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Averting Ecocide: We need a Human Survival Index

Julian Cribb

In the view of most thinking people, the human species is more likely to earn its end in either a nuclear Armageddon or an episode of uncontrollable global overheating. There is now a third, and more intractable, scenario by which our tenure of Planet Earth may be terminated: ecocide.

Ecocide? Sounds like another greenie scare story. Well, maybe, until you pause to consider that, according to the British medical journal [The Lancet](#), 9 million people died of ecocide (ie pollution) just last year. That's two million more victims per year than perished in World War II.

Ecocide is death caused by the collapse or vitiation of the systems that support life, including human life.

Last month the scientific journal [PLOS One](#) reported in a disturbing new study carried out in Germany that three quarters of flying insects in conserved areas had vanished in just 27 years. Such insects are responsible for pollinating 80 per cent of the world's wild plants and trees and a third of all our food crops, besides feeding birds, frogs, fish, reptiles and mammals.

This follows reports in recent years by the [Worldwide Fund for Nature \(WWF\)](#) that 58 per cent of large animals, birds and fish on land and at sea, have disappeared in the last forty years. Between 30 and 50 per cent of all *species* may be gone by mid-century. At the same time, in the oceans and coastal waters around the globe, 415 huge '[dead zones](#)' – places where no fish or ordinary marine life can exist – are spreading,.

Equally unsettling, and even closer to home, a [scientific study](#) of almost 50,000 human males in North America, Europe, Australia and New Zealand, found that sperm counts had fallen by 50-60 per cent since 1973. Whatever is wiping out insects and animals is also wiping out human fertility.

A subtler and more insidious indicator is the worldwide rise in mental disorders – suicide, depression, Alzheimers, autism, substance abuse, Parkinsons, etc. – estimated by the World Health Organisation to affect 450 million people worldwide at any one time, and one person in every six in western countries.

The common thread here, and the most parsimonious explanation, is that the human brain and reproductive system, as well as those of insects and other animals, are intensely sensitive to their chemical environment and are easily poisoned by toxins or fooled by chemicals that mimic the body's natural hormones. Total human chemical emissions are conservatively estimated at [over 250 billion tonnes per year](#) – four times the scale of our climate emissions. There are 144,000 man-made chemicals and 2,000 more are added each year. It now takes 18,000 different chemicals to grow, process and package the world's food.

The deeper explanation, which few people and almost no governments or large corporations fully grasp is that, as [US forest ecologist Glen Barry](#) puts it in his excellent piece on MAHB, the human population bomb has already burst.

Since 1900 human numbers have quadrupled. At the same time, our use of resources per person has increased tenfold compared with those that sustained our ancestors just four generations ago. Thus, humanity now uses and releases 40 times more stuff to live – unimaginably more – than we did in 1900.

As Paul Erhlich recently framed the issue: “The idea that we can just keep growing forever on a finite planet is imbecilic.” Yet our governments, businesses, banks, media and many individuals remain hypnotised by the mantra of eternal growth. Warning voices like those of Ehrlich, Pope Francis, David Suzuki, Jane Goodall, Richard Heinberg, Sylvia Earle and EO Wilson are still dismissed as nuisances whose intent is to disrupt the smooth business of plundering the Earth's natural resources and the worldwide release of contamination.

What the latest scientific data show, however, is that The Great Dying – as people are starting to call this era – applies not just to bees, birds, fish, plants and animals. It applies to we humans, too.

The Lancet Commission on Pollution and Health makes it plain that the polluting substances we release through all this ‘production’ are heavily implicated in a pandemic of premature death from cancers, lung disease, cardio-vascular and circulatory disease, diabetes, suicide and other disorders. To this can be added the toll taken by climate change, famine, military conflicts and social dislocation, which also reflect the wider decline of the Earth's life support systems.

Although it does not appear yet in any formal statistics, ecocide is becoming the predominant way by which humans, as individuals, meet their premature end in our hot, overcrowded world.

The question which, so far, few outside the specialised professions of science have dared to raise is whether all this can precipitate a global ecological decline so severe as to endanger human survival. Yet we already know the answer. In *Collapse* (2005), Jared Diamond posited that several civilizations have already met their end in such a way. Human extinction by ecocide is not unthinkable.

Indeed, the one thing that can assure such a fate is refusing to think about it – as most societies, governments, media and the global monetary system presently do. Walking out on the highway with your eyes tightly shut and ears blocked is no way to dodge the oncoming truck.

It follows that, if the human species is not to perish by ecocide, the absolute prerequisite is risk awareness. We need an informed society and an informed discussion about how best to prevent it.

As I argued in *Surviving the 21st Century*, one way to do this is develop a Human Survival Index, which takes accounts of all the main factors which imperil our future and represents them as an easy-to-understand number, so people can clearly see whether the risk is growing or receding.

Today, everyone with media access is informed about the weather forecast, the state of the stock market, price of houses or monetary exchange rates. Yet they are told nothing of any practical use to human survival.

It is time to amend this universal ignorance before it consumes us. My challenge to the scientists and academicians among us is this: help design a simple, practical Human Survival Index that will inform *Joe Average* just how close to the existential abyss we are...

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