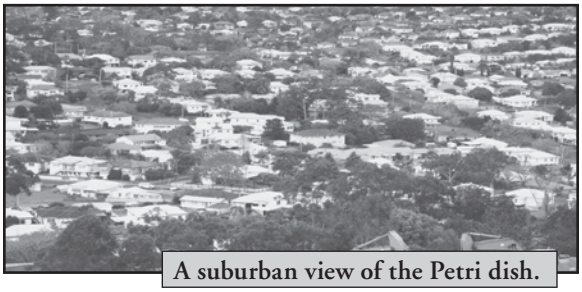
Living in The Petri Dish

by Kurt Talking Stone

As I am writing this, the Copenhagen Conference has already concluded and is widely considered a complete failure. Stymied by a resistant and sharply divided partisan Congress unwilling to pass any kind of climate legislation, President Obama came home with a just barely concealed public relations not-quite-a-disaster, no treaty and no binding agreements among the world's industrial nations.

As the designer of the *Wheel of the Year Calendar,* I am privileged to have a unique perspective in seeing "backstage" into the thoughts and ruminations of both the Board of Directors and the Editor of this publication. Over the years we have explored the subjects of Resource Depletion and Overshoot, Peak Oil, Sustainability and Climate Change, with the view of their relationship to our Earth Spirituality. When I compare the mind sets of thoughtful, observant people with the general public as reflected in the Main Stream Media, I sometimes wonder if we are living on the same planet.

Climate Change, the current buzzword for what used to be more properly known as Global Warming, has finally entered the public dialogue, but in the most confused and muddled way possible. The Science of Climatology has been virtually buried under an avalanche of propaganda, denials, junk science, disinformation and outright lies. The powerful and wealthy global establishment has chosen a steadfast strategy of denial, disinformation and obstruction. And it's no help that Climate Science is not straightforward. The complexity of Climate Science frightens even *Rocket Scientists*. But here is a critical concept worth sharing: "A few snow storms, cold snaps or even heat waves do not prove anything about climate change, because *there is a significant difference between weather and climate*. [my emphasis - KTS] Weather is what we experience on any given day or even over a couple weeks. Climate describes a region's prevailing conditions —including such things as temperature, rainfall, wind, humidity and atmospheric pressure —over long periods of time." Union of Concerned Scientists. <www.ucsusa.org>



A suburban view of the Petri dish.

Having read through the preceding articles, and a recent info piece in, curiously enough, *Rolling Stone*, (*As The World Burns*, and *The Climate Killers*, January 21, 2010) I am coming to the opinion, and fear, that humankind will be poorly motivated to take significant action on Climate, Resource Depletion and Sustainability until very tangible global crises are already upon us.

At a recent Stones Rising, I participated in a discussion on Global Trends where the analogy of the Petri Dish was raised. Most of us who recall our high school Biology remember the experiment where a bacterial colony is introduced to a growth medium and let free to reproduce. The colony will typically double in size every day or so, till the dish is full. At that point, there is a massive die-off, and the bacteria persists at about 10 percent of the previous population. This is an example of *exponential* growth, and is consistent with *all biological systems*. However if you ask someone, "if the dish is full at 30 days, on what day is the dish *half full?*" Most people will get it wrong, and say, "fifteen days" because people tend to think in *arithmetic* terms; exponential change simply blows our cro-magnon brains. The correct answer is, of course, "on the twenty-ninth day." This is very instructional when you consider human population and global overshoot. The *Earth* is a biological system, and *we live in the dish.* It might now very well be day 28 and eighteen hours.

We are already feeling the effects of environmental stresses, and our poor human response to them. Last year the American Corn crop was massively diverted to ethanol production, triggering worldwide food riots and spot shortages of other produce. Locally, I live in a suburb northwest of New York city where we are enduring a rancorous debate over the establishment of a pilot desalinization plant on the Hudson River. There are concerns over purifying PCBs and possible radio nucleotides from the nearby Indian Point nuclear power station. But the county continues to grow and *there is no other watershed available*. New Orleans now purifies and recycles their own *sewage*. Environmental activists work to close the Indian Point plant, offering no tenable suggestions for replacing the power it produces, nearly 30% of the NYC tri-state region's electricity.

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All of these issues are connected. Exponential human consumption of the world's resources drives us towards overshoot and global warming, especially in the developing world. Rising human populations drive resource depletion of every kind. The pressure to find, develop and burn every last scrap of fossil fuel on Earth is likely to grow ever more intense, at ever greater economic and environmental cost.

Considering human nature and history, there is a tendency for short sighted governments to solve problems with armies, and I am not certain we can act collectively to avert the impending crisis. What remains to be seen is whether humankind will raise its consciousness to bring about radical change in how we live within our limits. Or letting human nature take its course, will short sighted human ingenuity lead directly to the global crisis many of us already see on the not-so-distant horizon? Is human adaptability up to the challenge of such massive global change? So think about it. What skill sets do we need? What knowledge should we be cultivating? What *sacrifices* are we willing to make for our futures, for our children's futures, and for the Seven Generations down the road?