

The Franklin Institute Philadelphia - Our Changing Earth Exhibit

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The Franklin Institute in Philadelphia is a large and well known museum with an emphasis on science.



The Franklin Institute Philadelphia

The institute's *Changing Earth* exhibit pushes alarmist environmental buttons, not just on global warming and energy, but on other issues too, such as water and land use.

The irresponsible suggestion that the polar ice caps will melt and flood lower lying regions might scare children. The exhibit is reminiscent of the movie Planet of the Apes.



A tourist shop Statue of Liberty is flooded to varying heights depending on which polar ice cap melt button is pushed. The real Statue of Liberty is 305 feet tall. The exhibit evokes Planet of the Apes (below).



That the polar ice caps will melt and substantially raise sea level is a hypothetical catastrophe that would require thousands or tens of thousands of years. There is no credible evidence that any such thing is underway. The opposite, falling sea level, is more likely. Probably, in 10,000 years or so, a new ice age, driven by astronomical cycles, will lower sea levels.

The Intergovernmental Panel on Climate Change (IPCC) does not give a prediction as to how much the ice caps will melt. The IPCC is an organizations that has propensity to make doomsday predictions based on weak evidence, thus one can conclude that there is not even weak evidence for ice cap melting. (The IPCC does predict a small rise in sea level due to ocean warming and expansion. In recent years the oceans have not been warming.)

The polar ice caps are stable. Each year new ice is formed from falling snow. An approximately equal amount of ice exits the caps via glaciers flowing into the ocean or ice melting on the edges of the cap. The ice slowly flows over hundreds of years from the center of the ice cap toward the edges. Accurate satellite measurements of the volume of ice have only become available during the last 20 years. These measurements show small losses of ice in greenland amounting to about 1/10,000 of the ice cap per year. Probably ice was lost even faster during the 1920's and 1930's when Greenland was warmer than recently. It is not even clear that the ice caps will shrink if it gets warmer, because warmth increases melting and ice flow but it also increases snowfall that compensates for ice lost at the edges of the ice cap. It is unreasonable to extrapolate present small trends far into the future.

It is true that if the ice caps in Greenland and Antarctica vanished there would be a considerable increase in sea level. But this cannot happen in 1000 years and it is very unlikely to happen in 10,000 years, or even in 100,000 years. So what is the purpose of this exhibit? Sensationalistic propaganda? What about the American Association of Museums code of ethics that says:

programs are founded on scholarship and marked by intellectual integrity

In Britain an important museum decided to stop being a propaganda mill and adopt an ethical policy. It was reported in the British **London Times** on March 24, 2010 that the London Museum revised what had been a one sided exhibition:

The decision by the 100-year-old London museum reveals how deeply scientific institutions have been shaken by the public's reaction to revelations of malpractice by climate scientists.

The museum is abandoning its previous practice of trying to persuade visitors of the dangers of global warming. It is instead adopting a neutral

position, acknowledging that there are legitimate doubts about the impact of man-made emissions on the climate.

The Franklin Institute should follow the London Museum's example.

Next, what does the following mean in the Franklin Institute exhibit?

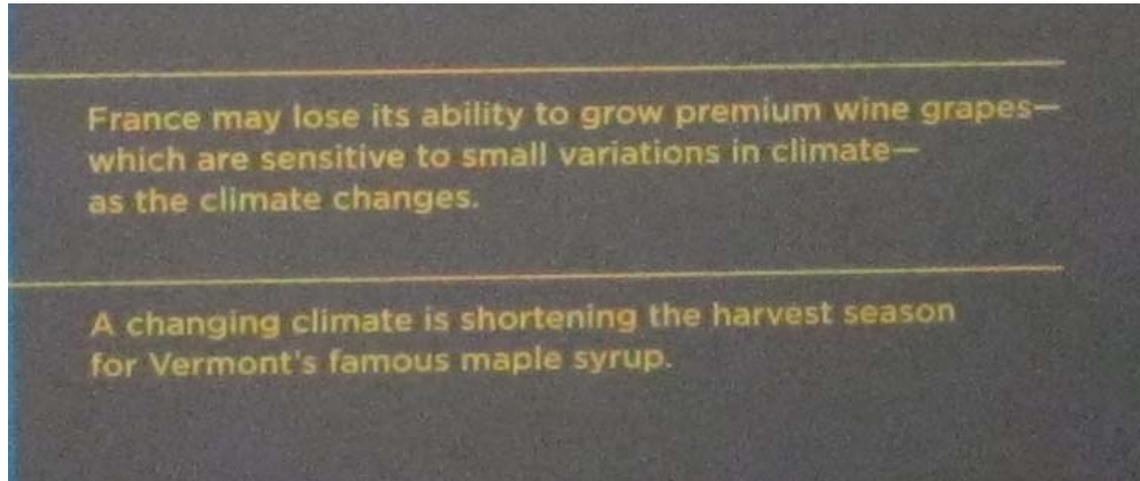
OUR ATMOSPHERE AND OUR CLIMATE CAN CHANGE— AND CHANGE OUR LIVES

A 10,000-year stretch of stable climate gave humans a chance to settle and invent agriculture. But Earth's climate hasn't always been so steady. In the past, the planet has plunged into ice ages, then warmed enough for lush forests to grow toward the poles. Oceans have flooded the land, then retreated.

Now our climate is changing again, and this change will challenge our civilization. It's already affecting where we grow foods. The future will bring more changes and disruptions to anything that depends on our current climate.

The message is vague but menacing. It asserts that we've had 10,000 years of stable climate. Stable compared to what? Certainly during the last 10,000 years there have been times when it has been both colder and warmer than now. It asserts that changing climate has affected where we grow our foods. Where and how? It is well known that the productivity of agriculture has greatly improved during the last 100 years. Is this anything but green alarmism?

The following claims made by the Franklin Institute are amusing when compared with other environmentalist claims. It seems that, like WalMart, greens localize their product mix for different parts of the country. The Philadelphia exhibit says:



The Environmental Defense Fund in a paper "Global Warming and the Golden State A Call to Action" suggested that premium wine production in the Napa Valley, California (rather than France) would be hurt by global warming. This is what they said:

Scientists predict that global warming will bring higher temperatures, more heat waves and less precipitation— changes that could transform the state's \$15 billion dollar wine industry.

... Etude Wines, for example, is known for its pinot noir—a notoriously difficult-to-grow varietal made famous by the movie "Sideways..."

At the Field Museum in Chicago a climate change exhibit suggested that maple syrup production in Illinois (instead of Vermont) would be affected by global warming. This is what they said in Chicago:

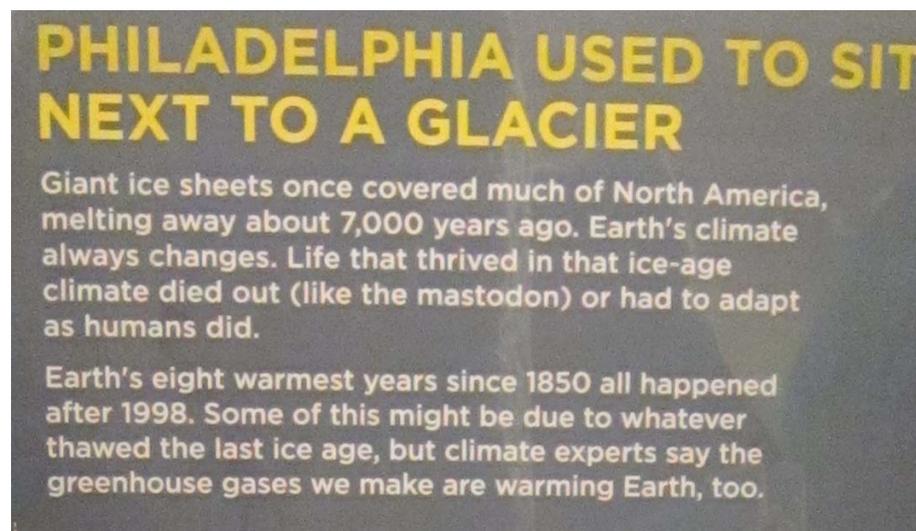
Goodbye to maple syrup-- since Illinois sugar maples are disappearing?

Apparently in California Napa wine is popular, while in Philadelphia French wine is popular. Evidently in Chicago they use Illinois maple syrup and in Philadelphia they favor Vermont maple syrup. Notice that expensive products, premium wine and maple syrup, are showcased rather than mundane products like spaghetti or hamburger. This says something about the audience the green movement is trying to reach.

An apologist for these sort of goings on would probably say that maple syrup is dying out every place and that all wine regions will be affected. But if it is getting too warm for wine in Napa and France perhaps wine production will move north to Oregon and

Britain. The misfortune of Napa and France will turn into good fortune for Oregon and Britain. Do we have a responsibility to expend trillions of dollars for global warming mitigation to supposedly protect the French against misfortune and the British against good fortune? Why should we deny the farmers of Oregon, eking out a living with hops and colder weather crops, the good fortune of getting rich on premium wine grapes? You don't have to be an expert on viticulture to doubt the end of Napa wine story. Wine grapes are grown in places like the central valley of California where summer temperatures are as much as 15 degrees Fahrenheit higher than in Napa. This is a much bigger temperature increase than is predicted by the most wild eyed advocates of global warming..

The following presentation is misleading:

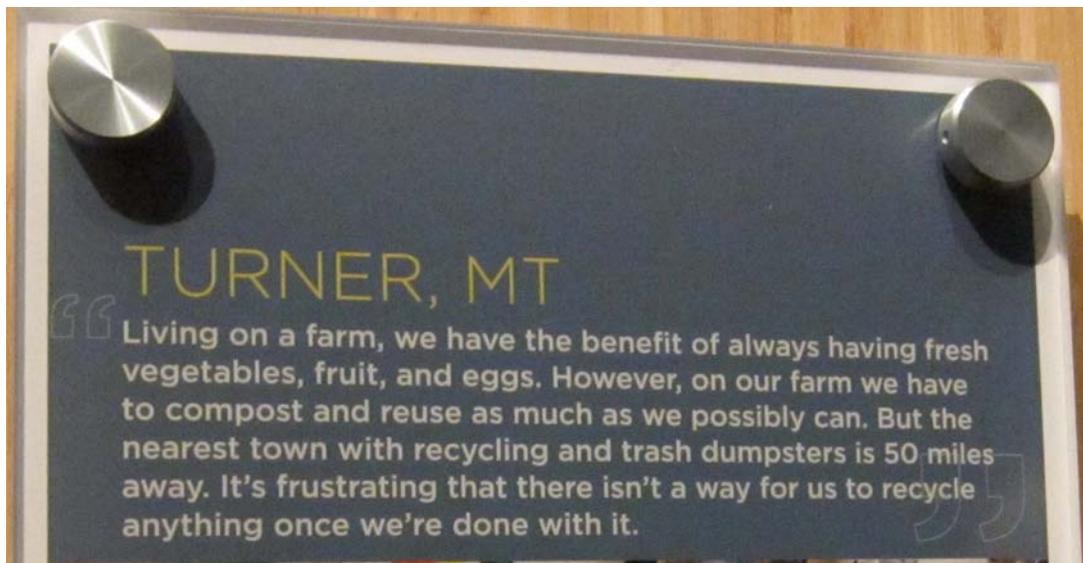


The end of the ice age is usually dated at about 12,000 years ago, not 7,000 years. 7,000 years ago was a period know as the *Holocene Optimum*, a period when it was considerably warmer than now. The reason for the extinction of the Mastodons is not known for sure, but it is unlikely to have been an issue with climate since they survived for millions of years in various climates. The most plausible theory is that they were hunted to extinction by the Indians that arrived in North America shortly before the Mastodons went extinct.

Did the 8 warmest years since 1850 happen after 1998? Perhaps, but probably it was hotter than now 900 years ago or 7000 years ago. We know it was very cold 300 years ago, a period known as the *little ice age* and rising temperatures of the last 200 years reflect the warming subsequent to that very cold period. The 8 warmest year claim is not terribly significant even if it is true because it is the natural consequence of the ending of the little ice age. In the United States the hottest year may have been 1934. The surface temperature records before 1970 are based on incomplete data derived from varying measurement techniques. This "dirty" data has been highly adjusted and there is a suspicion that the adjustments are wrong, or even that the data has been manipulated.

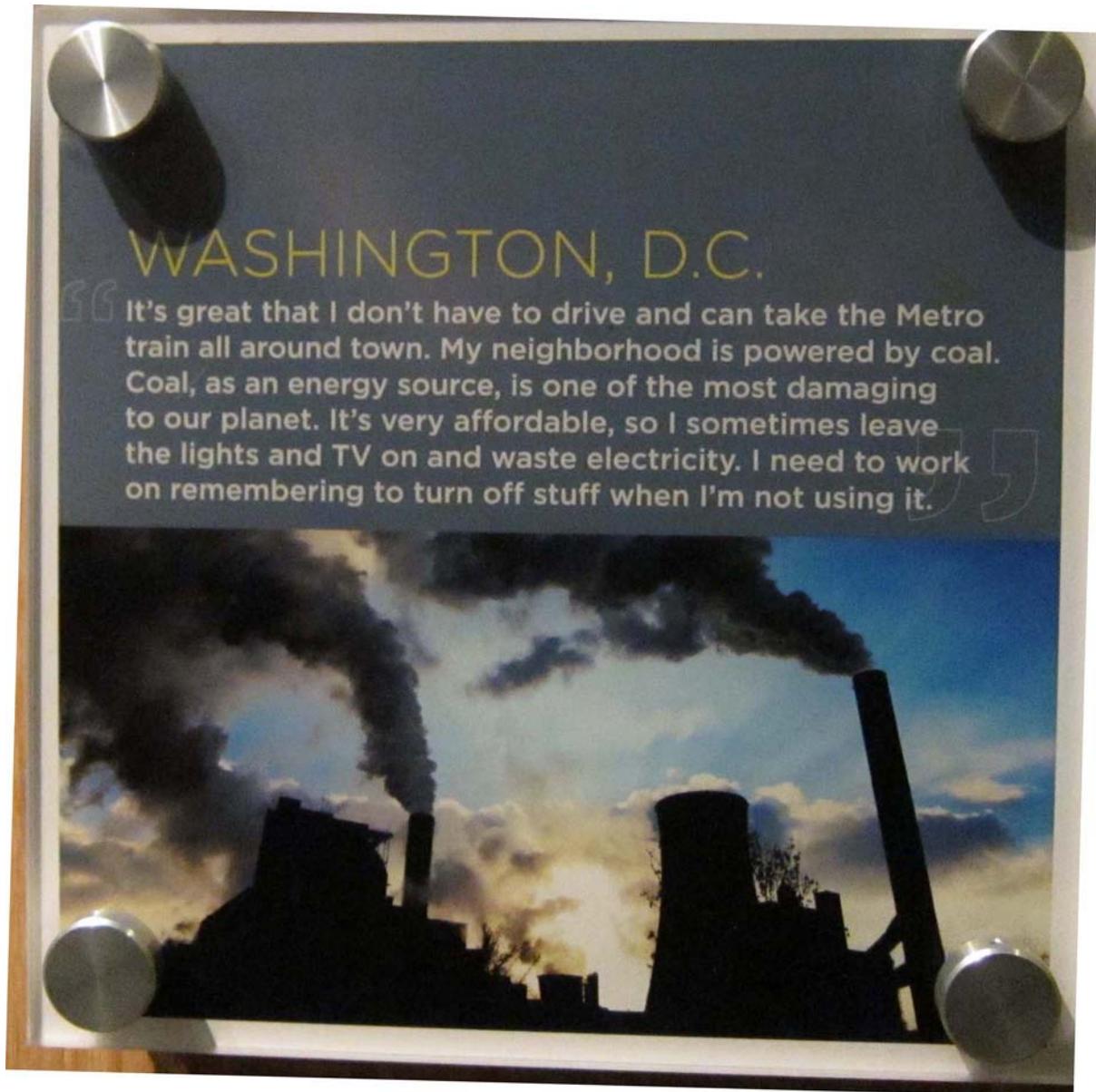
There is considerable evidence that the surface temperatures have a warming bias from the “urban heat island effect.” This happens when cities grow up around temperature measurement stations. Satellite temperature measurements show that the rising temperature trend that started in 1970 stopped around 1998 and since we have had 12 years of relatively stable temperature. It is hard for the global warming advocates to make a convincing case that the temperature rise since 1970 is due to greenhouse gases because a similar rise occurred from 1910 to 1940 when greenhouse gases were not present in large quantities and to this day no one has a good explanation for the 1910-1940 warming. In short, climate reality is a lot more complicated than the slogans and sound bites used by the advocates of global warming.

The following plaque shows a certain disconnect with agricultural reality



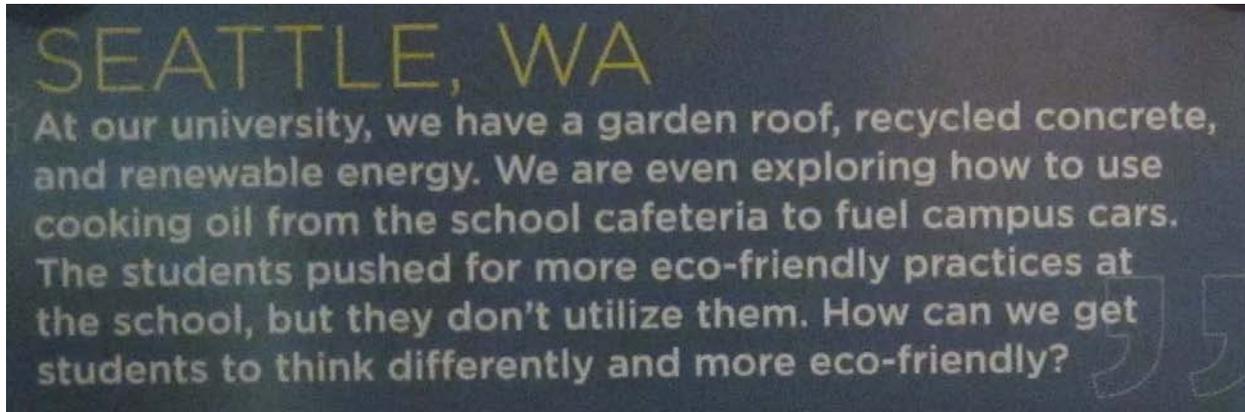
Turner, Montana is on the northern plains near the Canadian border. If they “always” have fresh vegetables and fruit they are probably getting them at the grocery store because the season would be short. Where do they get the containers and trash that they can’t recycle? Presumably at the grocery store in the town 50 miles away. So, they could recycle when they go to town. You have to wonder if the curators aren’t just making this stuff up.

Another misleading plaque:



The photo illustrates a traditional environmental photography trick: take a backlit picture of harmless steam coming out of a smokestack to make it look like black smoke. Is coal damaging to our planet? If we cut through the clutter environmentalists think that *humanity* is damaging to the planet. Environmentalists hate coal, a fuel that we possess in nearly unlimited quantities and that costs far less than the main alternative, natural gas.

This plaque asks how students at a college can be encouraged to engage in correct thinking:



What exactly are the environmental benefits of a garden roof? It costs more and uses water. Renewable energy, such as from windmills and solar energy, is far more expensive and, due to its intermittent nature, is not a practicable solutions for providing the nation's energy.

World consumption of edible oils is about 130 million tons per year while world consumption of petroleum is about 20 times as much. So used cooking oil, the small portion of edible oil not eaten, is not going to replace petroleum. Besides, people need to eat.

Perhaps it would be better if the students were encouraged to "think clearly" rather than to "think differently."

Conclusion

As a teenager I lived near Philadelphia and I visited the Franklin Institute many times. It is sad to see a great educational institution become an outlet for thoughtless propaganda.

The exhibit is very weak on science and strong on emotion. There is no effort to present both sides of controversial issues. Global warming is speculative science. The advocates of global warming theories prefer to present only their side of the argument.

Nothing is said about the tragic mistakes of the environmental movement. For example the banning of DDT that led to millions of deaths from Malaria. That ban has since been reversed by the World Health Organization. Non solutions like grid electricity from wind and solar, or cars powered by cooking oil are given credibility without considering the alternatives and costs.

More information: <http://www.climateviews.com>