutinize the global North and see only the variable of consumption is to remain blind to the mass that qualifies it. A major factor underlying destructive consumerism is population size: the sheer numbers of consumers around the globe. To propagate the myth that population growth is not itself a problem and to lament, instead, the harmful effects of unsustainable production and consumption bypasses one leading reason that production and consumption are unsustainable.

This brings us to the third way that population as a driver of ecological catastrophe has been obscured in the last two decades: the fast clip at which Northern consumer ideals are expanding within the global South. Social theorist Juliet Schor calls this the rise of “turbo consumption,” in which “a high-end, affluent, media-driven norm of consumption prevails” worldwide, even among the poor (2010, 589). While rich nations with their powerful financial, corporate, and military institutions have wielded enormous influence in the spread of globalization, developing nations (for the most part) are eager to participate in the global economy. Consumer lifestyles have become the hegemonic model, enjoyed by a portion of the world and coveted by the rest.

In a globalized world, where “the end of poverty” has become largely synonymous with the dissemination of a modern high-consumption standard of living, overconsumption and overpopulation are a seamless whole. Consider the rapid escalation of global trade, the worldwide expansion of car culture (in 2009, monthly automobile sales in China surpassed those in the United States), and the swift rise of meat consumption in formerly poor countries. Such trends should dispel any lingering notions that overconsumption can be dealt with while ignoring overpopulation, or vice versa.

By some accounts, during the last fifty years, human beings have consumed as many natural resources as all previous generations put together. That “achievement” came from the wedding of twentieth-century capitalist industrial production and the human population swell, and from their offspring: a mass consumer culture in which ever more people consumed ever more stuff. The levels that resource consumption and pollution might reach during the next fifty years, and the fifty after that, if business as usual prevails, are frightening to contemplate. How many other species, how many wild places, can possibly survive such a century, or the many demands of the ten billion or so increasingly affluent people projected to inhabit Earth by 2100?

Environmentalists have blundered terribly in failing to face up to growth. As Gustave Speth (2009) puts it, while the worldwide environmental movement has won many victories in recent decades, overall, we are "losing the planet." Certainly the movement has failed to think through popu-
lation issues, much less address them practically and with the urgency they require. Political correctness and timidity have played a role in this failure; so too, perhaps, has the complacency of the well-paid leaders of major environmental organizations. Yet the message from the scientific community could not be clearer, as stated in the Millennium Ecosystem Assessment in 2005, restated in the IPCC’s 4th Assessment Report in 2007, and reiterated in several recent reports on the state of world biodiversity, including the Convention on Biological Diversity’s Global Biodiversity Outlook published in 2010: simply put, population growth is a major driver of ecological degradation. We cannot create sustainable societies without ending population growth; indeed, as this book argues, without significantly reducing the human population. To ignore population matters is to acquiesce in advance to continued ecological decline.

The contributors to Life on the Brink—many of them veterans in the fight to protect wild nature—are unwilling to concede defeat. Moreover, we are willing to do the hard work and broach the difficult topics necessary to help lead the environmental movement forward to real and lasting success. In what follows, we discuss the full range of population issues, including the reasons behind mainstream environmental groups’ failure to address them. Knowing the necessity to limit human populations if we hope to preserve a vibrant natural world, we have not shied away from controversy or taken refuge in a foolish optimism.

Part 1 introduces our topic. It includes essays by William R. Catton Jr., Albert Bartlett, Martha Campbell, and Dave Foreman. Catton updates his classic work Overshoot (1980), identifying the main forces driving ecological degradation, including population growth, and asking whether the environmental movement has what it takes to recognize and overcome those forces. Bartlett provides an accessible tutorial on the mathematics of exponential growth, its power to drive rapid increases in resource use, and the implications for genuine ecological sustainability. Campbell examines why population issues have received little public attention in recent decades from policymakers and the general public, despite continued rapid demographic growth and mounting evidence of this growth’s harmful ecological consequences. Dave Foreman, author of the recent Man Swarm and the Killing of Wildlife (2011), explores the same topic, with an insider’s knowledge of the American environmental movement. While Campbell focuses on declining U.S. funding for international family planning efforts, Foreman also addresses the contentious American immigration debates of a
decade ago; readers who compare their accounts will find interesting areas of agreement and divergence.

Part 2 focuses on the ecological impacts of human population growth. Leon Kolankiewicz shows how “a plethora of people produces a paucity of wildlife,” emphasizing his own studies and experiences in Central and North America. Jeffrey McKee argues that globally, human population density is the most important variable correlating positively with species endangerment. Taken together, these pieces make a powerful argument that more people equal less biodiversity. Tim Palmer, writing from California, the most populous state in the United States, sees the rivers he has worked so hard to protect threatened by continued population growth. Efficiency improvements in water use could have bought the time and ecological space to create communities that shared water generously with other species; instead, Californians used them to facilitate more demographic and economic growth.

Widening the focus, Lester Brown next alerts us to a “rising tide” of environmental refugees, driven from their homes by a combination of overpopulation and degrading ecosystems. After warning about the dangers of overpopulation for decades, Brown must feel no pleasure to see his predictions beginning to come true. George Wuerthner discusses population growth’s potential to drive both famine and agriculture-caused biodiversity loss. And Captain Paul Watson, leader of the Sea Shepherd Conservation Society, explains the toll that population growth takes on the oceans and what we should do about it. Watson’s controversial suggestions for population control also serve as a bridge to the next section: “Necessary Conversations.”

Part 3 begins with Eileen Crist, who critiques a resourcist worldview and argues that if an “abundant Earth” is to provide for both human and nonhuman flourishing, we must move beyond merely stabilizing the global population at its current bloated level and greatly lower it. Modern contraception methods bring an unprecedented possibility—that parenthood can be a conscious choice, rather than a default option driven by genetic compulsion, cultural expectations, or chance—and the parlous state of Earth demands that we secure this opportunity of conscious parenthood for all. Stephanie Mills, who follows, agrees; she started quite a conversation herself at her college commencement in 1969, when she vowed, for environmental reasons, not to have any children. Looking back on a good life and forward to an ecologically sane future, Mills sees no
reason to regret her decision and many reasons for society to encourage less childbearing. Tom Butler, from his perch in Vermont, the forty-ninth least-populous U.S. state, also discusses the social and ecological benefits of fewer people. Conventional environmentalism is futile, Butler and many other contributors believe, unless we can reverse population growth.

The following two essays explore the implications of this position for the United States, a country where continued population growth is driven primarily by immigration. Philip Cafaro and Winthrop Staples III provide a comprehensive environmental argument for reducing immigration into the United States and consider some of the moral arguments against doing so. Joe Bish comes to a similar conclusion, from more cosmopolitan ethical premises. With climate change and other global ecological threats looming, the last thing the world needs is more Americans. Ronnie Hawkins asks why so many people fail to appreciate the grave dangers of population growth, finding hope in new ways of seeing, experiencing, and understanding the biosphere. And Amy Gulick returns us to Earth—in this case, the fjords and temperate rainforests of southeast Alaska—reminding us of what is at stake in our population policies and insisting that it is not too late to create societies that live more harmoniously with Nature.

The essays in part 4 seek to specify “solutions” to the problem of continued human population growth. Robert Engelman, author of More: Population, Nature, and What Women Want (2008), contends that providing affordable, accessible contraception, securing reproductive freedom, and improving women's economic lives and social status are the keys to reducing fertility rates in developing nations. William Ryerson agrees but argues that in addition, creative efforts to model and incentivize small families are necessary in areas of the world where large families remain the cultural norm. Don Weeden and Charmayne Palomba support Engelman's and Ryerson's proposals, arguing that furthering human rights and limiting human numbers are both necessary, if we hope to create a humane and ecologically sustainable future. Taken together, these three essays provide a fine overview of some of the best recent thinking on global population policy—and a necessary corrective to the widespread belief that the population problem is solving itself.

Switching the focus back to the American context, Richard Lamm next discusses the inability to confront limits, contending that it undermines clear moral reasoning and effective environmental policymaking. As governor of Colorado, Lamm showed rare candor in tackling sensitive topics such as immigration and health care rationing; his political success suggests that Americans may be willing to consider limits, when they are discussed honestly. Winthrop Staples III and Philip Cafaro return, making the case that nonhuman species have a right to exist and arguing that such a right implies limits both to human consumption and procreation. Historian Roderick Nash argues that the fragmentation of the global landscape by human expansionism and the population explosion has been a tragic mistake; instead, he believes we should create islands of human settlement within a larger matrix of a vast and restored wild nature. It is an appealing vision, which could only occur gradually and over the long term, and which would require a substantial reduction in human numbers and the humility to rescind civilization's planetary sprawl.

The book concludes with a short epilogue by Philip Cafaro that asks a modest question: Is humanity a cancer on the Earth? It is a modest question, we assert, because other species matter; therefore, the failure to ask it, given humanity's current heading, is a clear indication of selfishness and immodesty. We may ignore the question, or even reject it indignantly. But we will answer it with our actions over the next century, as we either work to end the sixth mass extinction in the history of life on Earth, or instead accept it. The book concludes with a select bibliography of essential works on population and the environment and a list of resources for readers interested in learning more and getting involved in efforts to stabilize or reduce human numbers.

In a 2009 report, the Economist articulated the widespread perception that "the population problem is solving itself." Exhibit A was the oft-cited decline in worldwide fertility rates: in 1965 the average woman gave birth to five children; today the worldwide average is just under half of that. According to this "demographic transition" paradigm, modern developments like urbanization, rising incomes, and women's empowerment are reliably accompanied by falling fertility rates; thus, all we need to do is sit back and let globalization solve "the population problem," as we stabilize our numbers decades from now, at around nine or ten billion people. This viewpoint is well captured by the slogan "development is the best contraceptive."

This comforting view suffers from serious flaws. First, it assumes that current downward fertility trends necessarily will continue, and that they
will do so automatically. But the causes of changing fertility levels are complex and imperfectly understood, and there are recent examples, from both rich and poor countries, where fertility rates have climbed after earlier declines. Furthermore, while birth rates have declined in recent decades, this has actually taken great effort: to raise the money to provide widespread, affordable contraception; to teach people to trust new contraceptive methods and how to use them effectively; to convince individuals in societies where large families are the norm that smaller families are acceptable, or even preferable. Continuing to drive fertility trends downward will continue to take hard work and substantial resources; it will not happen automatically (Moreland, Smith, and Sharma 2010).

Second, demographic transition theorists commonly assume that current trends are moving fast enough to ward off grave ecological catastrophes—most probably a false assumption, given the speed of global ecological degradation and climate change impacts that we are witnessing. It is true and important that fertility rates are declining, and that the worldwide annual population growth rate has declined along with them, from just over 2 percent in 1970 to its current rate of slightly over 1 percent annually, according to the Population Division of the United Nations Department of Economic and Social Affairs (2011). But in absolute terms, current world population growth is still immense, partly because these lower growth rates are occurring on top of an ever-larger base population. In 1970, the world population grew by seventy-six million people; in 2010, it grew by seventy-eight million (UN 2011). Meanwhile, the latest UN projections are for several billion more people to be added over the coming decades. Given that there are abundant ecological signs that current human numbers are too high, any significant population increase should be recognized as detrimental, and possibly lethal, to the success of sustainability efforts.

Perhaps the worst aspect of the commonly held view that population growth will take care of itself, however, is its anthropocentric perspective on what counts as an acceptable human population size. It assumes that the world is not already overpopulated, and that any level of appropriation of planetary resources is acceptable, as long as we can make it work for ourselves. Thus, it assumes that stabilizing our numbers in the vicinity of nine or ten billion is unproblematic, as long as we can figure out ways to “feed the world” and take care of our other needs. In its conceit, it completely ignores the fact that even if human beings could thrive under such a scenario, the cost would be global ecological meltdown and the completion of the sixth mass extinction: the treasures of Earth’s biological splendor gone or reduced to pitiful remnants.

The truth that complacent demographers and economists regularly bypass—and that mainstream environmentalists have failed to understand or defend—is that with clearly articulated goals and the political will, population growth could be reversed far faster. There is enormous potential to reduce our numbers, within this century and without coercion, if we take proactive steps to empower individuals and couples who want to have fewer children, and citizens who want to end population growth within their own communities and countries. Many of these steps are described in the articles that follow. Environmentalists should fight for them. The alternative is to give up our proud self-identification as “defenders of Nature” and instead accept a more honest job description: “servants of globalization,” making sure all get fed, nobody litters, everyone recycles, and the landscaping by the side of the highway is a little more aesthetically pleasing.

The contributors to this anthology believe that humanity belongs on Earth, but that Earth is not our possession. The human endeavor to make it so, underway and in fact accelerating hard, has scaled our presence way beyond what is ecologically appropriate, morally acceptable, or simply prudent. In order to repair Earth, restore balance to our lives, and preserve options for future generations, humanity must scale back profoundly. Ending population growth and then substantially lowering human numbers will be crucial to this effort. Environmentalists should boldly reengage in population issues. In fact, they should forthrightly advocate for population reduction, all the more so since even many of those who are indifferent to the well-being of other species have good human-centered reasons to support this ambitious goal.

In a paper wryly titled “Population Growth Seems to Affect Everything But Is Seldom Held Responsible for Anything,” anthropologist Kenneth Smail proposes that we “imagine any early twenty-first century problem—whether political, economic, environmental, social, or moral—and ask whether its solution would be made easier or more difficult by a rapidly growing population” (1997, 231). Well, let’s ask. Sky-high numbers of unemployed youth in the developing and developed worlds? Global climate change? Saving the oceans? Saving the rainforests? Stemming anthropogenic extinction? Providing a quality education to children everywhere?
Securing adequate food for the poor? These are daunting problems. While substantially lowering our population will not guarantee solutions, it will certainly help us address these and other problems more effectively by removing the dimension that scales them up—human numbers. Given that reversing population growth is eminently doable, we should strive to do so now.

Admittedly, a world with fewer people will (for an interim period) provide challenges of its own, such as how to support ballooning numbers of retirees with fewer workers. But these pale in comparison with the global ecological unraveling involved in accommodating, say, ten billion people, all consuming at ever-higher levels. Indeed, it appears that even our current numbers cannot be sustained, as hundreds of millions of people climb out of poverty. We need to start working now not just to end but to reverse population growth, while we still can manage the transition from an endless growth economy with minimal pain and dislocation. We invite readers to join us in thinking through our options and working to achieve a future in which we share the planet generously with all its inhabitants—human and nonhuman. The essays that follow are a great place to start.

**BIBLIOGRAPHY**


