WHY HUMANKIND IS NOT LIVING SUSTAINABLY

"All my means are sane, my motives and my object mad"

Captain Ahab in *Moby Dick*

"We have involved ourselves in a colossal muddle, having blundered in the control of a delicate machine, the working of which we do not understand."

John Maynard Keynes (although written about the economy, these prophetic words apply equally well to the threats to the Biosphere)

"All my means are sane, my motives and my object mad" is a relevant statement of many goals of the 21st century human lifestyle that are damaging the Biosphere and keeping sustainable living at bay. Illustrative causes and needed responses follow.

(1) Biospheric natural resources are being consumed at a rate beyond regeneration, causing a dangerous ecological overshoot that began in 1987.

(2) The planet's oceans are being altered from mildly alkaline to acidic by the greenhouse gas carbon dioxide, for which anthropogenic emissions are still rising. Because solubility of carbon dioxide increases in cold water, the acidic condition may become corrosive in the Polar Regions if increased emissions continue.

(3) "Global climate change is a reality that is rendering the concept of 'background conditions' meaningless. We can no longer attempt to maintain the environmental status quo. What we can do is to attempt to maintain ecosystem services despite climate-driven environmental change" (Chapman 2012).

(4) Retaining ecosystem services, including regeneration of renewable resources, may require more work than reducing anthropogenic greenhouse gas emissions, and this situation occurs when the old adage "A stitch in time saves nine" is forgotten or ignored.

(5) The political system (in the United States) is sluggish in controlling anthropogenic greenhouse gas emissions and making a prompt transition to non-carbon (solar, wind, geothermal) energy sources.

(6) "... the global food demand is rising as many millions of people in developing countries acquire the means to eat rich diets. That alone would be expected to drive food prices higher, but ... calculations suggest that climate change will greatly compound the problem" (Gillis 2012). Surely food insecurity should be easily understood, even by persons without much environmental literacy. Humanity inhabits a finite planet with finite arable land, and global climate change is diminishing food and water security.

(7) Humanity is acting as if it has the remainder of the 21st century to do something substantive about global climate change, but persuasive evidence indicates this hope is unlikely to be correct (ScienceDaily 2012).

(8) Exponential human population growth is now a major crisis, but a very effective taboo quiets any discourse about it. Some people and organizations are even opposed to contraception to control population growth for ideological reasons. The daily population growth for the entire world is 230,970 persons per day (Population Reference Bureau 2012).

(9) Fragmenting ecosystems is reducing biodiversity and accelerating biotic impoverishment. For example, scattered remaining patches of ecosystems "... are not providing many important species the protection they need to survive" (Slivka 2012).

(10) Many of the world's forests have survived because they are on mountains unsuitable for either agriculture or development. However, this situation is changing: "... forests in the region [Los Alamos, New Mexico, USA] have not been regenerating after the vast wildfires that have been raging for the last decade and a half. ... Ecosystems are already resetting themselves in ways big and small, ... The challenge for managing these ecosystems is to help them adapt. Seeking to preserve existing systems is futile ..." (Rosner 2012).

(11) A major problem in public acceptance of reality is the false perception of "balance" in the United States news media. "From climate change to voter fraud, [the news media is] a reflection on 'false balance,' in which reporters are accused of giving equal credence to arguments on both sides of an issue regardless of the preponderance of evidence" (New York Times).

(12) The response to scientific evidence is much worse than most of us who believe in evidence and reason thought. "It is well known that when like-minded people get together, they tend to end up thinking a more extreme version of what they thought before they started to talk. . . . [a] kind of echo-chamber effect . . ." (Sunstein 2012). Although "people tend to dismiss information that would falsify their convictions . . . they may reconsider if the information comes from a source they cannot dismiss. People are most likely to find a source credible if they closely identify with it or begin in essential agreement with it" (Sunstein 2012).

In many cultures, science has been a credible source of information; however, in the United States, the merchants of doubt (Oreskes and Conway 2010) have been successful in casting doubt on scientific evidence and conclusions. Despite their small numbers, they have had a major impact because they were heavily funded and the news media typically gave them equal space and time with the scientists in the interest of "balance."

The present throw-away economy uses renewable resources at an unsustainable rate as evidenced by ecological overshoot. When humanity pushes economic growth, it is simultaneously deleting the future of its descendants and millions of other species that depend upon the present Biosphere.

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