

Around the Campfire With Dave Foreman "The Human Population Explosion and Biodiversity"

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For over twenty-five centuries, the written record carries descriptions of damage wrought by too many people, and the worries of wise people about the consequences of human population growth. I think a careful search would find such writings even earlier. Had we the tools and could find the artifacts, we might find like descriptions and worries another fifteen or more centuries back, even into the Neolithic (certainly so in the New World). The consequences of human overpopulation during both historic and prehistoric times can be sorted into five kinds:

- (1) Land abuse and loss of productivity
- (2) Depletion of necessary natural resources and conflict over obtaining new sources
- (3) Inability to grow enough food, leading to hunger and famine
- (4) Social, economic, and security crises and threats, leading to warfare and intergroup strife
- (5) Harm to wild Nature, including extinction of species.

Feisty George Sessions, mountaineer and deep ecology philosopher, writes, "One's position on the human overpopulation issue serves as a litmus test for the extent of one's ecological understanding and commitment to protecting biodiversity and the integrity of the Earth's ecosystems."¹ Note that he does not mention running out of food or oil. Maybe George's question should be standard fare on job applications and board member applications for conservation groups.

¹ George Sessions, "Political Correctness, Ecological Realities and the Future of the Ecology Movement," *The Trumpeter*, Fall 1995, 191.

Professor Eileen Crist at Virginia Tech is a shockingly clear thinker. She is one of my intellectual heroes. Unfortunately, her 2003 essay in *Wild Earth*, “Limits-to-Growth and the Biodiversity Crisis,” has been overlooked. This is a tragedy because hers is a deeply profound analysis of how limits-to-growth scholars and advocates have erred. (I hope to have a PDF of her paper on the Rewilding Website soon.) When we discuss the problems of the population explosion and overshooting carrying capacity, we tend to focus on how expanding numbers will lead to two things: an inability to feed ourselves, and running out of vital resources (especially oil and water). Crist sees two problems with this focus: (1) “Limits-to-growth proponents cannot predict exactly when, or how, industrial civilization” will overshoot natural limits and collapse; and (2) “In crucial ways, the debate between the limits-to-growth proponents and the cornucopians is extraneous to the ecological crisis, especially to the plight of nonhumans; and it constitutes a digression.”² I think I've more or less understood this for quite a long while, but it wasn't until I read Crist's article that the truth of her point whacked me over the head with a two-by-four. I have always stressed how the population explosion harms wild Nature; I will do so even more in the future. The forthcoming population page on the Rewilding Website will be called “The Human Population Explosion and Biodiversity,” for example, and will tally how population growth drives the seven major wounds that cause extinction.

Crist argues that conservationists should stress the true cost and horror of human population growth: the destruction of wild Nature and the priceless diversity of life on Earth. This should be the concern of conservationists anyway. It is up to the petroleum geologists and their ilk to deal with resource shortages. It is up to the human-rights and poverty-alleviation campaigners to deal with famine. If they refuse to consider human population growth, well, shame on them—they make their task impossible and are responsible for horrific suffering by hundreds of millions of humans. It is the job of conservationists, however, to speak for the voiceless. It is our task to rise when we hear the question “Who speaks for tiger? Who speaks for prairie dog?” We must stress how converting more of Earth into more human biomass squeezes tigers, prairie dogs, and other species off our little living rock in space into short memory.

² Eileen Crist, “Limits-to-Growth and the Biodiversity Crisis,” *Wild Earth*, Spring 2003, 63.

In *Rewilding North America* I go into detail about the grave harm our booming numbers have done to other species and their ecosystems. Stuart Pimm authoritatively tallies up our damage to wild Nature in his book *The World According to Pimm*. In several books, E. O. Wilson and other esteemed scientists lay out the irrefutable case of how more and more people will gobble up millions of years of the bounty of evolution.³

Crist writes:

*The core issue is not the quandary of real-world limits but what kind of real world we desire to live in. I submit two points: (1) the biodiversity crisis is essentially sidestepped by the limits-to-growth framework; and (2) what is invidious about the cornucopian view is not that it is (necessarily) wrong-headed, but the dismal reality it envisions and would make of Earth....It is critical to focus on what is presently dead certain: that overproduction and overpopulation have been driving the dismantling of complex ecosystems and native life, and leaving in their widening wake constructed environments, simplified ecologies, and lost life forms.*⁴

She asks a very hard question: “Does the framework of ‘breaching limits’ address the momentous event of the biodiversity crisis? Arguably, it does not. It is perfectly possible that a mass extinction of 50%, 60%, or more of the Earth's species would not be pragmatically catastrophic for human beings.”⁵

The horror...the horror...is that the demented androids following the sci-fi utopianism of Julian Simon could engineer a fully anthropomorphized Earth supporting billions of humans or human-computer monsters. A nightmare world of deafening silence where no bird sings.

Michael Soulé warned of a similar dystopia, albeit on a much smaller scale, a decade ago when he wrote, “In summary, it is technically possible to maintain ecological processes, including a high level of economically beneficial productivity, by replacing the hundreds of native plants, invertebrates and vertebrates with about 15 or 20 introduced, weedy species.” He concluded, “WARNING! Be suspicious of ‘ecologists’ who are

³ Please go to the Books of the Big Outside page at www.rewilding.org for a descriptive list of such books.

⁴ Crist, “Limits-to-Growth,” 63.

⁵ Crist, “Limits-to-Growth,” 64.

pitching ecological services (for people) and who speak of ‘redundant’ species or ‘hyperdiversity.’”⁶

Another danger of fixating on humankind's inability to feed itself or to keep the cheap oil flowing is that such concern aids and abets those who want more dams for irrigation and who want oil wells wherever a drop can be sucked from the Earth. During the winter of 2005-2006, several polls showed frightening shifts in public opinion for more support for drilling in the Arctic National Wildlife Refuge, for example.

The enviro-resourcist cornucopians who tout ecosystem services and how alternative energy sources and organic agriculture can support our teeming masses may be at worst gentler versions of the Simonized mad technologists. Crist writes, “To contend that we need to sustain ‘natural capital’ for human well-being and survival is not an ecological argument, and bears no necessary connection to the conservation mission.” She slaps the conservation family awake, I hope, with, “The crucial question, then, is not whether a colonized world is viable but rather: Who (besides Simon and company) wants to live in such a world?” She argues that we need “to be as clear and precise as possible about the consequences of the humanized order under construction: in this emerging reality it is not our survival and well-being that are primarily on the line, but *everybody else's*.”⁷

The consequences of human population growth in the past, present, and future are trashed natural ecosystems, endangered and extinct species, and catastrophic climate change. These horrors are what conservationists should stress when we talk about population. If you are interested in whether or not our growing population can feed itself, read Lester Brown. If you want to understand dwindling resources, particularly energy and water, and their geopolitical consequences, read Michael Klare and Richard Heinberg. But if you want to understand how exploding human population and consumption threaten 550 million years of complex life, go to www.rewilding.org.

Of course, our quest to grow more food and to extract oil and gas in remote areas has led to the habitat destruction that partly drives mass extinction. At the 2005 meeting of the American Geophysical Union in San Francisco, researchers from the University of Wisconsin-Madison showed that since 1700, “the amount of cultivated land on the planet has

⁶ Michael E. Soulé, “Are Ecosystem Processes Enough?” *Wild Earth*, Spring 1996, 60.

⁷ Crist, “Limits-to-Growth,” 65.

increased from 7 to 40 percent.” Tropical forests have particularly suffered loss.⁸ This means that in the last 300 years, we have converted one-third of the terrestrial surface of Earth from natural habitats to agriculture. No wonder hundreds of species have been lost and many thousands face imminent extinction. Lester Brown, in his sobering book on the hunger ahead, *Outgrowing The Earth*, points out that there is really only one country that can greatly expand cultivated area. And what country is that? Brazil. Goodbye Amazon. Goodbye Cerrado. Hello miles and miles and miles of new soybean fields.⁹ It is the hungry billions created by the population explosion who will eat the wild species and habitats of Brazil.

Only ten years ago when The Wildlands Project began to look at the kinds of ecological wounds causing mass extinction, we didn't see global heating as a big enough deal for it to be one of the wounds. Unbelievable levels of extinction were happening because of direct killing, habitat destruction, fragmentation, loss of evolutionary and ecological processes, invasion by exotic species and diseases, and biocide pollution. But now we know that the greenhouse effect may become the major cause of species extinction in the coming century.

This knowledge has rocked me back on my heels. It has smacked me in the face like a meteor out of the dark. In some ways, it is too hellish to behold. But it is the real world, muchachos, and we are in it. We need to speak out loud and clear as conservationists that it is the human population explosion that has driven industrialization the last two hundred years thereby causing the greenhouse effect. And as conservationists, we must be loud and clear that the human population explosion and catastrophic global heating will cause mass extinction.

Dave Foreman
Embudo Boundary

⁸ *The Guardian*, San Francisco, December 7, 2005.

⁹ Lester R. Brown, *Outgrowing The Earth* (W.W. Norton & Co., New York, 2004), 156-176.