Population Camel Gets Its Nose into Ecologists' Tent: Hope Is High That the Rest Will Follow

BY STUART H. HURLBERT

Cology is the study of how microbes, plants, and animals, including humans, interact with each other and with their physical and chemical environments. The Ecological Society of America (ESA), founded in 1915 and with a current membership of about 10,000, is the largest ecological society in the world and the largest environmental science organization in the United States.

The ESA's 97th and most recent annual meeting, in Portland, Oregon, on August 5-10, 2012, was its largest ever, with approximately 5,000 people in attendance. An apparent breakthrough was achieved: two events took place that focused primarily on U.S. population growth, its causes, and its environmental consequences.

In a rational world, these population-focused events would have been non-events. After all, human populations and their activities have, for millennia in the Old World and for centuries in the New World, been major destroyers of wildlife and degraders of natural ecosystems. So surely population growth would always be a topical focus at such meetings.

Yet despite the addition of 5.4 billion humans to the planet and 214 million to the U.S. since the founding of the ESA, population growth has been largely absent from the agenda of ESA meetings, publications, and programmatic initiatives. This despite the fact that ecologists justify their requests for research funds from government agencies and foundations on the grounds that their research will show how to slow or even reverse all the different sorts of environmental damage for which human population growth is a major cause.

When individual ESA members tried in the past to put U.S. population issues in particular on the ESA agenda, their voices have been ignored or suppressed.¹

Stuart H. Hurlbert is a life member of the Ecological Society of America, an Emeritus Professor of Biology, San Diego State University, San Diego, and former secretary of Californians for Population Stabilization. Contact: shurlbert@sunstroke.sdsu. To provide perspective for appreciating the positive reception accorded U.S. population issues at this recent ESA meeting, I follow an account of them with a summary of ESA's population phobia as reflected in its historic and current approaches to the topic of sustainability, with commentary on the larger sustainability movements under way. To be sure, the ESA has not been the only scientific organization with censorious tendencies when it comes to population issues.

Bringing the strong sustainability movement to the ESA

A proposal to have a half-day session at the ESA meeting on *Population, Environment and Sustainabil-ity Issues in the U.S.* was submitted to and approved by meeting organizers. It received very positive comments from four of five anonymous reviewers. The program consisted of the ten talks shown in Table 1. These will not be summarized here, but abstracts of eight of them can be found in the online meeting program.² Talks by Robert Costanza and Madeline Weld were added to the program when David Pimentel had to cancel his proposed talk on *Estimating a Sustainable Population for the United States.* Weld's abstract is given in an appendix to this report.

The idea behind our session was simple: put population back on the ESA sustainability agenda, with a focus on the U.S. The ESA is, after all, an American scientific society, even if one with many foreign members, and the topic of U.S. population stabilization rarely will be an appropriate focus at meetings of international scientific organizations.

To provide broad perspective, our program had two speakers from Canada (Schindler, Weld) and one from Mexico (Ceballos Gonzalez) to discuss population-environment issues on or near the northern and southern borders of the U.S. Two other speakers (Costanza, Dietz) discussed ecological economics, the only economic principles that can lead to true sustainability in the long term.

Our session received a positive reception. Despite there being 31 other sessions running concurrently with

TABLE 1 Population, Environment and Sustainability Issues in the U.S. Organized Oral Session 9, Tuesday, August 7, 8:00-11:30 am ECOLOGICAL SOCIETY OF AMERICA 97th Annual Meeting, Oregon Convention Center, Portland, OR Organizer: Stuart H. Hurlbert, Moderator: Robert Costanza History of Population and Immigration Policies in the U.S. and Projections for the Future Marilyn Brant Chandler DeYoung, President, Californians for Population Stabilization, Santa Barbara, CA, Member of 1972 Rockefeller Commission on Population and the American Future **Pernicious Myths Drive Canada's Population Growth** Madeline Weld, President, Population Institute of Canada, Ottawa, ON Moving Toward Ecological Economics: Why Are We Still Haunted by the Ghosts of Adam Smith, Milton Friedman, and Julian Simon? Robert Dietz, Center for the Advancement of the Steady State Economy, Arlington, VA **Developing an Environmental Impact Statement for U.S. Immigration Policy** Philip Cafaro, Department of Philosophy, Colorado State University, CO Oil Sands Operations, First Nation Peoples, and a Sustainable Canada David Schindler, Department of Biological Sciences, University of Alberta, Edmonton, Alberta Continental Ecology, Connectivity, and the Conservation of Biodiversity in the Mexico-U.S. Border Region Gerardo Ceballos González, Instituto de Ecología, Universidad Nacional Autónoma de México, DF Pacific Coast Salmon -- Past, Present, and Future Hal Michael, Washington Department of Fish and Wildlife (retired), Olympia, WA Robert Lackey, Oregon State University, Corvallis, OR Population Growth and Projection of Future U.S. Greenhouse Gas Outputs Benjamin Zuckerman, Department of Astronomy and Physics, University of California Los Angeles, CA Sustainability, Censorship and Unholy Left-Right Alliances Stuart H. Hurlbert, Department of Biology, San Diego State University, San Diego, CA Population, Environment, Economy and Sustainability: Toward an Integrated Synthesis and a Desirable Future Robert Costanza, Institute for Sustainable Solutions, Portland State University, Portland, OR



CALIFORNIANS FOR POPULATION STABILIZATION

Fighting for lower immigration levels, family planning, wildlife and the environment since 1986

The raging monster upon the land is population growth. In its presence, sustainability is but a fragile theoretical concept.

– Edward O. Wilson, in The Diversity of Life, 1992

The flourishing of human life and cultures is compatible with a substantial decrease of the human population. The flourishing of non-human life requires such a decrease.

– Arne Naess, in The Ecology of Wisdom, 2008

We are not faced with a single global population problem but, rather, with about 180 separate national population problems. All population controls must be applied locally... For one nation to attempt to impose its ethical principles on another is to violate national sovereignty and endanger international peace.

- Garrett Hardin, in The Humanist, 1989



ABOVE — The program for the half-day session on "Population, Environment, and Sustainability Issues in the U.S." at the 97th annual meeting of the Ecological Society of America (ESA), August 7, 2012.

LEFT — The CAPS ad that appeared in the program for ESA's Portland meeting.

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ours, our audience approached 100 persons at times. Moderator Costanza did a smooth job of keeping speakers on schedule and refereeing the lively discussion periods following papers. Afterwards, at our booth (see below), in the halls, and by email, we got thanks from young folks and old timers alike for finally bringing population issues into the open at an ESA meeting. As was to be expected, there were also a few folks who objected to discussion of immigration issues in a few talks on the grounds that "overpopulation is a global problem," as the refrain usually goes.

A quick perusal of the fine-print, 240-page program for the meeting suggested our session was completely in sync with the ESA's dedication to sustainability issues. Prominent on the cover of the program was the theme of the meeting, *Life on Earth* — *Preserving, Utilizing and Sustaining Our Ecosystems*. And there were 14 other halfday sessions and dozens of individual papers with "sustainability," "sustainable," or "sustaining" in their titles.

Close inspection of session descriptions and paper abstracts suggested a less optimistic conclusion. Occasionally there is passing reference to global overpopulation, but there was not a single other session or paper with the environmental damage caused by U.S. overpopulation as an explicit focus. This is the *sustainability-lite movement (SLM)* on steroids, where U.S. population issues, such as family planning and immigration, are taboo. Sustainability for the SLM is only about minimizing per capita consumption and waste production rates, efficient use of resources and minimization of pollution, and saving, perhaps only temporarily, a patch of wetland or forest here and there...and maintaining the flow of research dollars to environmental scientists.

One half-day symposium did seem like it might address much the same issues as did our session. Its title was *Human Behaviour and Sustainability: Addressing Barriers to Change*, Paul Ehrlich was one of its speakers, and its description³ stated that:

The unifying argument of the symposium is that the primary barriers to sustainability are not a lack of existing knowledge, but socially constructed obstacles hindering our capacity to act on the basis of that knowledge.

That "argument" is unquestionably valid. However, the greatest of such "socially constructed obstacles" in the U.S. is none other than the suppression and censorship within ESA, other scientific societies, most mainline environmental organizations, academia, government agencies, Congress, and the media of discussion of the need to establish, first in the U.S. as a model for other nations, the coherent national population policy that will be required for economic and environmental sustainability. No abstract in this symposium showed awareness of *this* obstacle. National population, family planning, and immigration policies were once again completely off the agenda. Better just to chat about global overpopulation over a glass of wine in Rio every decade or two.

Gone by the wayside was earlier Ehrlichian wisdom:⁴

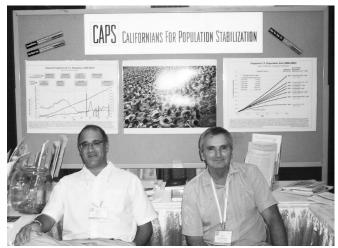
A large part of the responsibility for solving the human dilemma [of overpopulation] rests on the rich countries, and especially on the United States....The first step, of course, is for the United States to adopt a population policy designed to halt population growth and begin a gradual population decline..... We can never have a sane immigration policy until we have a sane population policy.... No sensible reason has ever been given for [the U.S.] having more than 135 million people.

All these other sustainability sessions and papers seem representative of thinking in academia these days. Most students may be hearing nothing of the *strong sustainability movement* where, long before the Brundtland Report, population was properly given central prominence as a factor in sustainability as expressed, e.g., in the I=PAT equation of Barry Commoner, Paul Ehrlich and John Holdren,⁵ Vallentyne's concept of demotechnic growth and consumption adjusted population sizes,⁶ and the Club of Rome's modeling exercises in *The Limits to Growth*.⁷

Population education via exhibitor booth

Independently of the session of talks on population-environment-sustainability issues, Californians for Population Stabilization (CAPS) applied to ESA to have an exhibitor booth on population issues at the Portland meeting. It was by no means a foregone conclusion that the application would be accepted. Earlier, applications from both CAPS and the Population Institute of Canada (PIC) to operate exhibitor booths on population at the 2012 American Association for the Advancement of Science (AAAS) annual meeting in Vancouver, British Columbia had been rejected.⁸ This censorship was imposed on the weakest of pretexts and despite a protest letter signed by 100 U.S. and Canadian scientists. The irony of an entirely American AAAS directorate, and one without any evident expertise on population issues, forbidding a booth on population issues at a meeting being held in Vancouver was not lost on Canadians.

But the application to ESA meeting organizers was accepted. The CAPS booth was set up on the first day of the meeting and was open to attendees for seven hours a day for the next four days. It was staffed by Leon Kolankiewicz, Marilyn DeYoung, Madeline Weld, Philip Cafaro, Ben Zuckerman, David Schindler, and myself, with two to three of us present at any given time. Its location, next to the area where refreshments were served every afternoon, was ideal.



Philip Cafaro and Leon Kolankiewicz manning Californians for Population Stabilization exhibitor booth at Portland Convention Center.

The booth had a display of about two dozen books on population and population-environment issues, a large chart showing U.S. population growth and its drivers for the period 1930-2012, and another large chart showing projections to 2050 of future U.S. population growth under seven different immigration scenarios. Copies of about three dozen articles, charts, and newsletters on different population issues from a variety of authors and organizations were also on display and made available *gratis* to booth visitors.

Over the four days, booth attendants had interactions, mostly quite positive, with almost 200 meeting attendees and distributed close to 1,500 pages worth of articles. Like the meeting attendees generally (and in contrast to booth attendants!), most visitors to the booth were on the young side, say less than 40. These young people had never heard of most of the books and articles on display, but their general open-mindedness was heartening, attested to the value of the booth, and augured well for the future of ESA and, if luck holds, the U.S.

You do these things one country at a time, and if you're more a focused pragmatist than a reckless utopian, you start with your own. Many visitors to our booth expressed interest in helping give the camel's behind a shove.

Revisiting the Sustainable Biosphere Initiative

Persons not members of the ESA may be unaware that overuse of "sustainable" and "sustainability" in this meeting's program reflects not just a current, widespread fashion but a particular document published by the ESA in 1991. The 20th anniversary of its publication was celebrated in a low-key, somewhat self-congratulatory evening session during the Portland meeting.

In the late 1980s a committee of 16 persons, chaired by Oregon State University ecologist Jane Lubchenco, was appointed to prepare *The Sustainable Biosphere Initiative: An Ecological Research Agenda (SBI).*⁹ Historically and logically, the idea of a sustainable biosphere meant that human population sizes, resource consumption rates, and pollutant production rates had to be managed in ways that would allow, over the long term, both a high standard of living for all people and strong protections for environmental quality, wildlands, and wildlife over a significant fraction of the planet.

Thus when the SBI was published it was a shock for many ecologists to discover that the document said nothing about the need for large reductions in population growth rates, both U.S. and global, and research documenting this, in order to move toward a sustainable biosphere. How could this omission be justified? As Jim Brown, who would be ESA president in 1996-1997, recently explained to me:¹⁰

In about 1989 when the ESA was preparing its "Sustainable Biosphere Initiative" the committee invited about five senior scientists to a meeting in DC to review and discuss the draft document. Ron Pulliam [ESA president in 1991-1992] and I noted the absence of any serious attention to human population and resource use, which we argued were THE BIG ISSUE WITH 'SUSTAINABILITY'. We were told that 'it would not be politically expedient to include any mention of this', because the ESA wanted to use the SBI to increase awareness and funding of ecology in DC and elsewhere, where this issue would be viewed as 'too controversial'.

Following its publication, other ecologists criticized the SBI's evasion of population issues.¹¹ The SBI committee and ESA leadership apparently never responded.

Contrast the SBI with another document that has played a key role in putting "sustainability" at the forefront of our attention: *Our Common Future*, the 1987 report of the World Commission on Environment and Development, often referred to as the Brundtland Report. A key mandate to that commission was "to propose longterm environmental strategies for achieving sustainable development by the year 2000 and beyond." The report itself stated that "a reduction of current growth rates is an imperative for sustainable development...[and that for each country] a population policy should set out and pursue broad demographic goals in relation to other socio-economic objectives."

Certainly the U.S., among many other countries, has not followed that advice. And, indeed, why should it have? Why would politicians stick their necks out on such difficult and controversial topics, knowing how little backup they would receive from the SBI and the timid publications of ESA and U.S. scientific societies and environmental organizations generally?

Since publication of the SBI, additional evidence has accumulated of an apparent unwritten ESA policy of censoring discussion of U.S. population issues in particular, even in other ESA white papers putatively dealing with sustainability.¹²

Lubchenco hints at a retreat from 'the globalist copout'¹³

Keynote speaker for the Opening Plenary Session of the Portland meeting was none other than Jane Lubchenco, now Under Secretary of Commerce for Oceans and Atmosphere, and Administrator of the National Oceanic and Atmospheric Administration (NOAA). The title of her talk — *Are We Waiting for Godot: Waiting for a Global Solution Is Not the Answer* — seemed to augur well for the tone of the meeting and perhaps the future of ESA's approach to sustainability. Good heavens, could she be channeling Garrett Hardin? He wrote in 1989¹⁴:

We are not faced with a single global population problem but, rather, with about 180 separate national population problems. All population controls must be applied locally; local governments are the agents best prepared to choose local means.

Of course, Lubchenco did not talk about population issues at all. This was understandable given her obligations to avoid saying anything that might hinder smooth sailing and decent funding for NOAA. That agency is never without numerous controversies roiling around it and not in need of more. Rather Lubchenco mostly talked about the successful initiatives accomplished or under way at NOAA that she, as the first ecologist head of that agency, has had some success in pushing.

Only in the exhortatory last slide of her presentation did we discover the inspiration for her title. The slide quoted the late Elinor Ostrom,¹⁵ of Indiana University and 2009 Nobel Laureate in Economic Sciences:

We can't just sit around waiting for the global solution. There is a lot that can be done at a household level, at a community level, at a regional level.

Again, shades of a Garrett Hardin-like rejection of globalism. Curious, however, was Ostrom's failure to mention the "national level" as one where action would



be critical, a failure not commented on by Lubchenco. With respect to the population factor in sustainability, it is primarily at the national level where action must be taken, in keeping family planning available, giving incentives for small family sizes, and

Jane Lubchenco

preventing excessive immigration. Does Lubchenco and did Ostrom oppose development of a U.S. population policy aimed at achieving U.S. population stabilization as soon as humanely feasible? We have no idea.

Ostrom on national population issues

Ostrom was reticent in publicly putting forward her opinions on population issues. In *Green from the Grassroots,* one of the last pieces she wrote before her death on June 12, 2012, she did say this:¹⁶

Of course, true sustainability goes further than pollution control. City planners must look beyond municipal limits and analyze flows of resources — energy, food, water, and people — into and out of their cities.[T] he first State of the Planet Declaration, published at the recent mammoth science gathering Planet Under Pressure, made it clear that sustainability is now a prerequisite for all future development. Sustainability at local and national levels must add up to global sustainability. This idea must form the bedrock of national economies and constitute the fabric of our societies. Note reference to "sustainability at ... national levels." Was this just a turn of phrase, or did Ostrom actually recognize what most of the ESA leadership does not, viz. that you cannot move toward true sustainability within the U.S. without reducing the U.S. population size and having a coherent, humane plan for achieving this.

Ostrom had earlier co-authored a paper with Xavier Basurto, titled, *The Core Challenges of Moving Beyond Garrett Hardin*.¹⁷ In it they suggested that for 'common-pool resources' not owned privately or by a government, the 'tragedy of the commons' can often be avoided by direct communication and cooperation among users, at least when the resource is not already overexploited. Responding to that paper and Ostrom's earlier work, Robert Walker, now president of the Population Institute, noted:¹⁸

Yes, we need better solutions to the "tragedy of the commons." But more than anything we need a greater sense of immediacy and urgency. In an earlier paper on this subject, Ostrom acknowledged in passing that there are circumstances where "population growth may exceed the carrying capacity before participants have achieved a common understanding of the problem they face." But in reading Ostrom's papers, one gets the strong sense that this is more of a theoretical problem, than a practical one. She appears to lack what Hardin never lacked when it came to population and the preservation of the commons: a sense of urgency.

Ostrom, in her words, may have "moved beyond Hardin." We need to move beyond Ostrom...to action.

Whether the ESA leadership also lacks "a sense of urgency" as the U.S. population shoots to ever higher and less sustainable levels is a question not yet quite answered. Certainly there is a large portion of the ESA membership that does not think ESA's silence on U.S. population issues should have been so easily and cheaply bought as it has been during the last twenty years.

Dangers of becoming a panchreston

In short, as evidenced by the ESA website and the official program for the Portland meeting, the distortion of the word "sustainability" is now so complete, that usually its presence in the title of a publication, organization, or meeting session is a solid signal of only one thing: U.S. population issues will *not* be discussed in

that venue or their relevance to true sustainability even mentioned.

"Sustainability" has paid for its fashionability by becoming a *panchreston*. Redefinition of that ancient term, sometimes used as a synonym for panacea, was proposed in 1956 by Garrett Hardin, who defined panchresta as "words that are too powerful, that 'explain' everything...[but that] explain nothing."¹⁹ A better definition was offered a few years later by J.H. Masserman in a psychiatry journal: "any term so diffuse and protean in its connotations as to be practically meaningless."²⁰ Masserman noted that, "Perhaps in no other sphere of human thought — except possibly in advertising, politics, and theology — are words used as loosely as they are in psychiatry." Ecology might be added to the list when it comes to topics at the interface of science and society.

Evidence abounds that 'sustainability' fits Masserman's definition perfectly. Andres Edwards,²¹ for example, notes, approvingly, that:

Sustainability encompasses a wide array of issues including: conservation, globalization, socially responsible investing, corporate reform, ecoliteracy, climate change, human rights, population growth, health, biodiversity, labor rights, social and environmental justice, local currency, conflict resolution, women's rights, public policy, trade and organic farming. These issues cross national boundaries, socioeconomic sectors and political systems, touching every facet of society and driven by life-affirming values that influence policies and initiatives at the local, regional, national and international levels.

And Glenn Rickets²² confirms this by noting, disapprovingly, that:

Sustainability can put on different hats at different times, sounding as if it is sternly scientific at one moment, enchanted with mystical unities the next, and down in the street fighting for social justice and cut-rate mortgages the moment after that. Like most ideologies, it can be amorphous when it is tactically useful to its proponents to blur the issues.

The ESA leadership may find it convenient to take advantage of the "blurring of the issues" offered by "sustainability" in order to quietly keep U.S. population growth and policy off the ESA agenda. However, it should take responsibility for the consequences of doing that. The ESA has never had any control over sustainability rhetoric and never will have. By officially identifying so relentlessly with the word on its website and in its meeting programs, the ESA associates itself with diverse, inchoate ideologies and political agendas marginally relevant to a sustainable biosphere. This can hurt ESA's image with both decision makers and the general public. Understandably not understanding the rhetoric, they will often assume the worst — and may be tempted to throw the baby out with the bathwater.

The National Association of Scholars (NAS), its journal *Academic Questions*, and its website have taken the lead in providing a critique of the excesses and politicized nature of the sustainability movements on U.S. college and university campuses. To quote briefly from the official NAS statement on the matter, *Fixing Sustainability and Sustaining Liberal Education*:²³

"Sustainability" is one of the key words of our time.... [It] is, by a large measure, the most popular social movement today in American higher education.... We regard good stewardship of natural and institutional resources and respect for the environment as excellent principles.... But wholesome words standing for wholesome principles do not always stay put.

Overall the NAS statement is a good critique with positive suggestions as to how to improve matters on campus. But it is easy to take issue with the tenor of some parts of the statement. These exemplify the dangers of ESA and other scientific societies being tightly associated with a panchreston.

The chief authors (who may not have included any ecologists) of the NAS statement clearly have doubts as to whether "the world is running out of key resources" or whether "short of intervention, population growth will outstrip resources." They are happy to have these matters debated, but also would like more attention given on campuses to "trade, substitution, the development of markets, and technological innovation" as ways to deal with "scarcity."

Yes, shades of the *Wall Street Journal* and the Cato Institute!

Ironically, the NAS statement disparages the sustainability movement as being "neo-Malthusian," meaning focused on the threat of overpopulation. Yet, it is also critical of the very politically correct Association for the Advancement of Sustainability in Higher Education (AASHE). That organization, as far as one can judge from its website and programs, is as oblivious to population issues as are the SBI and other ESA sustainability documents. That AASHE and ESA might become a tad more "neo-Malthusian" and join the *strong sustainability movement* is to be hoped for, as is the joining of NAS by more ecologists.

Acknowledgments

The arrival of this camel's nose in the tranquil, mostly population-oblivious tent of an ESA meeting was due in the first instance to the already named speakers in our population session and staffers of the CAPS exhibitor booth. But the expense of sponsoring, setting up, and operating such a booth is considerable, and the whole enterprise would not have gotten off the ground without the generous financial support of the Weeden Foundation, U.S. Inc, Fred Mohs, John Zamrzla, Tim Aaronson, Paul Nachman, and Sandy and Eloise Power.

Endnotes

1. The theme of the Spring 2011 issue of *The Social Contract* was *Scientists as Censors: How Political Correctness Corrupts Environmental Science*. Five of the 16 articles in it concern censorship by the ESA.

2. See: http://eco.confex.com/eco/2012/ webprogrampreliminary/Session7849.html

3. See: http://eco.confex.com/eco/2012/ webprogrampreliminary/Session7762.html

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9. Lubchenco, J., A.M. Olson, L.B. Brubaker, S.R. Carpenter, M.M. Holland, S.P. Hubbell, S.A. Levin, J.A. MacMahon, P.A. Matson, J.M. Melillo, H.A. Mooney, C.H. Peterson, H.R. Pulliam, L.A. Real, P.J. Regal, and P.G. Risser. The Sustainable Biosphere Initiative: an ecological research agenda. *Ecology* 72:371-412.

10. James Brown (University of New Mexico), email to S. Hurlbert, 1 November 2011.

11. Ludwig, D., R. Hilborn, and C. Walters. 1993. Uncertainty, resource exploitation, and conservation: lessons from history. *Ecological Applications* 3:547-549; Pulliam, H.R., and N.M. Haddad. 1994. Human population growth and the carrying capacity concept. *Bulletin of the Ecological Society of America* 75:141-157; Hurlbert, S.H. 2000. The globalist copout. *The Social Contract* 10:193-194.

12. Hurlbert, S.H. 2011. Wives of the Bishop of Worcester: the Ecological Society of America and global copoutism. *The Social Contract* 21(3):47-49.

13. "The Globalist Copout states that since overpopulation is a global problem, the ways of dealing with it must be primarily global or international in nature. It is ok for individual nations to attempt to control their own birth rates. But they should not control or reduce their immigration rates, even if immigration is the major cause of their population growth. It would be 'unfair' if one country were able to stabilize its population well ahead of other countries, especially if it were an industrialized western country. So goes the 'reasoning."" (Hurlbert, S.H. 2000. The globalist copout. *The Social Contract* 10:193-194).

14. Hardin, G. 1989. There is no global population problem. *The Humanist* 49(4): 11-13, 32.

15. Quote is from "Interview with Nobel Laureate Elinor Ostrom," The Escotet Foundation, undated (2010?), anonymous interviewer. See: http://escotet.org/2010/11/interview-with-nobel-laureate-elinor-ostrom/

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21. Edwards, A.R. 2005. *The Sustainability Revolution: Portrait of a Paradigm Shift*. New Society Publishers, Gabriola Island, British Columbia.

22. Ricketts, G.M. 2010. The roots of sustainability. *Academic Questions* 23(1): 84-101.

23. NAS. 2011. Fixing sustainability and sustaining a liberal education. Statement of the National Association of Scholars, New York, NY. April 21, 2011. Available at: http://www.nas.org/articles/fixing_sustainability_ and sustaining liberal education

APPENDIX: Abstract for a late entry talk for the ESA session on *Population, Environment and Sustainability Issues in the U.S.*

Pernicious Myths Drive Canada's Population Growth

BY MADELINE WELD

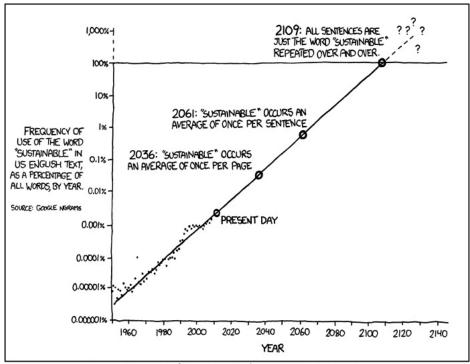
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Wery few people are aware that Canada, the Great White North, that country with all those "wide open spaces," has a serious population problem. Many Canadians also seem to have bought into the myth that having a large surface area means that Canada's capacity to accommodate human beings is unlimited. Part of the explanation surely lies in the propaganda that Canadians are relentlessly subjected to, not least by the national broadcaster, the Canadian Broadcasting Corporation (CBC). Along with much of the other media, the CBC uncritically propagates the idea that we need population growth to promote economic growth, and we need economic growth for our well-being. Some argue that a population of 100 million would give Canada more clout on the international stage. The reality is that most Canadians live within a 100-mile band along the U.S. border, and significant parts of that band are suffering from exactly the same stresses of overpopulation as are being felt in other parts of the world.

Canada's population growth is driven by immigration, in the absence of which it would have stabilized well below 30 million. At the current rate of intake of newcomers, 250,000-500,000 per year (including immigrants, refugees, and so-called temporary workers), Canada's population of 34 million is projected to reach 44 million by 2050. Contrary to the myths perpetrated to benefit certain businesses that profit from cheap labour, developers, bankers, and other growth-promoters (including politicians courting the ethnic vote), Canada's economy has not benefitted from this policy of mass immigration. Immigrants of recent decades have been performing poorly in economic terms and are actually costing the government \$18-23 billion (CAD) more in services than they pay in taxes. In real economic terms, the income of the average Canadian has not changed, but the rich have become richer and the poor have slipped farther behind. Furthermore, the myth that immigration is rejuvenating Canada's aging population has been thoroughly debunked.

Canada is also losing much of its best farmlands as Canada's cities sprawl outwards as well as upwards. Over 50 percent of Canada's best farmland is located in southern Ontario, and 20 percent of that land has been lost to development. Significant losses are also occurring in the southern mainland of British Columbia and in Alberta. These losses are irreplaceable. Canada's population growth has also taken a tremendous toll on its biodiversity, with 650 species now officially listed as endangered, threatened, or of special concern (in addition to 23 that are extirpated in Canada and 15 that are extinct).

There is no scientific, ecological, or economic justification for driving Canada's population growth. There is irrefutable evidence for the harm it is doing. Unfortunately, those who benefit from growth own the media. Canadians must start asking themselves, "Cui bono, this policy of mass immigration."



THE WORD "SUSTAINABLE" IS UNSUSTAINABLE.