

The Week That Was: 2015-08-01 (August 1, 2015)
Brought to You by SEPP (www.SEPP.org)
The Science and Environmental Policy Project

#####

Brief TWTW This Week

This TWTW is very brief. It focuses on two recent articles by S. Fred Singer of scientific importance: 1) Editor of Science Magazine Should Resign!; and 2) A Paradigm Change: Redirecting public concern from Global Warming to Global Cooling. The normal TWTW will resume next week.

We are at the 33rd Annual Meeting of the Doctors for Disaster Preparedness titled: “Myths, Superstitions, and Real Threats Confronting America.” Fred Singer discussed the threat of a new cold period. Ken Haapala discussed the *National Climate Assessment*.

#####

ARTICLES:

Please note that articles not linked easily or summarized here are reproduced in the Articles Section of the full TWTW that can be found on the web site under the date of the TWTW.

1. Editor of Science Magazine Should Resign!

By S. Fred Singer, American Thinker, Jul 28, 2015

http://www.americanthinker.com/articles/2015/07/editor_of_emscienceem_magazine_should_resign.html

The 3 July 2015 issue of Science features a remarkable editorial by Editor Marcia McNutt. Titled “The beyond-two-degree inferno,” it suggests that an anthropogenic greenhouse (GH) warming of more than 2 degrees C (global average) will literally cause hell on earth, unless we can all agree to reduce emissions of the “infernal” GH-gas carbon dioxide – preferably before or at a UN-sponsored mega-confab in Paris in December. This much-hyped event, to be attended by nearly 200 national delegations and thousands of hangers-on, has even been endorsed in a papal encyclical, referred to, somewhat irreverently, as a “Pope-sicle” by my Virginia colleague Dr Charles Battig.

McNutt’s editorial claims a “global threat to food supplies, health, ecosystem services, and the general viability of the planet.” Yet none of these threats are supported by any scientific evidence -- even from the usually alarmist UN-IPCC. She fails to remind us that atmospheric CO₂ is the essential ingredient for sustaining carbon-based life on Earth. The low CO₂ levels during the recent ice age severely limited the rate of photosynthesis; at slightly lower levels, we and almost all living things on the Earth’s surface would just starve and die. And she takes for granted that rising CO₂ will cause significant Global Warming (GW), with all the usual calamities that are recited by climate alarmists -- in spite of overwhelming evidence for absence of 21st-century warming.

As geologist Dudley Hughes wrote in May 2007 in Environment & Climate News, “[L]ittle publicity is given to the large number of qualified scientists who...contend that if CO₂ plays any part in global warming, it is so insignificant that it can barely be measured, let alone be the major cause.” And: “[T]he claim that increased carbon dioxide is causing ‘global warming’ ... has no more scientific foundation than the bloodletting of past generations.”

His words are backed by the five reports (in English) of the independent NIPCC (Nongovernmental International Panel on Climate Change), issued since 2008 and based on many thousands of references collected from peer-reviewed journals by nearly 100 well-qualified climate scientists; they included many papers ignored by the IPCC. The brief Overview-NIPCC volume of 2008 was translated into several European languages; the Chinese Academy of Sciences translated and published a substantial NIPCC summary volume in 2013.

But McNutt is not interested in listening to contrary evidence. “The time for debate has ended. Action is urgently needed.” What a strange position to take for the editor of a leading and (formerly) respected international science journal! She should resign her job and allow someone else to take her place -- someone who recognizes that debate is essential for scientific progress.

Maybe McNutt really believes that GW has never really paused and that reducing CO2 levels can make a noticeable difference. That could happen only if she reads the evidence selectively and rejects all evidence to the contrary. Or maybe she is cynically playing along with current White House policy, even though it is completely uninformed and misguided, in the hope it will benefit Science mag and herself.

Yet another possibility is that she is naïve enough to believe that the world’s nations are actually worried about a small amount of climate warming; in reality, the game is about money and political power. She seems oblivious to the fact that China snookered Obama in their November 2014 climate agreement; but she seems really disturbed about India’s plans, and insensitive to that nation’s desperate need for reliable, secure, and low-cost electric power: “Unfortunately, [energy minister] Piyush Goyal ... intends to double his nation’s coal production by the year 2019 to meet domestic energy requirements.” India’s CO2 emissions will soon match China’s and, together, will make irrelevant any emission reductions by the rest of the world; after all, it’s the global CO2 level that counts. Could someone please explain this to McNutt?

As for myself, I have decided to drop my subscription to Science and my AAAS membership; Science is the flagship journal of the American Association for the Advancement of Science. I guess I will continue as an elected AAAS Fellow; but I am no longer proud of that distinction. I suppose, also, that any future contribution to Science – even a Letter or a Technical Comment -- will not be welcome as long as McNutt or someone of her persuasion continues as editor.

Has the global warming pause really ended?

The pernicious influence of Editor McNutt’s ideology-driven science can be easily recognized in the promotion given to a fairly routine scientific paper by NOAA climatologist Thomas Karl and coauthors; however, it has very important policy implications. After making certain controversial adjustments to the surface temperature record, the authors concluded that there had been no GW pause (a.k.a. hiatus or plateau), which many researchers had rather reluctantly accepted, but that there had actually been a continuing warming trend during all of the 21st century. Their paper was published in Science-Express on June 4, with a lot of the publicity usually reserved for major discoveries.

It was finally printed in the 26June issue of Science; the comments published in Science blog were almost uniformly negative, and questioned the authors’ motives rather than the technical details of their data adjustment. This is wrong, of course; with the 3July editorial at hand, such comments might have been better addressed to the Editor.

The several NIPCC reports can be accessed free of charge at www.NIPCCreport.org. IPCC reports are available at www.ipcc.de. A critique of the latest IPCC science report was issued as a Policy Brief in Oct 2013 and can be accessed at http://heartland.org/sites/default/files/critique_of_ipcc_spm.pdf

My initial reaction (of 4June) to the Karl paper in Science-Express is seen at http://www.americanthinker.com/articles/2015/07/editor_of_emscienceem_magazine_should_resign.html. Independent comments from the Science blog were reprinted at http://www.americanthinker.com/blog/2015/07/commenters_excortiate_a_emscienceem_paper_that_denies_global_warming_pause.html. Technical papers questioning the Karl conclusions are forthcoming -- but may not be published in Science; one would want to look at other scientific journals.

To sum up: The GW plateau appears to be ongoing -- and is as yet unexplained. We don't know if or when it will end. Climate sensitivity of CO₂ seems to be much lower than any of the IPCC models predict -- perhaps even close to zero. Thus, any policies based on GH models can be junked; fossil fuels are not the cause of climate change. So much for McNutt's policy prescription that "...every person need [sic] to ... reduce carbon pollution [sic] by ...adopting alternative energy technologies, ...and capturing CO₂ at the source."

The two-degree limit is a political invention

The 2deg limit has nothing to do with science -- and, in any case, is unlikely to be exceeded, or even reached, as things look now. As recounted in American Thinker, the 2deg limit was invented in Sweden as a pure guess -- without any "evidence" from climate models that there might be some kind of discontinuity when global temperature (however it may be calculated) reaches the 2deg level.

However, the 2deg limit was widely adopted by politicians and became enshrined in folklore, when it was realized that it satisfied the "Goldilocks" principle -- not too little or too large, but just right for political action against CO₂, fossil fuels, low-cost and secure energy -- and the economic growth all this made possible.

Consider: A limit set at 0.5deg will be dismissed with "We've already seen this -- and nothing happened." A limit at, say, 5deg may elicit a different kind of response: "It won't happen soon -- at least, not in my lifetime." In fact, the whole concept of a global average is very vague; GH models tell us that warming will concentrate at high latitudes at night. So, Siberian winter nights might warm from minus 40deg all the way to minus 35deg. Is that bad?

Many economists have concluded that even a 3deg warming might on the whole be beneficial, even at the lower US latitudes, largely because of gains by the agricultural sector: longer growing seasons and fewer frosts, more rain, but mostly increased fertilization from higher atmospheric CO₂ levels.

Ice ages are the real threat to mankind

The most recent glaciation covered much of the northern hemisphere with miles-thick ice and wiped out the Neanderthals; its sudden end about 12,000 years ago led into the present warm

interglacial period, which we call the Holocene. According to the Milankovitch astronomical calculations, the next glaciation is “just around the corner” -- or at least a millennium or so away.

But even a “little” ice age, like one that ended only 200 years ago, would be extremely damaging to our civilization. Crop failures worldwide would lead to famines, disease, and many deaths. The December gabfest in Paris should be concerned about near-future cooling -- not warming. And so should Editor McNutt.

She should be soliciting research papers that explore adaptation to an extended cool period, and ways its harmful effects can be overcome or lessened. Time to prepare may be short.

2. A Paradigm Change: Re-directing public concern from Global Warming to Global Cooling

By S. Fred Singer, American Thinker, Jul 31, 2015

http://www.americanthinker.com/articles/2015/07/a_paradigm_change_redirecting_public_concern_from_global_warming_to_global_cooling.html

I want to change public concern from Global (GW) to Global Cooling (GC). Presented here are three arguments in favor of such a drastic shift -- which involves also a drastic shift in current policies, such as mitigation of the greenhouse (GH) gas carbon dioxide.

My main argument relies on the fact, backed by historical evidence, that cooling, even on a regional or local scale, is much more damaging than warming. The key threat is to agriculture, leading to failure of harvests, followed by famine, starvation, disease, and mass deaths.

Also, GC is reasonably sure, while GW is iffy. The evidence, again, is historical -- from deep-sea sediment cores and ice cores. Our planet has experienced some 17 (Milankovitch-style) glaciations in the past 2 million years, each typically lasting 100,000 years, interrupted by warm inter-glacials, typically of around 10,000-yr duration. The most recent glaciation ended rather suddenly about 12,000 years ago. We are now in the warm Holocene, which is expected to end soon.

In fact, we may have already entered into the next glaciation -- as we can discover only in retrospect. (Past cycles suggest a very gradual cooling initially -- with ice accumulation and a drop in global sea levels, a decrease in atmospheric CO₂ into the cooling oceans and lowest temperatures occurring only much later in the cycle.)

Archeological data show that the recent glaciation wiped out the Neanderthals and much of the fauna that constituted their source of food. Most of humanity may not survive the next, inevitable glaciation.

We need to consider also the warming-cooling (Dansgaard-Oeschger-Bond -- DOB) cycles, which seem to be solar-controlled and have a period of approx 1000-1500 years; its most recent cooling phase, the “Little Ice Age” (LIA), ended about 200 years ago. For details, see Unstoppable Global Warming: Every 1500 Years by Singer and Avery [2007].

The LIAs are not nearly as severe as the major glaciations; yet they present an important threat to the food supply and to current civilization. Available technology seems adequate to assure human survival -- at least in industrialized nations. The main threat is warfare, driven by competition for

food and other essential resources. With nuclear weapons and delivery systems widely dispersed, the outcome of future wars is difficult to predict.

Geo-Engineering: Overcoming a Future Ice Age

In a word: the possibility of using technology to overcome a future cooling looks promising for both types of ice ages -- with relatively low cost and low risk to the physical and biological environment.

Geo-Engineering has generally been discussed in relation to GW -- most recently in two reports issued by the US National Academy of Sciences-National Research Council. The schemes most favored include either reduction of solar intensity (by increasing Earth's albedo (the fraction of solar energy reflected back into space) or reduction of the atmospheric level of carbon dioxide (under the unproven assumption that the increasing level of the GH gas CO₂ is responsible for such a GW). Unfortunately, both approaches are costly and have undesirable side effects.

With regard to the Milankovitch cycles, there is of course little chance of changing the astronomical parameters that influence the cycles. One can dream up engineering schemes to increase solar flux to the Earth's surface -- either by increasing solar intensity or by reducing general albedo. Both approaches are costly and risky.

The most promising method is to find a "trigger" -- a phenomenon that initiates the glaciation. The most common suggestion is a high-latitude snowfield that somehow survives summer melting. It can then grow from year to year in extent and thickness and develop into an ice sheet by a kind of positive feedback -- thanks to the high albedo of snow and ice.

The easiest way to locate such triggers is by digital comparison of successive images from existing weather satellites. This non-intrusive scheme costs very little and presents no risks of any kind; it is simply a software program that processes available data in a special way. It is fairly easy to establish an automatic routine to accomplish this task.

Once such growing snowfields have been located, they can be covered with black soot to decrease albedo. The summer sun can then do its work. How much soot? A certain amount of experimentation is required to answer the question. The best way to produce and spread soot particles can again be found by experiment; it looks like a rather simple technical issue, akin to crop-dusting in agriculture.

The problem appears to be rather different for DOB cycles; there may not be any triggers to initiate the cold phase of a cycle -- although clues on timing may be derived from solar observations. These clues may simply be the time-history of sunspot numbers; but more sophisticated techniques to monitor the Sun are just now becoming available.

The aim would be to eliminate the cold phase -- or at least diminish it. The problem is rather complicated; judging from available but imperfect and incomplete data. Observations between 1400 and 1800 AD of the Little Ice Age show that cooling appears to be regional rather than global; in addition, the cold phase is not continuous but consists of decades-long frigid intervals, with warmer periods in between.

Obviously, there is much scope here for research on how to ameliorate DOB cooling. One suggestion is to make use of GH effects. But CO2 is not the answer; its atmospheric lifetime is too long and its distribution is global -- a poor match to what is required. In addition, CO2 effectiveness is questionable -- or at least controversial -- judging by the current temperature plateau (a.k.a. 'pause' or 'hiatus') that has lasted nearly 20 years -- and perhaps even much longer.

My personal suggestion has been to create regions of cirrus near the tropopause by injecting water in the form of mist or droplets, leading to ice particles -- akin to contrails from aircraft. The scheme would create regions of strong GH forcing and seem to fit the twin requirements of regionality and moderate lifetime. How much water is needed? How often to inject -- and other important but more detailed parameters? Again, we need to learn by experimentation.

Conclusion

In my opinion, there is little doubt that a near-term cooling is among the major calamities facing the population on our planet; concern about global warming is entirely misplaced. A Little Ice Age (DOB cooling) may arrive within decades -- perhaps much sooner. The end of our warm Holocene inter-glacial is rapidly approaching. There is no time to lose in preparing for survival. A paradigm change is essential.

Instead of fiddling with apportionment of CO2 quotas among different nations, we should face realities: CO2 forcing of climate seems largely offset by internal atmospheric negative feedback. In any case, CO2 forcing is largely saturated spectroscopically; there is little chance of exceeding or even reaching the artificial temperature goal of 2 degrees that politicians have adopted.

No effective quota system will emerge at the forthcoming climate conference in Paris in December 2015, as long as developing nations, like India, aim to overcome poverty by assuring their citizens of reliable, secure, and cheap energy from fossil fuels. The United States needs to learn this lesson also.

#####