CLIMATE “CONSENSUS” OPIATE

The 97% Solution

by Dennis Ambler

There never was a consensus!
A recent re-posting on the SPPI blog from the HockeySchtick site, with the title, “The 97% “Consensus” is only 75 Self-Selected Climatologists” was a second look\(^1\) at the claim first made in January 2009, in a paper called “Examining the Scientific Consensus on Climate Change” by Peter Doran and Kendall Zimmerman, from the department of Earth and Environmental Sciences at the University of Illinois.

This was their stated aim:

“The objective of our study presented here is to assess the scientific consensus on climate change through an unbiased survey of a large and broad group of Earth scientists.”

It was roundly de-bunked at the time by several commentators and it would have been forgotten and consigned to its proper place in the dustbin, if it hadn’t been continually quoted by activists as fact.

Barry R. Bickmore, an associate professor of geological sciences at Brigham Young University, Utah, was the most recent to quote it in an op ed in the Deseret News of November 25\(^{th}\) 2010, entitled “Global warming consensus matters”, where he attacks Utah Senator Orin Hatch for challenging consensus claims.

He starts by saying,

“Two recent studies have shown that 97 percent to 98 percent of researchers who actively publish peer-reviewed research on climate change agree that humans are significantly affecting Earth’s climate.”

He then proceeds to justify the use of “consensus” statements.

“It would be unacceptable in a peer-reviewed scientific publication, for instance, to brush aside legitimate objections to a theory by saying the vast majority of researchers in the field agree. That just isn’t how science is done.

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I’m sorry, but that is exactly how climate science is “done” these days.

He makes yet more appeals to authority, that these poor scientists have such great difficulty in transmitting their superior knowledge to the masses, that the only answer is to say that “the majority of scientists agree” on the main issues. Of course this is also how they try to stifle dissenting voices from climate scientists who are just as qualified to address the climate issues, if not more so, than the main protagonists.

This is never valid and certainly not when the claim that “almost all of the experts agree” is shown to be a total distortion of the real facts, as in the “97%” scenario from the Doran and Zimmerman paper. By quoting it without checking the detail, he tarnishes his own credibility as a scientist.

This is not arcane knowledge for the select priesthood, this is science and we can read scientific papers and apply quality judgements to them, whether we be specialists or not.

He says that:

“scientists simply don't have time (and the audience typically doesn't have the interest) to lay out all the evidence, the arguments and counterarguments, in full detail. Isn't it legitimate, then, to simply note that almost all the experts have been convinced of a given point?”

This is never valid and certainly not when the claim that “almost all of the experts agree” is shown to be a total distortion of the real facts, as in the “97%” scenario from the Doran and Zimmerman paper. By quoting it without checking the detail, he tarnishes his own credibility as a scientist.

He was preceded earlier in the month on this topic by former Republican congressman Sherwood Boehlert, in a Washington Post Op-ed, attacking the climate stance of the GOP in Congress. He is an honorary board member of Republicans for Environmental Protection, (REP), an organisation that seems to be a cheerleader for the EPA.

This is what Boehlert said:

Science the GOP can't wish away, November 19th 2010

“National Journal reported last month that 19 of the 20 serious GOP Senate challengers declared that the science of climate change is either inconclusive or flat-out wrong. Many newly elected Republican House members take that position. It is a stance that defies the findings of our country’s National Academy of Sciences,
national scientific academies from around the world and 97 percent of the world's climate scientists.”

Mr Boehlert, like most politicians, obviously doesn't read the documents that are presented to him in any depth, but is quite content with the headline statements. The findings of the National Academy of Sciences are the subject of another paper.

The phrase “97 percent of the world's climate scientists” sounds very dramatic and overwhelming, but the truth is somewhat different. According to the figures presented in the paper, 90% of the scientists were from the US, including federal and state bodies, 6% from Canada and 4% from 21 countries around the world.

We are also told that only 5% of the original sample responses were climate scientists, so if we pragmatically apply those proportions we end up with just 141 from the US, 9 from Canada and just 6 from 21 countries around the world, hardly a global consensus.

THE FIGURES

The paper is behind a pay wall but there is a comprehensive summary here.

We find that they originally contacted 10,257 scientists, of whom 3,146 responded, less than a 31% response rate. “Impending Planetary Doom” was obviously not uppermost in the minds of over two thirds of their target population. Of that number, only 5% described themselves as climate scientists, numbering 157. The authors reduce that by half by only counting those who they classed as “specialists”.

“In our survey, the most specialized and knowledgeable respondents (with regard to climate change) are those who listed climate science as their area of expertise and who also have published more than 50% of their recent peer-reviewed papers on the subject of climate change (79 individuals in total). Of these specialists, 96.2% (76 of 79) answered “risen” to question 1 and 97.4% (75 of 77) answered yes to question 2.”

There is little detail of how many peer reviewed papers are needed to qualify as a specialist, it could by their definition be just two papers, one of which needs to be on climate change. What a poor example of scientific enquiry this survey really is.

There were supposed to have been nine questions asked, but we are only given sight of two of them.

1. When compared with pre-1800s levels, do you think that mean global temperatures have generally risen, fallen, or remained relatively constant?
This is quite banal and shows the desperation of those involved in this “unbiased survey of a large and broad group of Earth scientists.”

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Has it got warmer since pre-1800 levels? This really depends on the time period referred to. Do they mean the Little Ice Age, when disastrously cold temperatures caused massive loss of life and untold hardship? Of course temperatures are now warmer than that desperate period in climate history. Is that what they would wish to regard as normal?

Perhaps they refer to periods mentioned by the Climatic Research Unit (CRU) in an information leaflet that was available on their pre-climategate web site, where they acknowledged earlier warm periods in the Central England Temperature record, but didn’t explain the lack of a CO₂ link. However that would produce difficulties for the theory, so maybe not. One wonders what time period the 76 specialists out 79 thought they were answering yes to.

...seasonal and annual temperatures for the entire CET series... show unprecedented warmth during the 1990s, but earlier decades such as the 1730s and 1820s are comparable.

Alas, the link is no longer available.

2. Do you think human activity is a significant contributing factor in changing mean global temperatures?

This is the classic closed question, in that it implies mean global temperatures are being changed and someone must be responsible.

The response to this question was 75 specialists out of 77, so here we have our massive 97%.

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The original number contacted was 10,157 and of those, 69% decided they didn’t want any part of it, but they were the original target population. When the figure of 75 believers is set against that number, we get a mere 0.73% of the scientists they contacted who agreed with their loaded questions.

However a headline of “0.73% of climate scientists think that humans are affecting the climate” doesn’t quite have the same ring as 97% does it? This CNN posting was typical of the Press coverage at the time:

Surveyed scientists agree global warming is real January 19, 2009

A survey of more than 3,000 scientists found that the vast majority believe humans cause global warming.

Human-induced global warming is real, according to a recent U.S. survey based on the opinions of 3,146 scientists. However there remain divisions between climatologists and scientists from other areas of earth sciences as to the extent of human responsibility.

Against a backdrop of harsh winter weather across much of North America and Europe, the concept of rising global temperatures might seem incongruous.

However the results of the investigation conducted at the end of 2008 reveal that vast majority of the Earth scientists surveyed agree that in the past 200-plus years, mean global temperatures have been rising and that human activity is a significant contributing factor in changing mean global temperatures.

This was the message on the Mongabay website:

“A new poll among 3,146 earth scientists found that 90 percent believe global warming is real, while 82 percent agree that human activity been a significant factor in changing mean global temperatures.

The survey, conducted among researchers listed in the American Geological Institute's Directory of Geoscience Departments*, "found that climatologists who are active in research showed the strongest consensus on the causes of global warming, with 97 percent agreeing humans play a role".
What a gross travesty of the truth, and such appalling reporting, but these are the messages fed to acquiescent politicians who do not bother to check the facts, and criticise those who do. How low has science sunk, that scientists will dispense this sort of disinformation to promote their own agenda?

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Cover illustration from johnstonanalytics.com.

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