Why Canada Needs a Population Policy

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In the spring of 2001, the Population Institute of Canada submitted the following paper to the Standing Committee of Citizenship and Immigration of the House of Commons of the Parliament of Canada which was holding hearings and receiving papers relating to future immigration policy. While the receipt of the paper was acknowledged, there was no reply that addressed its substance. This was not surprising since most members of the Standing Committee and the mass of Canadians are in the thrall of an irrational concept tied to their national pride. Since Canada is the second largest country in the world by land area, many conclude that Canada should have a much larger population without considering the negatives, such as, that any expansion of human activities takes space from other living organisms many of which are essential for human survival, that the growth of urban areas in Canada is covering over much of the best agricultural land in the country, that Canadian prosperity is based substantially on the extraction and sale of finite natural resources some of which are becoming scarce, and that most of the Canadian land mass cannot support a large human population. Since 1900, the population of Canada has increased six fold, while the global population has grown about four times. Given the environmental damage caused to the living Earth by the expansion of human activities and the danger this poses to future generations, it is time to put aside Canadian hubris and to develop a population policy for Canada that is based on reason, not illusion. This paper and other material on the Website of the Population Institute of Canada strive to bring more reason to bear on those public policies that influence the size of the Canadian population and to ensure that the Canadian population stays safely within limits of what the land can support over the intermediate and the longterm.

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Problem, What Problem?

The idea that their country has a problem with overpopulation might strike most Canadians as preposterous. On the contrary, many see Canada as a vast empty land ripe for massive human settlement. Recent insights from the science of ecology, however, suggest that we greatly overestimate Canada's carrying capacity. How is it that so many Canadians hold views so far removed from reality? The answer is not simple, and involves, among other factors, the lag time for new ecological knowledge to permeate the mainstream, the built-in-resistance to change among existing institutions, the persistence of myths in the Canadian mind of a land with boundless resources, and an ethical sense to "share the wealth" with some less fortunate people from other lands. More recently, the assertion is sometimes made that those who wish to limit the growth of population in Canada - which given the low birthrate of native-born Canadians, means limiting immigration - harbour racist motivations. Thus, people may be inhibited about expressing opposition to population growth in Canada, regardless of their ecological and socioeconomic concerns. To a certain and probably significant extent, the often unspoken but nevertheless very real fear of being accused of racism has muzzled the debate about population growth in Canada. While human beings seem to have an almost inexhaustible ability to differentiate and fight amongst themselves, they all too often place insufficient emphasis on more critical issues, such as the relationship between humanity and the web of life that supports us.

The Challenge of Ecology

The major challenge for all humanity in the twenty-first century is to learn to live within the web of life on Earth without destroying it. This will be a difficult undertaking for a species with a misplaced sense of its own importance. It is only in the past few hundred years that humans have come to accept that the Earth (and by inference humanity) is not the centre of the Universe. Now, scientific knowledge about ecology makes it clear that human beings are not of central importance to the continuation of the process of life on Earth except in the negative sense that they have the capacity to destroy it.

Most Canadians have, at best, a limited understanding of ecology. The health of the environment is viewed as just one of many political issues rather than the essential underpinning of all life. The ecological reality (which doesn't give a fig about human politics) is that human life depends on a web of many interdependent species. The web is based on countless micro-organisms in the soil and water and on plants that, through photosynthesis, directly or indirectly feed all other levels of the food chain. We tend to overlook the importance of micro-organisms because we cannot see them. As for the energy produced by photosynthesis, the human species consumes a hugely

disproportionate share. Human population growth and the expansion of human activities consume an ever-larger fraction of the Earth's surface. Not only do we directly displace other species by occupying or destroying their habitat, but we extinguish them, including many of those at the foundation of life, with our wastes and chemical poisons. Current human practices and beliefs are on a collision course with the life support system on Earth. With the short-term focus of daily human activities, the profound implications of this predicament are not given sufficient attention. Old beliefs impede the acceptance of new information and delay the implementation of changes that are essential to render human activities sustainable.

Human beings seem to have an instinctive drive to expand their numbers. Furthermore, in many cultures, including the globally predominant consumer culture, there is a bias that recognizes ethics only in terms of human relationships but not in terms of the human impact on other forms of life, regardless of the fact that they make human life possible. Consequently, human numbers and demands continue to grow and fuel the deterioration of the web of life on Earth. We must develop a new sense of ethics that involves confronting our instinctive expansionist drives and our disregard for non-human forms of life.

Where Human Ethics Clash with Ecology

All living organisms exhibit a drive to locate or absorb resources, avoid toxins and predators, and pass on their genes to future generations. In some social animals, the aims of the individual are furthered by cooperative activities with relatives or even more distant members of the same species. Among humans, this has led to the creation of more complex organizations, such as tribes, nations, and corporations.

Overall, the focus of all individual living organisms is opportunistic and short-term. High intelligence has increased the capacity of the human species to acquire resources and to diminish the impact of many population-limiting factors, such as disease and famine. These capabilities have allowed humans to expand their numbers enormously, from about five million in 6000 BC to over 6.8 billion in 2009. Our population is now greatly in excess of the population density of a "typical" predator of our size. The impact on both the physical world and other life forms has been devastating and will continue far into the future.

It is obvious that the success of the human species in expanding its numbers and its ability to access resources has not been matched by a change in outlook. We have failed to shift our focus from the short to the long term. It is extremely rare that we even acknowledge the influence of our basic instincts on ethics, decision-making, and public policy.

Modern communications and transportation have created an unprecedented global awareness, and individuals, both corporate and human, have been quick to take advantage

of opportunities. Transnational corporations comb the world looking for cheaper labour, natural resources, and larger markets, while individual people look for advantages in other countries and migrate in unprecedented numbers. Therefore, transnational corporations and economic refugees share a common interest in relatively open national borders to provide more opportunities for increased consumption. Despite the popular admonition to "think globally, and act locally," any nation that acts with foresight to curtail population and protect its environment, thereby creating an area of order in an increasingly chaotic world, will likely attract more international corporate activity and face enormous pressure to allow the entry of people from less ordered regions. Pressure tactics will include demands for free trade and accusations of racism for restrictions on immigration. The net result of such tactics, if successful, is to accelerate the unravelling of the web of life worldwide.

Like locusts and rabbits, we have entered a plague cycle that will end with the collapse of the food supply, when the reality of environmental constraints can no longer be concealed by technological interventions. Local human population crashes resulting from the depletion of natural resources have occurred previously (e.g., Easter Island) but human activities have never before affected so detrimentally virtually every part of the planet at the same time. The coming population crash will be global in scale, but it will be far from equally shared across the planet.

Urban areas, especially the shanty-towns of overcrowded mega-cities, will be the most adversely affected. Their dense population and woefully inadequate sanitation provide the ideal breeding ground for diseases new and old - diseases which will, sooner or later, be carried to all parts of the world through migration and tourism. Health systems in developed countries will not be able to adequately deal with the impact. Nevertheless, the poorest parts of the world, where population growth is still rapid, will continue to be the most adversely affected, and suffer increased mortality through resource depletion and disease. The downward-spiralling situation in Africa is the most graphic illustration of the reality of environmental constraints. It is popular in the current intellectual climate to pretend that all would be well if only those in the developed regions would consume less. However, this ignores the fact that it is primarily population growth and its concomitant deforestation, erosion, and desertification, that, in the poorer countries, destroys the ecological underpinnings of their subsistence way of life.

A small minority of human beings understands the inevitability of the global encounter with environmental limits and warns of the chaos and pain it will bring. The masses, however, do not grasp the dire nature of the situation, and many institutions ignore the looming environmental crisis because they depend on the growth of human numbers and demand. Many economists take as an article of faith that an economy needs to grow about 3% a year to maintain its health, and business favours more people and higher consumption - all on a finite planet. The press has done little to help people understand the "whole system" reality of the population/environmental crisis. The right-wing press does not begin to acknowledge that the economy is a wholly owned subsidiary of the environment. As far as it is concerned, the resources of the planet are infinite and the loss of a few million species is no big deal. The left-wing press embraces the "it's not

population, it's consumption" ideology, as if the two were not inextricably linked. From the perspective of many on the left, the resource pie is big enough for any number of people provided these people divide it into equal pieces. Many of these positions reflect deficient understanding of biological capacities and human nature.

To extricate ourselves from this trap, we must expand our code of ethics from a set of guidelines governing only interactions among humans to one that includes consideration for other life forms and the impact of our activities on future generations.

Changing our Ethics

Any attempt to change ethics challenges long-standing traditions. Codes of ethics are found in all religions, some of which have existed for millennia, and to go against them - or even to challenge some of their tenets – appears, to many, as tantamount to opposing the will of some form of Universal Power. Regardless of perception, however, ethics evolve over time, for they are practical beliefs that respond, however slowly, to changing circumstances. New information does alter the way we see the world. At present, most new insights come from science.

Human belief systems are more than just codes of ethics. The human psyche has a need for a sense of purpose. Humans can be thought of as comprising their physical selves and their symbolic selves. The physical self requires food, shelter, sex, and entertainment. The symbolic self is more complicated. It comprises the way that we perceive ourselves and includes concepts such as beliefs and values, and identification with family, tribe, race, religion and nationality. The allegiance to the symbolic self is reinforced by the great human fear of death. The identification with symbols provides a sense of being able to transcend the limitations of human life by various means, such as belief in an afterlife, seeking enlightenment through adherence to a religion, and the continuation of one's culture, language, and belief system. Having children, in a sense the continuation of the physical self, often takes on symbolic importance. Asking a person to change his beliefs and ethics can threaten the symbolic self, triggering fears of death, and frequently, violent reactions.

It is essential to encourage people to identify their symbolic selves with the web of life. If people make it their core purpose to sustain the health of the web of life, then, in a most practical sense, they will contribute to the survival of humanity. At a more spiritual level, the continuation of all life gives them a kind of immortality. When humans make the leap in understanding that we are just one species in an interdependent web, a substantial shift of ethics must follow. The totality of life becomes sacred, not just human life. If human numbers and demands grow too quickly to the point where they endanger the health of ecosystems, as is happening now, then human life becomes relatively less valuable. This debasement of the value of human life, while not publicly acknowledged, is occurring in many countries.

Population Policy

To bring about these major and essential shifts in perception, each country will need to develop a population policy that looks at human numbers in the context of the natural environment that supports them. Accepting the oft-repeated mantra that theirs is a lightly populated country, most Canadians have concluded that the problem of overpopulation is a concern of other places, but not here. The numbers say otherwise.

Since Confederation, the Canadian population has grown very quickly. It rose from 3,463,000 in 1867 to 11,654,000 in 1942, to 20,378,000 in 1967, and to 31,000,000 in 2001. Statistics Canada estimates that the population should reach about 36,000,000 in 2025. However, with the expected surge of environmental disasters and the concomitant rise in the number of environmental and economic refugees and the growth of human smuggling, the population may be much higher within a generation or two. This represents a potential onslaught of which the Government of Canada is aware, but for which it appears to be very ill-prepared.

To date, no Canadian government has ever adopted a population policy or even acknowledged domestic population as an issue. One could say that the issue has been "addressed" piecemeal by policies on immigration, human rights, refugees, child credits, abortion, perhaps even euthanasia and assisted suicide. In general, governmental policies favour an increase in population. The largely unchallenged assumption is that Canada has no population problem since it has the second largest land area of all countries on Earth. These unpopulated Canadian land areas are generally seen as "empty" spaces just waiting to be filled.

These assumptions are based on a false premise that the potential for growth is equatable with the crude statistic of land area. The reality is that much of the land is barren and incapable of supporting a large population. Furthermore, whatever population lived in these barren areas would leave a large "ecological footprint." Most food would have to be shipped in, requiring both land surface for agriculture elsewhere and large amounts of energy for transportation and space heating. It is a reflection of our anthropocentric bias to consider all people-free areas as "empty" when, in fact, some are full of life and contribute to the ecological balance of the web of life on the planet.

The majority of Canadians, however, accept the myth over the reality. Despite evidence to the contrary - the collapse of the cod fishery, the crises in the salmon fisheries, the Walkerton water fiasco, the ever-lengthening list of endangered species, national parks under siege - they continue to believe that theirs is a land of almost limitless resources. The myth is in fact an integral part of Canadian national pride.

The more habitable parts of Canada, the most southerly strip near the American border that is home to most Canadians, is already densely populated. Toronto and Vancouver are experiencing serious problems associated with their rapid, unplanned growth, yet Canada continues to actively seek large numbers of immigrants who gravitate towards these regions. Anyone using the Lions gate Bridge in Vancouver, highway 401 in southern

Ontario, or emergency services at hospitals across the country, knows that we do not lack people.

When considering population, our policy makers compare Canada with other countries, many of which are grossly overpopulated and showing signs of severe ecological, social and political stress. Then, they decide that Canada has too few people. It does not occur to them to consider the carrying capacity of ecosystems in Canada and the long-term historical trend of the growth of human population.

Most Canadian policy makers have backgrounds in law, business, or economics; very few have backgrounds in science, including biology and ecology. As long as our policy makers remain largely ignorant about the state of the web of life on Canadian land, lakes and coastal areas - or even about why they should worry about such things - the likelihood of Canada developing a comprehensive population policy based on ecological insights remains slim. How many people can Canada support without imperilling many other life forms? We simply don't know, although such events as the collapse of the cod fishery, the impending collapse of the salmon fisheries, and the Walkerton water tragedy show the danger of ignorance. What we don't know can most assuredly hurt us.

Human numbers do not tell the whole story. The range of human activities and the types of technologies used influence the impact on the web of life. Canadians demand energyand technology-intensive lifestyles involving activities that are high-cost, financially and environmentally. The average Canadian consumes 30 to 50 times as much as a person in one of the poorer countries. The impact of the present Canadian population is equivalent to that of from 900 to 1500 million people in the poorest regions of the world. Some of this consumption may be inevitable - a large cold country will require much energy for transportation and heating - but this does not mitigate its impact. Newcomers to Canada quickly adopt our high-consuming lifestyle. Consequently, transplanting population from low consuming regions to high-consuming ones merely accelerates the deterioration of the planet. Yet over the past twenty years, Canada has accepted about 250,000 people a year as immigrants and refugees or as illegal economic migrants, with about half of them coming from very poor regions. Given Canadian levels of consumption, the effect on the Earth is equivalent to adding 7.5 to 12.5 million extra people annually in a poor country. There appears to be no attempt on the part of the Government of Canada to coordinate its policies in different areas. For example, its goal to increase immigration levels would appear to be at odds with the objective of reducing greenhouse gas emissions.

Steps towards a Population Policy

Clear Statement of the Issue

Often strategists suggest that a good question leads to the right answer, in this case, to a far-sighted population policy. Accordingly, the issue is stated in the form of a question that needs to be given a high profile in the public mind.

What is the sustainable level of human population for Canada taking into consideration the quality of life to which most Canadians aspire, the carrying capacity of the web of life, the need for biodiversity, and the preservation of some wilderness areas?

Political Leadership

The development of a population policy requires strong leadership with the capacity to bridge many jurisdictions and interest groups in Canada. Most politicians avoid the issue of population growth because it opens them to criticism from a wide range of special interest groups and is more likely to damage than help their careers. However, from time to time, an issue arises of such overwhelming importance to the future of humankind that it requires an assertive rather than a reactive form of leadership. The human threat posed to the health of the web of life is just such an issue. It demands anticipation and preventive actions, since a cure may not be possible if a broad systemic collapse occurs.

Develop Reliable Data

As soon as Canadians try to answer the question posed by the issue, they will realize that they need much better information on which to base their decisions.

Clearly, Canada needs extensive and reliable data on the condition of the web of life on Canadian lands and in Canadian boundary waters to determine the appropriate levels of human population and economic activity. The good news is that there is a great deal of environmental information in Canada; unfortunately, it is dispersed in hundreds of databases across the country. Many of these databases are not designed to relate easily to one another, creating barriers relating to cost, function and jurisdiction. Gaps exist. In some cases, there is insufficient data to show the present effect of current management practices on natural resources. For example, in forestry, Canadians must often extrapolate from non-Canadian information regarding the effects of harvesting on water quality, wildlife populations, aesthetics and fisheries.

Improved information will allow Canadians to develop the science of human carrying capacity. "Carrying capacity" refers the human population that can be supported in a given territory, in a specified lifestyle (normally the one to which people can reasonably aspire), without degrading their physical, ecological and social environment, and without imposing wastes on the global environment beyond a specified (or internationally agreed)

limit. In particular, Canada needs to know how many people can be supported sustainably in Canada over the medium and long-term.

Canada should place the highest priority on developing reliable data to ensure that human demands on the web of life remain safely within the bounds of sustainability. Without such information, the state of health of the web of life will be left to the ignorance and mercy of political, environmental and industrial speculation - a road leading to more Walkertons and collapsed fisheries.

Public Participation - Building Public Support

Faced with such a complex issue, it is essential to take time to engage the public and to draw upon their insights in formulating a population policy.

An unbiased, accessible process of consultation would help to develop consensus in an open, participatory process. The end-product would be a statement of **goals, assumptions and principles** for a population policy. In the course of doing this task, the participants in the consultation process would draw upon the growing database of reliable environmental information and indicate gaps. The process should be designed so that the attainment of a more comprehensive database and the production of the statement of goals, assumptions and principles coincide to give legislators a solid foundation for a population policy.