

The Week That Was: 2018-06-09 (June 9, 2018)

Brought to You by SEPP (www.SEPP.org)

The Science and Environmental Policy Project

Quote of the Week. “Science is what you know, philosophy is what you don’t know.” – Bertrand Russell.

Number of the Week: \$14,000 per megawatt hour. (10,600 USD)

THIS WEEK:

By Ken Haapala, President, Science and Environmental Policy Project (SEPP)

Problem of Induction: As briefly discussed in the May 26 TWTW, the scientific developments of the 19th and early 20th century resulted in a questioning of the philosophical bases for knowledge about the physical world, particularly about the ability to make predictions. Newtonian mechanics could not describe Brownian Motion. Quantum Mechanics, advanced at the beginning of the 20th century by Max Planck, Einstein, and others, does not fit into a scheme of Euclidian geometry. The questioning of the ability to predict the future highlighted the extremely skeptical views expressed by Hume in “A Treatise of Human Nature” (1739). Hume had questioned the grounds by which we come to our beliefs about the unobserved using inductive inferences.

In “The Problems of Philosophy” (1912), Bertrand Russell writes:

“Experience might conceivably confirm the inductive principle as regards the cases that have been already examined: but as regards unexamined cases, it is the inductive principle alone that can justify any inference from what has been examined to what has not been examined.”

Herein is a major problem with the use of long-term projections / predictions from mathematical models. We simply do not know how solid the results are. Further, Russell writes:

*“The general principles of science, such as the belief in the reign of law, and the belief that every event must have a cause, are as completely dependent upon the inductive principle as are the beliefs of daily life. All such general principles are believed because mankind have found innumerable instances of their truth and **no instances of their falsehood**. But this affords no evidence for their truth in the future, unless the inductive principle is assumed. [Boldface added]*

“Thus, all knowledge which, on the basis of experience tells us something about what is not experienced, is based upon a belief which experience can neither confirm nor confute, yet which, at least in its more concrete applications, appears to be as firmly rooted in us as many of the facts of experience. The existence and justification of such beliefs – for the inductive principle, as we shall see, is not the only example – raises some of the most difficult and most debated problems of philosophy. We will, in the next chapter, consider briefly what may be said to account for such knowledge, and what is its scope and its degree of certainty.”
(Chapter VI, On Induction Pages 68 & 69, Galaxy Book publication, 1959)

The view that prediction is not knowledge has been expressed by many, including in the lectures by Richard Feynman available on U-Tube. Yet, the UN Intergovernmental Panel on Climate Change (IPCC) and its followers, such as the US Global Change Research Program (USGCRP), continue to treat the projections / predictions of the IPCC reports as if they are knowledge.

Repeatedly, John Christy has testified before committees in Congress, producing evidence from Earth System Science Center at the University of Alabama in Huntsville, demonstrating that the global climate models tested greatly overestimate the warming of the atmosphere, where the greenhouse gas effect occurs. Except for the model by the Institute of Numerical Mathematics, in Moscow, the models used by the IPCC are false. In general, the US models greatly overestimate the warming of the atmosphere, despite the US spending over \$40 Billion on what government reports call climate science, from 1993 to 2015.

Simply, there is no reason for the governments to implement policies, including those on energy use, based on falsified models. Such policies defy logic, fact, and scientific philosophy. See links under Challenging the Orthodoxy.

Fear Run Its Course? Writing in the Wall Street Journal, reproduced by the Global Warming Policy Forum, Steven Hayward, Resident Scholar at the Institute of Government Studies at Berkeley, argues that the fear of climate change is no longer a pre-eminent policy issue. Eliminating fossil fuels is no longer a critical concern. Hayward uses a five-stage model by political scientist Anthony Downs to explain his views.

The five stages are: one, activists and experts expressing a problem; two, media and political alarm; three, recognition that the costs of the “solution” are very high; four, decline in intensity of public interest; and five, prolonged limbo. Hayward concludes with:

“Scientists who are genuinely worried about the potential for catastrophic climate change ought to be the most outraged at how the left politicized the issue and how the international policy community narrowed the range of acceptable responses. Treating climate change as a planet-scale problem that could be solved only by an international regulatory scheme transformed the issue into a political creed for committed believers. Causes that live by politics, die by politics.”

It appears the US may be heading for the final stages, but a real concern is the damage that bureaucratic scientists in government will do and the monetary and physical harm they will cause. For example, the myth that solar and wind can replace nuclear and fossil fuel power plants is dangerous and expensive. Modern civilization requires reliable and resilient electrical power, something that many government officials in the US, Europe and Australia do not recognize or understand. See links under Challenging the Orthodoxy, Questioning European Green, and Energy Issues for Non-US, Australia, and US.

Deploying Dreams? Writing in Spectrum, the publication of the Institute of Electrical and Electronics Engineers (IEEE), power expert Vaclav Smil examines some of the claims made that green technologies can quickly replace traditional methods for generating and distributing electricity. As he explains, too many “experts” believe that what applied to miniaturization of electronic circuitry in electronic chips used in computers and similar devices (Moore’s law) will also apply to all things electronic.

In a short essay, Smil does his best to dispel this absurd notion, that has seized far too many politicians and government bureaucrats.

“However, our civilization continues to depend on activities that require large flows of energy and materials, and alternatives to these requirements can’t be commercialized at rates that double every couple of years. Our modern societies are underpinned by countless industrial processes that have not changed fundamentally in two or even three generations. These include the way we generate most of our electricity, the way we smelt primary iron and aluminum, the way we grow staple foods and feed crops, the way we raise and slaughter animals, the way we excavate sand and make cement, the way we fly, and the way we transport cargo.”

A 450-ton Francis hydro-turbine or the 4,360,000 cubic yards (3,333,000 cubic meters) of concrete used to construct Hoover Dam cannot be miniaturized easily. The hub and nacelle of a Vestas V-90 1.8 MW wind turbine, alone, weighs 14,780,000 pounds (88 metric tonnes). The weight of the tower and base are many times that. They cannot be miniaturized easily. See links under Challenging the Orthodoxy.

Questions Answered: Writing in American Thinker, physicist Wallace Manheimer address three critical questions about global warming / climate change:

“1) is the scientific community really united? 2) can solar and wind take over any time soon to provide the required vital energy for the maintenance of modern civilization in today's world of 7 billion people? and 3) has CO2 caused any harm yet?”

He states the answer to each is NO and clearly explains why. See links under Challenging the Orthodoxy.

Delusions in Paris: Donald Trump has been denounced in the general press for announcing last year that the US will pull out of the 2015 Paris Agreement. As reported in TWTW at the time of the agreement, the Paris Agreement was significantly changed at the last moment and was never submitted to the Senate for approval as a treaty. The Obama Administration insisted that it was an executive agreement, not a treaty. Executive agreements may be long-lasting or not, depending on the whims of the executive. That Mr. Trump rejected the executive agreement was no surprise.

On his web site, Paul Homewood discusses parts of a web site called Profiles of Paris. The site asks: *“Please explore the remarkable stories of the people who created the Paris Agreement, and what it means for the future. Use the filters to guide you. This collection will grow in the coming months, so watch this space.”*

Unfortunately, no information is given on the sponsor of the site, making one suspicious, but some of the quotes appear genuine. Particularly important is a May 2018 statement by Laurent Fabius, the French Minister of Foreign Affairs and International Development and the president of COP 21 (Conference of Parties) when the agreement was signed. He writes that after working out last minute difficulties of getting all parties to agree, he got a surprise:

“It was then that John Kerry, the US Secretary of State, urgently requested a meeting. John Kerry had been very helpful all through the process. Indeed, a few days earlier he and the Chinese negotiator had been in my office for the purposes of fine-tuning some of the wording that would later prove to be valuable in the final arbitration. ‘Laurent,’ he said, ‘I cannot accept the text, it is

impossible.’ ‘Not possible? But it is too late to change!’ ‘It’s impossible,’ he repeated, ‘because there is a section where the word ‘shall’ has been used in the place of ‘should’, which was in the previous versions. In one case – as any lawyer will tell you – there is an obligation of means, and in the other the United States would be agreeing to an obligation to achieve precise results. The use of ‘shall’ would require that the US Senate put the text to a vote for approval. As you know, if we have to go down that path, there will be no Paris Agreement.’ That was quite a blow! I quickly asked my team to review the situation. In the previous versions, the term that referred to financing was in fact ‘should’. As the final draft of the text was prepared, ‘should’ had unfortunately been changed to ‘shall’. A typographical error. I told John Kerry that I was going to try to find a solution, but there was no guarantee. If the other delegations objected, we were headed for failure.”

We do not know if the term “shall” was a typo for “should,” but Mr. Obama’s desire to avoid presenting the agreement to the Senate was well documented at the time. Mr. Fabius obtained the approval of the G77 (a major group of countries including China) and the revised agreement was signed.

Of course, Mr. Fabius finds the actions of Mr. Trump reprehensible. Could it be that Mr. Trump is taking advantage of last minute “typo” changes made by Mr. Fabius?

It is becoming clear that the current administration recognizes the economic benefits to the country offered by the fossil fuel resources of the country and is willing to take advantage of these resources. See links under After Paris!

Bay Cities Litigation: Federal Judge William Alsup, presiding over the public nuisance complaint by Oakland and San Francisco against five oil companies, provided another surprise to all the parties: in addition to all the damages in the future that the cities claim, the judge wants to see how the public, especially the people of California, have benefited from the use of fossil fuels. Listing and estimating the monetary value of these benefits will be a daunting task.

Perhaps, by now, the attorneys general (AGs) for the cities and those who urged them to file the litigation are finding that litigation can be dangerous and is not to be taken lightly. In testimony against the oil companies, the cities used Myles Allen, a lead author in later IPCC reports and an expert on the “social cost of carbon.” Will he participate in this legal round? See Article # 1 links under Litigation Issues.

Sea Level Rise: Contrary to the IPCC experts and the Bay Cities AGs, Fred Singer stated in the Wall Street Journal that sea level rise was not accelerating as the IPCC claimed. Mr. Mann and others objected to Singer’s essay. Singer’s views are defended by others. See Article #2.

Cost-Benefit Analysis: EPA Administrator Scott Pruitt created an uproar among many in the press and science organizations by announcing that public health science that is not revealed to the public should not be used to create public health regulations. Now, he is creating another uproar. The EPA announced requests for comments on policies regarding the use of cost-benefit analysis.

Among other issues, TWTW would suggest that the analyses use fixed, identified growth rates, fixed, identified discount rates (of future costs and benefits) and be updated periodically. Some economists manipulate such rates for political purposes. For example, in the UK, Nicholas Stern

used an unrealistically low discount rate to make costs projected far in the future appear immediate and pressing, thus influencing the passing the UK Climate Change Act 2008.

No doubt, the current request for comments will produce outrage by some. But, the current system works poorly, and needs to be improved greatly. See links under EPA and other Regulators on the March.

Number of the Week: \$14,000 per megawatt hour (MWH). (10,600 USD) Australian commentator Jo Nova reports that short-term spikes in electricity prices in New South Wales, Australia, hit \$14,000 Australian. The average for June 8 was \$220/MWH (170 USD). In the US, for March, latest data available, the highest peak was about \$70/MWH for New England (ISONE). The average high for UW wholesale markets was far less, and the Midwest had a high of about \$30/MWH. Australia, which once enjoyed some of the lowest electricity rates in the world, is experiencing the problems created by politicians who believe solar and wind power can replace thermal generation. See lines under Energy Issues – Australia and https://www.eia.gov/electricity/monthly/update/wholesale_markets.php

SEPP'S APRIL FOOLS AWARD THE JACKSON

SEPP is conducting its annual vote for the recipient of the coveted trophy, The Jackson, a lump of coal. Readers are asked to nominate and vote for who they think is most deserving, following these criteria:

- The nominee has advanced, or proposes to advance, significant expansion of governmental power, regulation, or control over the public or significant sections of the general economy.
- The nominee does so by declaring such measures are necessary to protect public health, welfare, or the environment.
- The nominee declares that physical science supports such measures.
- The physical science supporting the measures is flimsy at best, and possibly non-existent.

The six past recipients, Lisa Jackson, Barrack Obama, John Kerry, Ernest Moniz, John Holdren and Christiana Figueres aka Cruella de Ville are not eligible. Generally, the committee that makes the selection prefers a candidate with a national or international presence. The voting will close on July 30. Please send your nominee and a brief reason why the person is qualified for the honor to Ken@SEPP.org. Thank you. The award will be presented at the annual meeting of the Doctors for Disaster Preparedness in August.

NEWS YOU CAN USE:

Commentary: Is the Sun Rising?

Scientists Find Sun-Driven Temperature Changes Led CO2 Changes By 1300-6500 Years In The Ancient Past

By Kenneth Richard, No Tricks Zone, June 7, 2018

<http://notrickszone.com/2018/06/07/scientists-find-sun-driven-temperature-changes-led-co2-changes-by-1300-6500-years-in-the-ancient-past/>

Challenging the Orthodoxy -- NIPCC

Climate Change Reconsidered II: Physical Science

Idso, Carter, and Singer, Lead Authors/Editors, 2013

<https://www.heartland.org/media-library/pdfs/CCR-II/CCR-II-Full.pdf>

Summary: <http://www.nipccreport.org/reports/ccr2a/pdf/Summary-for-Policymakers.pdf>

Climate Change Reconsidered II: Biological Impacts

Idso, Idso, Carter, and Singer, Lead Authors/Editors, 2014

<http://www.nipccreport.org/reports/ccr2b/pdf/Full-Report.pdf>

Summary: <https://www.heartland.org/media-library/pdfs/CCR-IIb/Summary-for-Policymakers.pdf>

Why Scientists Disagree About Global Warming

The NIPCC Report on the Scientific Consensus

By Craig D. Idso, Robert M. Carter, and S. Fred Singer, NIPCC, Nov 23, 2015

<http://climatechangereconsidered.org/>

Download with no charge

<https://www.heartland.org/policy-documents/why-scientists-disagree-about-global-warming>

Nature, Not Human Activity, Rules the Climate

S. Fred Singer, Editor, NIPCC, 2008

http://www.sepp.org/publications/nipcc_final.pdf

Challenging the Orthodoxy

Three Climate Change Questions Answered

By Wallace Manheimer, American Thinker, June 4, 2018

https://www.americanthinker.com/articles/2018/06/three_climate_change_questions_answered.html

Steven Hayward: Climate Change Has Run Its Course

By Steven Hayward, The Wall Street Journal, Via GWPF, June 5, 2018

<https://www.thegwpf.com/steven-hayward-climate-change-has-run-its-course/>

Comparing the current and early 20th century warm periods in China

By Willie Wei-Hock Soon, et al. Earth-Science Reviews, October 2018

<https://www.sciencedirect.com/science/article/pii/S0012825218301235>

The Short and Simple on Why Climate Alarmism Is Nonsense

By Alan Carlin, Carlin Economics and Science, June 1, 2018

<http://www.carlineconomics.com/archives/4457>

A Critical Look at Claims for Green Technologies

Green technologies are not yet proved, affordable, or deployable—but even if they were, it would still take them generations to solve our environmental problems

By Vaclav Smil, IEEE Spectrum, June 3, 2018 [H/t GWPF]

<https://spectrum.ieee.org/energy/environment/a-critical-look-at-claims-for-green-technologies>

“These are not arguments against the need for some form of the techniques that are promoted here but rather cautionary reminders that many of today’s ambitions will not become tomorrow’s realities. It’s better to be pleasantly surprised than to be repeatedly disappointed.”

Atomic Physicist: Human CO2 Emissions Have An Equilibrium Climate Sensitivity Of A ‘Not Important’ 0.02 K

By Kenneth Richard, No Tricks Zone, June 4, 2018

<http://notrickszone.com/2018/06/04/atomic-physicist-human-co2-emissions-have-an-equilibrium-climate-sensitivity-of-a-not-important-0-02-k/>

[SEPP Comment: Based on calculations that climate sensitivity to a doubling of CO2 is 0.4K, not 3.5K +/- 1.5K and human contribution is 5% of CO2 increase in atmosphere.]

Examination of space-based bulk atmospheric temperatures used in climate research

By Christy, Spencer, Braswell & Junod, International Journal of Remote Sensing, Mar 8, 2018

<https://www.tandfonline.com/doi/full/10.1080/01431161.2018.1444293>

Defending the Orthodoxy

Massive Climate Funding By Wealthy Foundations Failed To Sway Public Opinion

By Elena Connolly, Western Wire, June 7, 2018

<http://westernwire.net/massive-climate-funding-by-wealthy-foundations-failed-to-sway-public-opinion/>

Link to Study: Strategic philanthropy in the post-Cap -and-Trade years: Reviewing U.S. climate and energy foundation funding

By Matthew Nisbet, WIRES Climate Change, 2018

<https://onlinelibrary.wiley.com/doi/epdf/10.1002/wcc.524>

Fix the Mistakes That Killed the Climate Change Campaign

By Larry Kummer, Fabius Maximus, June 2, 2018 [H/t GWPF]

<https://fabiusmaximus.com/2018/06/02/fix-the-mistakes-that-killed-the-climate-change-campaign/>

Summary: Let’s trace the misrepresentation and misuse of RCP8.5 from a new paper back to its earliest days. This shows how a big mistake and a small one combined to put much of climate science on a dead-end road. And how climate scientists’ refusal to recognize these mistakes has kept it on this road. Understanding the past can help climate science become more useful.

{SEPP Comment: According to the article there are two fundamental mistakes: 1) Predictions over absurdly long horizons; and 2) Misrepresenting the future. A more fundamental mistake is the speculation in the Charney Report that has been accepted as a given: that a small amount of warming from CO2 will be greatly amplified by a dramatic warming caused by an increase in water vapor.}

Questioning the Orthodoxy

Latest Euro Delusion: EU Wants Us To Believe It Can Rescue Oceans By Removing Less Than 0.01% Of The Plastic!

By P Gosselin, No Tricks Zone, May 29, 2018

<http://notrickszone.com/2018/05/29/latest-euro-delusion-eu-wants-us-to-believe-it-can-rescue-oceans-by-removing-less-than-0-01-of-the-plastic/>

Critical evidence on W Hudson Bay polar bears still not published after 25 years

By Susan Crockford, Polar Bear Science, June 6, 2018

<https://polarbearscience.com/2018/06/06/critical-evidence-on-w-hudson-bay-polar-bears-still-not-published-after-25-years/>

“Years ago now, in an oft-cited paper, Stirling and Derocher (2012) claimed to summarize the evidence that climate warming was negatively impacting polar bear health and survival. Several life history parameters were considered crucial, particularly body condition.

“Despite almost a dozen papers (and perhaps more) on various aspects of WH polar bear health and life history studies based on capture/recapture data published since 2004 (e.g. Castro de la Guardia 2017; Lunn et al. 2016; Pilfold et al. 2017), none have reported the body condition data that supposedly support the claim that sea ice loss is having a severe impact — and the same is true for litter size, proportion of independent yearlings, and cub survival.”

After Paris!

5 Advantages of Stepping away from the Paris Climate Treaty

By Richard Morrison, Competitive Enterprise Institute, June 1, 2018

<https://cei.org/blog/5-advantages-stepping-away-paris-climate-treaty>

Delusions Of Paris

By Paul Homewood, Not a Lot of People Know That, June 3, 2018

<https://notalotofpeopleknowthat.wordpress.com/2018/06/03/delusions-of-paris/>

Link to report: Profiles of Paris: Explore 99 Profiles

[No authors or organization stated]

<https://profilesofparis.com/profiles/>

Change in US Administrations

Donald Trump has the courage and wit to look at 'green' hysteria and say: no deal

By Charles Moore, Telegraph, UK, Via GWPF, June 1, 2018

<https://www.thegwpf.com/charles-moore-trump-has-broken-the-spell-of-climate-change-mania/>

Two More Major Actions Are Needed before We Can Celebrate Victory over the CIC

By Alan Carlin, Carlin Economics and Science, June 8, 2018

<http://www.carlineconomics.com/archives/4469>

Trump prefers energy dominance to Paris

By Myron Ebell, Standpoint, June 2018

<http://standpointmag.co.uk/node/7175/full>

Emails show climate change skeptics tout ‘winning’ under Trump

By John Bowden, The Hill, May 29, 2018

<http://thehill.com/policy/energy-environment/389713-emails-show-climate-skeptic-group-gloated-about-winning-under-trump>

“Secret Science” Regulation: A Time for Truth

By E. Calvin Beisner, Master Resource, May 29, 2018

<https://www.masterresource.org/secret-science-reform/secret-science-epa/>

More than 100 bipartisan lawmakers urge Pruitt to scrap 'secret science' rule

By Miranda Green, The Hill, June 7, 2018

<http://thehill.com/policy/energy-environment/391165-bi-partisan-lawmaker-group-calls-pruitt-to-withdraw-secret-science>

Social Benefits of Carbon

Climate change may increase arable land: Study

By Staff Writers, Press Trust of India, May 25, 2018 [H/t GWPF]

https://www.business-standard.com/article/pti-stories/climate-change-may-increase-arable-land-study-118052500494_1.html

Link to paper: Northward shift of the agricultural climate zone under 21st-century global climate change

By Myron King, Daniel Altdorff, Pengfei Li, Lakshman Galagedara, Joseph Holden & Adrian Unc, Nature Scientific Reports, May 21, 2018

<https://www.nature.com/articles/s41598-018-26321-8>

Problems in the Orthodoxy

Germany's Planned Coal Exit Hits A Wall

By Dave Keating, Forbes, May 31, 2018

<https://www.forbes.com/sites/davekeating/2018/05/31/germanys-planned-coal-exit-hits-a-wall/#6758adba1d02>

Seeking a Common Ground

7 Things Everyone Should Know About Climate

Pielke on Climate #11

By Roger Pielke Jr., The Climate Fix, June 3, 2018

<https://theclimatefix.wordpress.com/2018/06/03/pielke-on-climate-11/>

“US climate policy is subject to dramatic shifts because, since the 1990s, US climate policy has occurred via executive action rather than through Congressional legislation.”

[SEPP Comment: States: “The most important lever for deep decarbonization is carbon intensity (CO₂/TPES).” Does not explain the meaning of TPES.]

Top 15 climate scientists: consensus and skeptics

By Judith Curry, Climate Etc. June 5, 2018

<https://judithcurry.com/2018/06/05/top-15-climate-scientists-consensus-and-skeptics/#more-24132>

The debate

By Judith Curry, Climate Etc. May 28, 2018

<https://judithcurry.com/2018/05/28/the-debate/#more-24124>

UK Air Pollution Continues To Fall

By Paul Homewood, Not a Lot of People Know That, June 7, 2018

<https://notalotofpeopleknowthat.wordpress.com/2018/06/07/uk-air-pollution-continues-to-fall/>

Why One Should Never Use the Term "Climate Denier

By Cliff Mass, Weather and Climate Blog, May 28, 2018

<http://cliffmass.blogspot.com/2018/05/why-one-should-never-use-term-climate.html>

Review of Recent Scientific Articles by CO₂ Science

Three Decades of Winter Bird Abundances in Russia

Askeyev, O., Askeyev, A. and Askeyev, I. 2018. Recent climate change has increased forest winter bird densities in East Europe. *Ecological Research* 33: 445-456. June 4, 2018

<http://www.co2science.org/articles/V21/jun/a4.php>

Two Thousand Years of Drought in Central Mongolia

Hessl, A.E., Anchukaitis, K.J., Jelsema, C., Cook, B., Byambasuren, O., Leland, C., Nachin, B., Pederson, N., Tian, H. and Hayles, L.A. 2018. Past and future drought in Mongolia. *Science Advances* 4: e1701832. June 3, 2018

<http://www.co2science.org/articles/V21/jun/a3.php>

Ocean Acidification Effects on Copepod Egg Hatching Success

Preziosi, B.M., Runge, J.A., Christensen, J.P. and Jones, R.J. 2017. Effects of pH and temperature on egg hatching success of the marine planktonic copepod, *Calanus finmarchicus*. *Marine Biology* 164: 218, doi: 10.1007/s00227-017-3243-5. June 1, 2018

<http://www.co2science.org/articles/V21/jun/a1.php>

More Proof of a Biological Control on Coral Calcification

Ross, C.L., Falter, J.L. and McCulloch, M.T. 2017. Active modulation of the calcifying fluid carbonate chemistry ($\delta^{11}\text{B}$, B/Ca) and seasonally invariant coral calcification at sub-tropical limits. *Scientific Reports* 7: 13830, DOI:10.1038/s41598-017-14066-9. May 31, 2018

<http://www.co2science.org/articles/V21/may/a18.php>

“Such proof that corals living in natural environments can biologically manipulate their rates of aragonite precipitation (i.e., calcification) by actively raising both pH_{cf} and DIC_{cf} is a *game-changing discovery* in the field of ocean acidification research, demonstrating that, out in the *real world* ocean acidification will have little, if any, impact on coral growth.”

Positive Growth Response of a Marine Macroalgae to Ocean Acidification

Xu, K., Chen, H., Wang, W. Xu, Y., Ji, D., Chen, C. and Xie, C. 2017. Responses of photosynthesis and CO₂ concentrating mechanisms of marine crop *Pyropia haitanensis* thalli to large pH variations at different time scales. *Algal Research* 28: 200-210. May 28, 2018

<http://www.co2science.org/articles/V21/may/a16.php>

Measurement Issues -- Surface

Cooling Ocean Air Temps

By Ron Clutz, Science Matters, June 6, 2018 [H/t GWPF]

<https://rclutz.wordpress.com/2018/06/05/cooling-ocean-air-temps/>

Fixing the Warm Temperature Bias At Yakima

By Cliff Mass, Weather and Climate Blog, June 5, 2018

<http://cliffmass.blogspot.com/2018/06/fixing-warm-temperature-bias-at-yakima.html>

Measurement Issues -- Atmosphere

UAH Global Temperature Update for May, 2018: +0.18 deg. C

By Roy Spencer, His Blog, June 1, 2018

<http://www.drroyspencer.com/2018/06/uah-global-temperature-update-for-may-2018-0-18-deg-c/>

May 2018 Map and Graph [UAH Temperatures]

By Staff Writers, Earth System Science Center, The University of Alabama in Huntsville

<https://www.nsstc.uah.edu/climate/2018/may2018/MAY%202018.png>

https://www.nsstc.uah.edu/climate/2018/may2018/tlt_2018May_bar.png

Changing Weather

Chris Landsea Urges Caution Linking Hurricanes To Warming

By Paul Homewood, Not a Lot of People Know That, June 8, 2018
<https://notalotofpeopleknowthat.wordpress.com/2018/06/08/34001/>

Doomsday Climate Models Wrong Again! Hurricanes Declining...Flooding Over Europe Not More Frequent

By P Gosselin, No Tricks Zone, June 5, 2018
<http://notrickszone.com/2018/06/05/doomsday-climate-models-wrong-again-hurricanes-declining-flooding-over-europe-not-more-frequent/>

Flooding really was worse in the old days

By Oliver Moody, The Times, Via GWPF, May 29, 2018
<https://www.thegwpf.com/extreme-flood-events-decreasing-in-europe-despite-global-warming/>

Link to paper: Trends in flood losses in Europe over the past 150 years

By Dominik Paprotny, Antonia Sebastian, Oswaldo Morales-Nápoles & Sebastiaan N. Jonkman, Nature Communications, May 29, 2018

<https://www.nature.com/articles/s41467-018-04253-1>

[SEPP Comment: Now many westernized countries are better prepared for flooding.]

Changing Climate

Ancient Greenland was much warmer than previously thought

Discovery helps researchers understand how Greenland's ice sheet responds to warming

By Amanda Morris, Northwestern University June 4, 2018 [H/t GWPF]

<https://news.northwestern.edu/stories/2018/june/ancient-greenland-was-much-warmer-than-previously-thought/>

[SEPP Comment: Not much warmer than H.H. Lamb suggested 40 years ago.]

New Scientific Evidence Robustly Affirms Scandinavian Temperatures Were 3-4°C Warmer 9000 Years Ago

B Kenneth Richard, No Tricks Zone, May 31, 2018

<http://notrickszone.com/2018/05/31/new-scientific-findings-affirm-temperatures-were-3-4c-warmer-9000-years-ago/>

3 New Papers: Permian Mass Extinction Coincided With Global Cooling, Falling Sea Levels, And Low CO2

By Kenneth Richard, No Tricks Zone, May 28, 2018

<http://notrickszone.com/2018/05/28/2-new-papers-permian-mass-extinction-coincided-with-global-cooling-falling-sea-levels-and-low-co2/>

Changing Seas

Disappeared: Tide gauges showing negative absolute sea level rise removed from data base

Guest essay by Albert Parker, WUWT, June 7, 2018

<https://wattsupwiththat.com/2018/06/disappeared-tide-gauges-showing-negative-absolute-sea-level-rise-removed-from-data-base/>

[SEPP Comment: Tidal gages that do not agree with IPCC speculation are being adjusted out?]

Acidic Waters

Coral seems to have its own strategy for adapting to 'ocean acidification'

By Anthony Watts, WUWT, June 9, 2018

<https://wattsupwiththat.com/2018/06/coral-seems-to-have-its-own-strategy-for-adapting-to-ocean-acidification/>

Link to paper: Epigenome-associated phenotypic acclimatization to ocean acidification in a reef-building coral

By Yi Jin Liew, et al. Science Advances, June 6, 2018

<http://advances.sciencemag.org/content/4/6/eaar8028>

[SEPP Comment: The ability of corals to adapt to changing pH has long been discussed in CO2 Science.]

Agriculture Issues & Fear of Famine

Carbon Fuels Conquered Famine – But Green Policies Are Inviting It Again

By Viv Forbes, WUWT, June 8, 2018

<https://wattsupwiththat.com/2018/06/carbon-fuels-conquered-famine-but-green-policies-are-inviting-it-again/>

Record wheat harvest in Punjab underlines a revolution still green

Average yield rises steadily from 27.3 quintals per hectare in 1980-81 to 51.2 quintals per hectare this year.

By Anju Agnihotri Chaba, Indian Express, May 25, 2018

<http://indianexpress.com/article/india/record-wheat-harvest-in-punjab-underlines-a-revolution-still-green-5188803/>

Lowering Standards

UK Met Office “loses” 300 year database, uses noise to generate *hottest ever* spam headline

By Jo Nova, Her Blog, June 4, 2018

<http://joannenova.com.au/2018/06/uk-met-office-loses-300-year-database-uses-noise-to-generate-hottest-ever-spam-headline/>

Communicating Better to the Public – Exaggerate, or be Vague?

World’s first grid-scale liquid air energy storage plant goes live

By Kelvin Ross, Power Engineering, June 5, 2018 [H/t Energy Matters]

<https://www.powerengineeringint.com/articles/2018/06/world-s-first-grid-scale-liquid-air-energy-storage-plant-goes-live.html>

“The 5MW/15MWh plant near Manchester in England will become the first operational demonstration of liquid air energy storage (LAES) technology at grid-scale.”

[SEPP Comment: Must be a very small grid!]

Communicating Better to the Public – Make things up.

Jerry Brown: 3 Billion Will Die from Global Warming

By Roger Andrews, Energy Matters, June 5, 2018

<http://euanmearns.com/jerry-brown-3-billion-will-die-from-global-warming/#more-22139>

[SEPP Comment: Exploring the source for the number.]

Communicating Better to the Public – Go Personal.

Shocking Twitter Display Of Contempt And Hubris By Stefan Rahmstorf, NASA’s Gavin Schmidt

By P Gosselin, No Tricks Zone, June 3, 2018

<http://notrickszone.com/2018/06/03/shocking-twitter-display-of-contempt-and-hubris-by-stefan-rahmstorf-nasas-gavin-schmidt/>

Questioning European Green

CO2 Positive: Europe is Losing its Contrived War

By Allen Brooks, Master Resource, May 30, 2018

<https://www.masterresource.org/eu-climate-policy/surprise-europe-losing-co2-battle/>

Dominic Lawson: Another Renewables Plan That's Gone Up In Smoke

By Dominic Lawson, The Sunday Times, Via GWPF, May 27, 2018

<https://www.thegwpf.com/dominic-lawson-another-renewables-plan-thats-gone-up-in-smoke/>

“The wood pellets burnt at Drax largely come from the southeastern United States, in a vast, highly mechanised operation.”

British Smart Meters cost £28 million EACH

By Nick Hunn, Creative Connectivity, May 1, 2018 [H/t Paul Homewood]

<http://www.nickhunn.com/british-smart-meters-cost-28-million-each/>

“There should now be plenty of data from the smart meters which have been installed to confirm whether they do have a lasting effect on energy usage. If that were calculated, we would have a good idea of whether this programme is justified. Almost every independent analysis of smart meters here and elsewhere in the world suggests it is not. But none of that data from the UK is being released.”

[SEPP Comment: 80 new style installed, only 50 million to go. Note this is the estimated cost for the 80 prototypes installed. The actual production costs for the 50 million is yet to be determined. No doubt, the cost per meter will decline dramatically.]

Litigation Issues

Speculative climate chaos v. indisputable fossil fuel benefits

Federal judge tells climate litigants to tally the numerous blessings from fossil fuels since 1859

Guest essay by Paul Driessen and Roger Bezdek, WUWT, June 3, 2018

<https://wattsupwiththat.com/2018/06/speculative-climate-chaos-v-indisputable-fossil-fuel-benefits/>

Chevron wins \$38m from Environmentalists behaving badly: extortion, fraud, witness tampering, corrupt practices

By Jo Nova, Her Blog, May 31, 2018

<http://joannenova.com.au/2018/05/chevron-wins-38m-from-environmentalists-behaving-badly-extortion-fraud-witness-tampering-corrupt-practices/>

Dutch government appeals against court ruling over emissions cuts

Judges ordered a 25% carbon emissions cut by 2020 in the first successful lawsuit against a government's climate policy

By Arthur Neslen, The Guardian, UK, May 28, 2018

<https://www.theguardian.com/environment/2018/may/28/dutch-government-appeals-against-court-ruling-over-emissions-cuts>

Judge rules EPA must provide evidence used for Pruitt's climate change claims

By Jacqueline Thomsen, The Hill, June 7, 2018

<http://thehill.com/policy/energy-environment/391130-judge-rules-pruitt-must-provide-evidence-used-for-climate-change>

“...that human behavior is not a ‘primary contributor’ to climate change.”

Subsidies and Mandates Forever

Even in sunniest Queensland, solar can’t run without big subsidies — so big they have to be kept secret

By Jo Nova, Her Blog, June 8, 2018

<http://joannenova.com.au/2018/06/even-in-sunny-queensland-solar-cant-run-without-big-secret-subsidies/>

Chinese solar power stocks plunge as government moves to contain industry size

By Zhang Shidong and Eric Ng, South China Morning Post, June 4, 2018 [H/t GWPF]

<http://www.scmp.com/business/companies/article/2149131/chinese-solar-power-stocks-plunge-government-moves-contain>

China: solar stocks plummet as solar subsidies cut to “make electricity cheaper”

By Jo Nova, Her Blog, June 6, 2018

<http://joannenova.com.au/2018/06/china-solar-stocks-plummet-as-solar-subsidies-cut-to-make-electricity-cheaper/>

EPA and other Regulators on the March

EPA Asks for Public Comment on Improving Cost-Benefit Analysis of Regulations

By Marlo Lewis, Jr., Competitive Enterprise Institute, June 8, 2018

<https://cei.org/blog/epa-asks-public-comment-improving-cost-benefit-analysis-regulations-%C2%A0>

Link to draft document: Increasing Consistency and Transparency in Considering Costs and Benefits in the Rulemaking Process

By Staff Writers, EPA, No Date

https://www.epa.gov/sites/production/files/2018-06/documents/cost_and_benefit_consideration_anprm_pre-pub.pdf

Energy Issues – Non-US

Britain’s Man-Made Gas Crisis

By Jillian Ambrose, The Sunday Telegraph, Via GWPF, May 27, 2018

<https://www.thegwpf.com/britains-man-made-gas-crisis/>

China’s CO2 Emissions Set for Fastest Growth in 7 Years

By Staff Writers, Financial Times UK, Via GWPF, May 30, 2018

<https://www.thegwpf.com/chinas-co2-emissions-set-for-fastest-growth-in-7-years/>

Terence Corcoran: Trans Mountain is the cost of Corporate Canada surrendering to green enemies

Ottawa’s desperate decision to buy Trans Mountain is the logical outcome of an incoherent governance regime controlled by a triumvirate of social, political and economic institutions

By Terence Corcoran, Financial Post, Canada, May 29, 2018 [H/t GWPF]

<http://business.financialpost.com/opinion/terence-corcoran-trans-mountain-is-the-cost-of-corporate-canada-surrendering-to-green-enemies>

“Corporate Canada’s flirtation with environmental activists is one reason Alberta’s energy industries are caught in an existential crisis. That’s what happens when you endorse your enemies’ objectives”

Energy Issues – Australia

Solar overload — “Costs a fortune” as the super Duck Curve flood of electricity hits Australia

By Jo Nova, Her Blog, June 8, 2018

<http://joannenova.com.au/2018/06/solar-overload-costs-a-fortune-as-the-super-duck-curve-flood-of-electricity-hits-australia/>

[SEPP Comment: Government policy: first wreck a reliable system, then introduce subsidies to repair the wreckage?]

Energy Crisis: NSW [State of New South Wales] can’t keep coal plants, or aluminium smelters running, prices hit \$14,000/MWh

By Jo Nova, Her Blog, June 9, 2018

<http://joannenova.com.au/2018/06/energy-crisis-nsw-cant-keep-coal-plants-or-aluminium-smelters-running-prices-hit-14000mwhr/>

“Those spikes are \$14,000 per megawatt hour bursts, which dwarfs everything else. The average price in NSW was \$220/MWh on Friday.”

Energy Issues -- US

Why HELE Matters

By Donn Dears, Power For USA, June 1, 2018

<http://ddears.com/2018/06/01/why-hele-matters/>

[SEPP Comment: With its CO2 regulations on coal-fired power plants, has the EPA become a threat to human health and welfare?]

Americans Are Being Badly Served

By Donn Dears, Power For USA, June 5, 2018

<http://ddears.com/2018/06/05/americans-are-being-badly-served/>

“Reliability of the grid and availability of low-cost electricity should not be a political issue.”

[SEPP Comment: Discussing the consequences of the hidden (ancillary) costs of wind and solar.]

Another Utility Voices Reliability Concerns

By Donn Dears, Power For USA, May 28, 2018

<http://ddears.com/2018/05/29/another-utility-voices-reliability-concerns/>

From the Horse’s Mouth

By Donn Dears, Power For USA, June 8, 2018

<http://ddears.com/2018/06/08/from-the-horses-mouth/>

How America’s Shale Plays Are Turning The U.S. Into A Global Exporting Power

By David Blackmon, Forbes, June 6, 2018

<https://www.forbes.com/sites/davidblackmon/2018/06/06/how-americas-shale-plays-are-turning-the-u-s-into-a-global-exporting-power/#1670e28c27c0>

Record Oil Exports Help Cut U.S. Trade Gap

Petroleum shipments reached nearly \$20 billion in April

By Josh Mitchell and Christopher M. Matthews, WSJ, June 6, 2018
<https://www.wsj.com/articles/u-s-trade-gap-narrowed-2-1-in-april-1528288570>

Oil and Natural Gas – the Future or the Past?

Why The Next Oil Bonanza Could Be Deep Under Water

By Gillian Rich, IBD, June 4, 2018

<https://www.investors.com/news/oil-stocks-deepwater-oil-super-basin-bonanza-permian-shale/>

Return of King Coal?

Indonesia neglects renewables in export and domestic-driven coal boon

Indonesia's coal industry is enjoying a resurgence, driven both by rising demand from China—the world's biggest consumer of the fossil fuel—and a push by the government in Jakarta to build more coal-fired power plants.

By Hans Nicholas Jong, Mongabay.com, May 31, 2018 [H/t GWPF]

<http://www.eco-business.com/news/indonesia-neglects-renewables-in-export-and-domestic-driven-coal-boon/>

Nuclear Energy and Fears

Taxpayer Bankrolls £15BN New Nuclear Power Plant

By Staff Writer, The Times, Via GWPF, June 4, 2018

<https://www.thegwpf.com/taxpayer-bankrolls-15bn-new-nuclear-power-plant/>

Alternative, Green (“Clean”) Solar and Wind

Britain Has Gone Nine Days Without Wind Power

By Rachel Morison, Bloomberg, June 7, 2018 [H/t GWPF]

<https://www.bloomberg.com/news/articles/2018-06-07/u-k-wind-drought-heads-into-9th-day-with-no-relief-for-weeks>

Energy & Environmental Newsletter: June 4, 2018

By John Droz, Jr. Master Resource, June 4, 2018

<https://www.masterresource.org/alliance-for-wise-energy-decisions/energy-environmental-newsletter-june-4-2018/>

Alternative, Green (“Clean”) Energy -- Other

Hydrogen fuel cell trains herald new steam age

By Paul Homewood, Not a Lot of People Know That, June 9, 2018

<https://notalotofpeopleknowthat.wordpress.com/2018/06/09/hydrogen-fuel-cell-trains-herald-new-steam-age/#more-33716>

Alternative, Green (“Clean”) Energy -- Storage

A review of underwater compressed air storage

By Roger Andrews, Energy Matters, May 31, 2018

<http://euanmearns.com/a-review-of-underwater-compressed-air-storage/#more-22122>

Beyond The Spin of Green Energy Storage

By Euan Mearns, Energy Matters, May 29, 2018

<http://euanmearns.com/beyond-the-spin-of-green-energy-storage/#more-22093>

“Guest post by Diarmuid Foley who provides a detailed overview of technical initiatives to accommodate ever-higher levels of variable renewable energy onto the Irish grid whilst

maintaining grid stability. The main theme is renewable energy storage versus grid stabilisation services.”

Alternative, Green (“Clean”) Vehicles

BMW, Daimler struggle as Europe's emissions plans at risk of coming undone

By Elisabeth Behrmann, Bloomberg, June 1, 2018 [H/t GWPF]

<http://europe.autonews.com/article/20180601/ANE/180609983/bmw-daimler-struggle-as-europes-emissions-goals-at-risk-of-coming>

Other Scientific News

Carbon dating accuracy called into question after major flaw discovery

By Colm Gorey, Siliconrepublic, June 6, 2018 [H/t GWPF]

<https://www.siliconrepublic.com/innovation/carbon-dating-accuracy-major-flaw>

Link to paper: Fluctuating radiocarbon offsets observed in the southern Levant and implications for archaeological chronology debates

By Sturt W. Manning, et al. PNAS, May 29, 2018

<http://www.pnas.org/content/early/2018/05/23/1719420115>

[SEPP Comment: The calibration curves in the northern and southern hemispheres, based on carbon 14, may be off by as much as 20 years.]

Other News that May Be of Interest

The First Imagery from the New Geostationary Satellite

By Cliff Mass Weather and Climate Blog, June 3, 2018

<http://cliffmass.blogspot.com/2018/06/the-first-imagery-from-new.html>

BELOW THE BOTTOM LINE:

Climate change killed the aliens, and it might kill us too, new simulation suggests

Easter Island's demise suggests all of human civilization may face a similar fate.

By Brandon Specktor, Live Science, June 7, 2018

<https://www.nbcnews.com/mach/science/climate-change-killed-aliens-it-might-kill-us-too-new-ncna880671>

Original article: The neurobiology of climate change denial

By John Ridgeway, Climate Scepticism, June 6, 2018

<https://cliscep.com/2018/06/06/the-neurobiology-of-climate-change-denial/>

[SEPP Comment: Writing in WUWT, the author of the original, John Ridgeway, has stated that it is a spoof, a prank.]

U.S. Geological Survey warns: Don't roast marshmallows over volcano

By Luis Sanchez, The Hill, May 29, 2018

<http://thehill.com/blogs/blog-briefing-room/389731-us-geological-survey-warns-against-roasting-marshmallows-over>

Glaciers head for the hills!

By Staff Writers, Climate Change Predictions.org, May 27, 2018

<http://climatechangepredictions.org/uncategorized/6074>

“Climbers and officials in Nepal are worried that global warming is making the glacial environment unsafe for humans in the Himalayas. They say human settlements and activities such

as mountaineering are threatened by glaciers retreating and glacial lakes growing both in number and size.

“Global warming rates in different parts of the country vary, says Saraju Baidya, a meteorologist at the department, which has been collecting data from around the country for 30 years. He and his colleagues say climate change has caused glaciers in the northern Himalayas to retreat at a rate never seen before, posing the threat of ‘glacial lake outburst floods’”.

BBC News, 21 May 2007

Never smile at a

By Staff Writers, Climate Change Predictions.org, May 30, 2018

<http://climatechangepredictions.org/uncategorized/9795>

“Rising temperatures could force the birth of more female crocodiles and fewer males, an expert said today. The scenario could cause some croc populations to disappear.

“Crocodile gender is determined by temperature during incubation. Nest temperatures of 89.6 to 91.4 degrees Fahrenheit (32-33 Celsius) result in males. Anything warmer or cooler produces females.

“Temperatures typically vary from the top of a nest to the bottom, producing both genders.”

LiveScience, 27 Nov 2006

ARTICLES:

1. The Climate-Change Tort Racket

Liberal cities join the contingency-fee bar to shake down oil firms.

Editorial, WSJ, June 8, 2018

https://www.wsj.com/articles/the-climate-change-tort-racket-1528499384?mod=cx_picks&cx_navSource=cx_picks&cx_tag=contextual&cx_artPos=1#cxrecs_s

SUMMARY: After political comments on racketeering laws, the editorial continues:

“San Francisco, Oakland, New York and Seattle have sued five global oil giants—BP, Chevron, ConocoPhillips, ExxonMobil and Royal Dutch Shell—for billions in future damages from climate change. Brass-knuckled plaintiff firm Hagens Berman Sobol Shapiro has been shopping around the lawsuit to other cities desperate for cash.

“No court has recognized common-law claims for injuries supposedly caused by climate change, and the Supreme Court unanimously ruled in AEP v. Connecticut (2011) that the Clean Air Act pre-empts public nuisance torts against corporations for greenhouse-gas emissions. So the cities are now arguing that the mere production and promotion of fossil fuels create a public nuisance, and the suits are heading to court.

“San Francisco and Oakland were counting on a home courtroom advantage with their choice of legal venue give that climate change is something of a religion in California. But Clinton-appointed federal Judge William Alsup is calling fouls as he sees them.

“‘We won the Second World War with fossil fuels. If we didn’t have fossil fuels, we would have lost that war and every other war,’ the judge mused during a recent hearing. ‘And so we have gotten a huge benefit from the use of fossil fuels, right?’ Plaintiff attorney Steve Berman agreed.

“Judge Alsup also pointed out that the federal government and states have encouraged the production of fossil fuels. ‘If the nation is saying, ‘please do it,’ how can we hold them liable for that?’ he asked.

“The cities’ ostensible trump card was a document purporting to show that the oil companies concealed evidence that they knew for decades that fossil fuels contribute to global warming. But as the judge noted, this ‘smoking gun’ was merely a ‘slide show that somebody had gone to the [United Nations Intergovernmental Panel on Climate Change] and was reporting on what the IPCC had reported, and that was it. Nothing more.’

“When Judge Alsup asked for an example of an out-of-pocket cost that San Francisco has paid due to climate change, Mr. Berman replied: ‘We have people that we’ve had to employ, outside consultants, to study global warming. Had to hire them to figure out how high the sea wall should be.’

“Even this was contradicted by a 2017 San Francisco general-obligation bond document that says ‘the City is unable to predict whether sea-level rise or other impacts of climate change or flooding from a major storm will occur.’ If Mr. Berman is right, then the Securities and Exchange Commission should prosecute San Francisco for a fraudulent bond offering.

“Cities are demanding billions for an ‘abatement fund’ that will help backfill their budgets. San Francisco schools’ retirement costs have more than doubled since 2012. New York City subways are in disrepair, which its lawyers attribute to hurricane damage caused by climate change but everyone knows is the result of decades of neglect. The real public nuisances in these progressive sanctuaries are vagrancy, public urination and open drug use that are all increasingly common.

‘Hagens Berman, which has negotiated a 23.5% contingency fee in the San Francisco and Oakland cases, is hoping the oil giants will pay to make the lawsuits go away, which may be tempting as cases pile up. Federal Judge John Keenan is reviewing a motion to dismiss New York City’s lawsuit on June 13. But by fighting the lawsuits, the companies are giving the public a valuable education in the monetary self-interest behind climate-change politics.’

2. You Wouldn’t Think Sea Level Is So Complex

Since precise measurements began, mean atmospheric CO2 level has risen for 58 consecutive years, with no detectable acceleration of sea-level rise.

WSJ, June 1, 2018, Letters

<https://www.wsj.com/articles/you-wouldnt-think-sea-level-is-so-complex-1527873471>

“Prof. Fred Singer (“The Sea Is Rising, but Not Because of Climate Change,” op-ed, May 16) is right: CO 2 emissions have no detectable effect on sea-level rise. Profs. Andrea L. Dutton and Michael E. Mann (May 22 letter) claim, without measurable evidence, that human-caused climate change raises sea levels.

“Sea-level is rising in some places and falling in others. Globally, sea levels are very slowly rising, but “human-caused climate change” cannot be the cause, because the rate of rise is no greater now than when the first Model A rolled off Ford’s assembly line.

“Ice crevasses near the coast of West Antarctica.

Ice crevasses near the coast of West Antarctica. PHOTO: MARIO TAMA/GETTY IMAGES
Since precise measurements began, mean atmospheric CO 2 level has risen for 58 consecutive years, with no detectable acceleration of sea-level rise. Clearly, human-caused warming doesn't significantly increase the rate of sea-level rise.

"Profs. Dutton and Mann also suppose the Antarctic ice sheet simply must lose ice in a warming climate because of "basic physics." That's also nonsense. Most of Antarctica averages far below freezing, so a few degrees of warming won't melt it. Melting decreases ice-sheet mass balance, while snowfall adds to it, offsetting sea-level rise. Multiple studies confirm accumulating snow on ice sheets increases as the climate warms, the result of downwind "ocean effect snowfall."

"Compelling evidence shows global warming from fossil-fuel use is modest and benign, and higher CO 2 levels measurably benefit agriculture and natural ecosystems, outweighing hypothetical harms.

David Burton
Cary, N.C. &
Thomas Wismuller
NASA meteorologist (Ret.)
Ogunquit, Maine