

## ROUNDTABLE IN ETHICS

Rick Harvey

April 11, 2011

### A CHRISTIAN ETHIC OF ECOLOGY, Week 2: Supplement

#### **Reconsidering *An Inconvenient Truth***

Former Vice President Al Gore's Oscar winning documentary movie, *An Inconvenient Truth*, rocked the environmental and political world when it was released in 2006. Gore's chief objective in the film was to convince viewers that the earth was in immediate peril of catastrophic overheating due to humankind's introduction into the atmosphere of carbon dioxide (CO<sub>2</sub>). He further urged taking immediate dramatic steps worldwide to reduce the use of fossil fuels, which are the chief engine driving the increase of CO<sub>2</sub> in the earth's atmosphere. The viewer who is unacquainted with climate science can be easily swept away with Gore's personable and emotional presentation of apparently overwhelming evidence of anthropogenic global warming. However, revisiting the movie with more discernment and a foundational knowledge reveals that things are not as they appear. Here are twenty-five points to reconsider.

#### **1. The "Hockey Stick" graph**

The United Nations' International Panel on Climate Change (IPCC), foremost proponent of the anthropogenic (man caused) global warming theory, included in its 1998 report a graph from a study led by Michael Mann. "Due to collation errors, unjustifiable truncation or extrapolation of source data, obsolete data, geographical location errors, incorrect calculation of principal components,"<sup>1</sup> and other errors, Mann's study erased earlier climate fluctuations from climate history. This left the "hockey stick" effect apparent in the graph used by Al Gore in *An Inconvenient Truth*, and distorted the strength of present warming in comparison to past history. The so-called hockey stick graph, which Gore dramatized in his movie by riding up in an electric lift, has since been thoroughly discredited and is no longer used by the IPCC.

#### **2. A cavalier dismissal of the Medieval Warming**

Al Gore cavalierly dismissed the Medieval Warming period (or Medieval Climate Optimum, 900-1300 A. D.) as insignificant to the discussion. The Medieval Warming was, in fact, a dramatic four hundred year warming period that enhanced harvests, improved living conditions, and enabled a dramatic increase in the world's population. Average global

temperatures during the Medieval Warming exceeded what we've seen in the last 150 years.

#### **3. "There is no controversy."**

Al Gore's assertion that there is no controversy around the anthropogenic theory of global warming is simply false. Thousands of scientists have gone on record as questioning the theory. Naomi Oreskes' survey of articles, to which Gore anonymously refers to promote his consensus argument, has been shown to be fatally flawed. But more importantly, it must be acknowledged that *consensus* is a political term, not a scientific one. It has meaning in the caucus room, but not in the laboratory. There was a very strong consensus in the days of Galileo, but Galileo was still right in spite of it. Science is not a democratic undertaking.

#### **4. "This is a moral issue." "Deeply ethical."**

Gore's assertion that the reduction of CO<sub>2</sub> emissions is a "deeply ethical" issue is right, but in the opposite way he imagines. Radical mandated reductions in CO<sub>2</sub> will have a devastating effect on the poor and hungry of our world, and will actually increase life threatening household air pollution and rampant deforestation in the impoverished regions of the world.

### **5. Heat waves will kill masses of people.**

This claim is based on Gore's assumption that the world will overheat. But the IPCC has been systematically dialing back estimates of temperature increases expected in this century. Further, Gore's dire warning ignores the fact that more people die each year from cold rather than heat. Hence the moderate global warming we've seen in the last 150 years (since the Little Ice Age) is actually saving lives. Additionally, advancing technology and increasing wealth attributable to plentiful low cost energy mitigate hot weather mortality.

### **6. Ten hottest years ever measured have occurred in the last 14 years**

Though technically true, this is a highly misleading statement. "Ever measured" means from 1880, when temperatures began to be instrumentally measured on a worldwide basis. Hence all measurements to which he refers have occurred since just after the end of the Little Ice Age (app. 1850) and the commencing of the Modern Warming. Since we may still be in the ramp up stage of the Modern Warming we may experience temperatures to continue rising moderately for years. Recent peer reviewed proxy data, however, reveals that temperatures a full 1° C warmer were reached during the Medieval Warming (see #2). So modern temperatures, though not seen in hundreds of years, are not out of line with the 1500 year climate cycle.

### **7. Confidence in long-range predictions of computer models.**

Anyone who has counted on a seven day weather forecast based on computer models knows how precarious even short-range climate prediction is. Climate models are marvelous computer programs, but they have a very long way to go before they can be counted on to reliably predict long-range climate change. Due to the fact that climate acts as a chaotic nonlinear fluid dynamic system, it may never lend itself to long-range predictions.

### **8. Stronger storms.**

There is no convincing evidence that we are experiencing any unusually stronger weather patterns or storms in the last fifty years than at any other time in history.

### **9. Higher insurance liabilities are a result of global warming.**

Gore's claim that higher insurance payouts are evidence of stronger storms is disingenuous. It is well known that higher liabilities are chiefly the result of more expensive property and more structures being built in vulnerable areas such as hurricane zones.

### **10. Climate pattern has been pretty much the same on the earth since the last Ice Age 11,000 years ago.**

Gore chooses to ignore the voluminous evidence of the 1500 year climate cycle, in which the earth's climate, world-wide, has been shown to fluctuate between cold and warm every 1500 years ( $\pm 500$  yrs) for thousands of years. The cause of this cycle is currently unknown, but data suggest a possible relationship to solar activity.

### **11. Ice cap has diminished 40% in the last 40 years**

In fact, the ice cap is melting around the perimeter for a variety of reasons, including ocean currents. Nevertheless, the ice cap itself is increasing in depth due to increased precipitation over the polar regions as a result of that very same warming. Overall the ice cap is growing, not diminishing.

### **12. Predicted shutdown of the Atlantic Conveyor**

The shutdown of the Atlantic Conveyor, as is believed to have occurred prior to the last Ice Age, is impossible today because the earth has only a tiny fraction of the ice required to melt in order to cause such a shutdown. Furthermore, recent warming has actually contributed to a rapid and systematic increase in deep Atlantic currents.

**13. A 5° increase at the “low end” of projections**

Actually, the IPCC’s own projections are now in the range of 2.2° C by 2100, and those are based on what it admits are high projections. Further, those estimates are based on trends seen in surface instruments that are compromised by urban heat islands. Satellite and balloon measurements indicate a trend resulting in less than 1° C by 2100.

**14. Millions of ecological niches threatened**

There is simply no field data to support the wildly exaggerated claims of species extinction made by many environmentalists. In fact there is not a single case of a proven extinction attributable to global warming. (With the possible, but unlikely, exception of the Golden Toad of Costa Rica.)

**15. Bleaching of the coral reefs**

Bleaching (ejection of single celled algae) of coral reefs has been shown to be an adaptive mechanism which coral uses to accommodate changes in water temperature. It is a normal process that can occur almost immediately when ocean temperatures fluctuate, as they often do, by a few degrees within just a few hours or days. The coral may then select new varieties of algae suitable for the altered conditions. By this mechanism coral has managed to survive thousands of years of what is often dramatic ocean temperature fluctuations.

**16. Species loss is occurring at 1000 times greater than the background rate.**

Gore simply doesn’t have the data to support his claim that species loss is occurring at such a rate. Actual field research commissioned by the International Union for the Conservation of Nature (IUCN) puts the rate of species loss at a small fraction of such claims. In the resulting book from that study the authors state: “Known extinction rates [worldwide] are very low. ...[for mammals and birds] the current rate of extinction is about one species per year.”

**17. Antarctic Peninsula is melting.**

Well, yes, this thin finger of land reaching north toward Argentina, and comprising 3% of Antarctica is warming. But the main body of Antarctica is actually growing colder (in direct contrast to anthropogenic warming theory) and the snow falling on the ice cap from increased moisture resulting from warming oceans is deepening the ice cap.

**18. Greenland Ice Cap is melting.**

The IPCC itself now says that the Greenland Ice Cap is in no danger of melting for thousands of years.

**19. Population increase (mostly in the poorer nations) is responsible for our civilization’s clash w/the earth**

Population increase exacerbates problems of pollution, deforestation, etc., but it is not “responsible” (i. e., the cause). Specifically, Gore is referring to global warming, and there is no provable link of global warming to human activity such as CO<sub>2</sub> emissions. There was actually a much faster rising of temperatures prior to 1940 than since, before the dramatic increase of CO<sub>2</sub> we saw in the second half of the century. The unstated implication that dramatic population control measures are called for is baseless.

**20. Scientific and technological revolution is also responsible for our civilization’s clash w/ the earth**

This is only half the story. The Environmental Transition predicts that early in economic development there will be a significant negative impact on the environment of a developing region. But at a certain point, as technology continues to improve, and as people’s wealth and standard of living improves, they are then freed to concentrate on using new technologies to reduce environmental impact. This accounts for the fact that American cities are cleaner today than forty years ago.

**21. The U. S. is responsible for 1/3 of global warming**

Apparently by this he means that *all* global warming is anthropogenic, and that the U. S. is

responsible for 1/3 of the CO<sub>2</sub> that causes it. The problem is, he has no way to establish what the cause of our present, moderate, global warming is. We are presently coming out of the Little Ice Age (1300-1850) and are likely to experience a period of moderate warmth for the next few hundred years.

## 22. We already know everything we need to know (to save the planet from global warming)

Climate science is actually relatively young and is just beginning to learn what it needs to know. Computer climate models, while impressive pieces of human engineering, remain highly speculative, with a large amount of guessing being fed into them. We do not know what causes the 1500 year climate cycle. On the abatement side, at this time we have no viable alternate source of reliable, inexpensive, plentiful energy to replace fossil fuels. We don't know how to make the shift to alternate energy without drastic cost in human lives and well-being.

## 23. Ignoring the benefits of global warming and increased levels of CO<sub>2</sub>.

Gore's alarmist manifesto conveniently ignores a host of benefits from both moderate global warming (such as we are seeing) and from increased CO<sub>2</sub> in the atmosphere. For example, global warming literally saves lives as more people die from cold weather than warm weather. A warming globe expands the regions available for farming and extends the growing season, making food more plentiful and less expensive. Increased CO<sub>2</sub> in the atmosphere is literally a fertilizer to all kinds of plants, including crops and forests.

## 24. Alarming predictions of rising sea levels

Gore issues dire warnings, accompanied with startling graphics, of possible catastrophic sea level rise on the order of twenty to forty feet. The fact is that, notwithstanding anecdotal reports of the islands of Tuvalu and Kiribati being flooded by rising sea levels, measurements around the South Pacific indicate slight or nonexistent sea level rise over the last thirty

years. Satellite measurements actually show a four inch *drop* in sea level at Tuvalu in the last decade. The most probable sea level rise by 2100 is 10 to 15 cm (4 to 6 inches). This is a rate to which humankind can easily adapt, as it has done repeatedly throughout history when sea levels have fallen and risen.

## 25. Mark Twain and what we know for sure

At one point in his movie, Gore quotes Mark Twain: "What gets us into trouble is not what we don't know, it's what we know for sure that just ain't so." Much of what Al Gore "knows for sure" apparently just ain't so. Unfortunately it will not only get him into trouble, but millions of others as well.

### SOURCES (Recommended reading):

*An Inconvenient Truth*, produced by Lawrence Bender and Scott Z. Burns, 2006

*A Renewed Call To Truth, Prudence, and Protection of the Poor*, Cornwall Alliance, <http://www.cornwallalliance.org/docs/a-renewed-call-to-truth-prudence-and-protection-of-the-poor.pdf> (accessed Apr. 2011)

*Environmental Stewardship in the Judeo-Christian Tradition*, Acton Institute, (Grand Rapids, MI.) 2007,

*Unstoppable Global Warming*, S. Fred Singer and Dennis T. Avery, Rowman & Littlefield Pub. Inc., (New York) 2007

*2010 Antarctica Peer-Reviewed Research: Ice Core Data Confirms Medieval Period Warmer Than Present*, C3 Headlines, <http://www.c3headlines.com/2010/06/2010-antarctica-peerreviewed-research-ice-core-data-confirms-medieval-period-warmer-than-present.html> (accessed Apr. 2011)

<sup>1</sup> S. McIntyre and R. McKittrick, "Corrections to Mann, et. al., "Proxy Data Base and Northern Hemispheric Average Temperature Series, 1998," *Energy and Environment* 14 (2003) 151-71. Cited by S. Fred Singer and Dennis T. Avery, *Unstoppable Global Warming*, Rowman & Littlefield Pub. Inc., New York, 2007. p. 130