

The Week That Was: 2019-05-18 (May 18, 2019)

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The Science and Environmental Policy Project

Quote of the Week: “*For a successful technology, reality must take precedence over public relations, for Nature cannot be fooled.*” – Richard Feynman to NASA after the Challenger explosion.

Number of the Week: 415.26 ppm

THIS WEEK:

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

Language: In WUWT, a TWTW reader asked: “Do you see a tendency in the climate change reporting, say in the last 3 years? Is it getting better, scientifically speaking, or worse?”

Both in newspapers and in magazines with science or nature in the name, the reporting has been become more strident and personal attacks more frequent. But this was occurring long before the election of Donald Trump.

For example, in their 2010 book, *Merchants of Doubt* attacking four distinguished scientists, Oreskes and Conway implied that the evidence supporting their claims could be found in the works referenced in footnotes. Of course, the evidence was not there. By 2015, such subtleties were gone, no footnotes needed.

In the run-up to the Paris Agreement, 2015, UN Intergovernmental Panel on Climate Change (IPCC) and its followers were among the leaders of strident claims on the certainty of the science implying that \$100 billion per year sent to the UN Green Climate Fund could alleviate the threat of climate change by controlling carbon dioxide (CO2) emissions. As the IPCC became more strident on the effects of CO2 on temperature, it produced no significant hard evidence. The effort was political, not scientific.

Based on hard evidence, compared with natural changes, CO2 is a bit player in climate change. A graph covering the past 600 million years in an article by meteorologist Joe Bastardi shows the historic weak relationship between CO2 and temperatures. The graph may not be exact, but it should not be ignored, unless there is powerful hard evidence that the relationship is strong—evidence that the IPCC and its followers have failed to produce.

The recent attacks on Will Happer and the proposal to have an independent committee reviewing climate science indicate that the climate establishment knows something is wrong with its work. Happer is an expert in Atomic, Molecular and Optical Physics, which includes the study of electromagnetic radiation (including infrared radiation), the very field which is needed to understand how increasing CO2 may affect the earth’s temperatures by slowing electromagnetic radiation (including infrared radiation) from the earth’s surface to space. Yet, editorials in science magazines claim that he is not qualified because he is not a climate scientist – whatever a climate scientist is. See links under Challenging the Orthodoxy and Change in US Administrations.

Guardian Guidelines: According to reports the Guardian newspaper, UK, has updated its style guidelines. As stated in The Hill newspaper the guidelines:

“...no longer recommend the use of the phrases ‘climate change’ and ‘global warning.’”

“The Guardian will instead use ‘climate emergency, crisis or breakdown’ instead of ‘climate change’ and ‘global heating’ instead of ‘global warming,’ although the other phrases won’t be prohibited. The paper will also stop using ‘climate skeptic,’ opting instead for ‘climate science denier.’”

“‘Wildlife’ will be used instead of ‘biodiversity’ and ‘fish stocks’ will also change to ‘fish populations.’”

“We want to ensure that we are being scientifically precise, while also communicating clearly with readers on this very important issue,” editor-in-chief Katharine Viner said in a Friday Guardian article explaining the change. ‘The phrase ‘climate change’, for example, sounds rather passive and gentle when what scientists are talking about is a catastrophe for humanity.’”

“Increasingly, climate scientists and organizations from the UN to the Met Office are changing their terminology, and using stronger language to describe the situation we’re in,” she added.

“The article notes that United Nations secretary general António Guterres has used the phrase ‘climate crisis,’ as does climate scientist Hans Joachim Schellnhuber, who has advised German Chancellor Angela Merkel, the EU and the pope.”

Under these guidelines, is TWTW a climate science denier because TWTW claims that IPCC’s version of climate science is not science because it ignores contradicting hard evidence or is it a climate science denier because TWTW asserts the IPCC does not understand the greenhouse effect? See links under Defending the Orthodoxy.

Nature and Children: Nature magazine had an article advocating the use of children to motivate parents on the political issue of climate change, or “climate breakdown.” Statistician William Briggs discusses the absurdity of the proposal.

Also, it is useful to review the maturation of the human brain. According to the Health Encyclopedia of the University of Rochester Medical Center:

“Understanding the Teen Brain

“It doesn’t matter how smart teens are or how well they scored on the SAT or ACT. Good judgment isn’t something they can excel in, at least not yet.”

“The rational part of a teen’s brain isn’t fully developed and won’t be until age 25 or so.”

“In fact, recent research has found that adult and teen brains work differently. Adults think with the prefrontal cortex, the brain’s rational part. This is the part of the brain that responds to situations with good judgment and an awareness of long-term consequences. Teens process information with the amygdala. This is the emotional part.”

"In teen's brains, the connections between the emotional part of the brain and the decision-making center are still developing—and not always at the same rate. That's why when teens have overwhelming emotional input, they can't explain later what they were thinking. They weren't thinking as much as they were feeling."

Unfortunately, for many politicians it seems that the prefrontal cortex has never fully developed. See links under Communicating Better to the Public – Use Propaganda on Children and <https://www.urmc.rochester.edu/encyclopedia/content.aspx?ContentTypeID=1&ContentID=3051>

Greenhouse Effect – Benefits: It is generally accepted that greenhouse gases are a natural part of Earth's atmosphere. It is estimated that greenhouse gases raise average surface temperature of the Earth about 33°C (60°F). Without greenhouse gases, it is estimated that the average surface temperature would be about minus 18°C (0°F), rather than the current 15°C (59°F) for estimated global temperatures today. Water vapor and clouds account for 70 to 90% of the greenhouse effect. The 70% is from the 1992 IPCC report. Others assert a greater role for water vapor and clouds. The other major greenhouse gas is carbon dioxide, contributing an estimated 5 to 25%.

It is important to realize that without the greenhouse effect, the continental regions of the landmass out of the tropics would be much colder at night – well below freezing. Such temperatures would prevent agriculture in the great breadbaskets of the world, in the temperate regions. Grasses such as wheat and maize (corn) would not grow. Under such conditions, perhaps the only plants growing in the Midwest would be mosses, heaths, and lichen such as those growing in the tundra. (As discussed in last week's TWTW, Roy Spencer estimated that, based on the AIRS infrared temperature sounding instrument on the NASA Aqua Satellite, about 80% of the warming that has occurred since the satellite was launched in 2002 has occurred at night.)

The greenhouse effect is critical for agriculture and for life in the United States. For the Supreme Court to find that greenhouse gases, namely water vapor and carbon dioxide, are pollutants that can be regulated by the EPA under the Clean Air Act is an extraordinary act requiring extraordinary evidence. The Supreme Court had none. In its finding that greenhouse gases endanger public health and welfare, the EPA ignored the benefits of greenhouse gases and the greenhouse effect, but produced no hard evidence of harm, only questionable studies and models that do not describe what is occurring in the atmosphere.

The Competitive Enterprise Institute (CEI) has filed a Request for Correction under the Information Quality Act requesting the EPA stop using its Endangerment Finding until it corrects procedural errors committed during the preparation of the Endangerment Finding. This is in addition to the earlier petition filed by CEI and SEPP and is not part of a future supplement being prepared stating that the evidence presented by the EPA demonstrates that it does not understand the Greenhouse Effect and the benefits therefrom. See links under Challenging the Orthodoxy.

Multicellular Life: About 3.5 billion years ago, life was far simpler. It largely consisted of microorganisms such as prokaryotes, single-cell organisms without a membrane-bound nucleus. These are considered more primitive than eukaryotes which have a well-defined membrane-bound nucleus and specialized structures.

One form of prokaryote, blue-green bacteria, cyanobacteria, developed a method of obtaining energy by photosynthesis, using energy from the sun to chemically breakdown molecules of water

and carbon dioxide and reform them creating carbohydrates and oxygen. Then, life got complicated and multicellular life gradually developed, including, much later, animals.

All multicellular life depends on the breaking down molecules of water and carbon dioxide. Yet in their gaseous phase, these compounds are called pollutants.

Svensmark and Cosmic Rays: Last week our friends at WUWT carried an interview with Henrik Svensmark who developed the hypothesis that during times of low solar activity high-energy cosmic rays increase cloudiness in the earth's atmosphere. During times of high solar activity, the intensified solar wind reduces the number of high energy cosmic rays hitting the atmosphere, reducing cloudiness. Unfortunately, the written introduction to the interview was a bit cloudy about cosmic rays and solar radiation. TWTW did not link to it.

Svenmark's hypothesis is that high-energy cosmic rays from exploding supernovae (hugely massive stars), upon entering our atmosphere, cause ionization tracks which serve as nucleation sites for clouds to form. When the sun is very active, that is, during times of very numerous sunspots, the strong solar wind and solar magnetic field reduce the flux of these energetic cosmic rays, thereby decreasing cloud cover. During times of low solar activity (such as the Maunder Minimum), the cosmic ray flux increases cloud cover, thereby blocking incoming sunlight and cooling the earth.

Astrophysicist Gordon Fulks, "Solar Modulation of Galactic Cosmic Ray Electrons, Protons, and Alphas, JGR 1975" alerted SEPP to the confusion on the huge energy difference between of galactic cosmic rays and solar output. See links under Science: Is the Sun Rising?

Energy and the Information Infrastructure: Energy expert Mark Mills has produced five parts of a series in Real Clear Energy discussing the tremendous demands for electricity from developing electronics and associated high-tech equipment. The development of "smart" technology and artificial intelligence will place burdens on the grid that renewables cannot meet. Among the critical requirements for data centers, and other "smart" centers is that electricity must be reliable. Wind and solar are not, and battery back-ups are quickly depleted. The power demands are too great.

Mills summarizes his views in another article stating an energy revolution will not come from renewables. He states:

"If we want a disruption to the energy status quo, we will need new, foundational discoveries in the sciences. As Bill Gates has put it, the challenge calls for scientific 'miracles.' Any hoped-for technological breakthroughs won't emerge from subsidizing yesterday's technologies, including wind and solar. The Internet didn't emerge from subsidizing the dial-up phone, or the transistor from subsidizing vacuum tubes, or the automobile from subsidizing railroads. If policymakers were serious about the pursuit of the next energy revolution, they'd be talking a lot more about reinvigorating support for basic science."

There has been a number of comments made about ExxonMobil giving \$100 million to the National Renewable Energy Laboratory and other DOE laboratories with emphasis on "developing transformative advanced energy technologies with a focus on reducing emissions." However, based on reports much of this money will be going into failed technologies such as "biofuels, carbon capture and storage technologies." One wonders if anything really

transformative will come from this research. See links under Challenging the Orthodoxy and Seeking a Common Ground.

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 seven past recipients, Lisa Jackson, Barrack Obama, John Kerry, Ernest Moniz, John Holdren, Gena McCarthy and Jerry Brown are not eligible. Generally, the committee that makes the selection prefers a candidate with a national or international presence. The voting will close on June 30. Please send your nominee and a brief reason why the person is qualified for the honor to Ken@SEPP.org. Thank you.

Number of the Week: 415.26 ppm. (parts per million) At NOAA's Mauna Loa Hawaii Observatory, (3397 meters, or 11,135 feet above sea level) carbon dioxide hit 415.26 ppm on May 14. Traditionally levels peak in May then go down as plant life in the Northern Hemisphere consumes CO₂ to grow. This should be a time for merriment over the coming bursting of spring and greening of the planet. Unfortunately, for many it is a time for spreading fear of CO₂. See links under Measurement Issues – Surface.

NEWS YOU CAN USE:

Science: Is the Sun Rising?

The Mystery of High-Energy Cosmic Rays

By Staff Writers, NASA, Accessed May 13, 2019

<https://science.nasa.gov/science-news/news-articles/mystery-of-high-energy-cosmic-rays-news>

SVENSMARK's Force Majeure, The Sun's Large Role in Climate Change

By H. Sterling Burnett, WUWT, May 9, 2019

<https://wattsupwiththat.com/2019/05/09/svensmarks-force-majeure-the-suns-large-role-in-climate-change/>

[SEPP Comment: See comments above under the heading of Svensmark and Cosmic Rays.]

Censorship

Defamation-pedia? Climate Institute Sends ‘Cease & Desist’ Against Wikipedia! 7-Page List Of “Falsehoods”, “Malicious Intentions”

By P Gosselin, No Tricks Zone, May 15, 2019

<https://notrickszone.com/2019/05/15/defamation-pedia-climate-institute-sends-cease-and-desist-against-wikipedia-7-page-list-of-falsehoods-malicious-intentions/>

Challenging the Orthodoxy -- NIPCC

Climate Change Reconsidered II: Physical Science

Idso, Carter, and Singer, Lead Authors/Editors, Nongovernmental International Panel on Climate Change (NIPCC), 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, Nongovernmental International Panel on Climate Change (NIPCC), 2014

<http://climatechangereconsidered.org/climate-change-reconsidered-ii-biological-impacts/>

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

Climate Change Reconsidered II: Fossil Fuels

By Multiple Authors, Bezdek, Idso, Legates, and Singer eds., Nongovernmental International Panel on Climate Change, April 2019

<http://store.heartland.org/shop/CCR-II-Fossil-Fuels/>

Download with no charge:

<http://climatechangereconsidered.org/wp-content/uploads/2019/01/Climate-Change-Reconsidered-II-Fossil-Fuels-FULL-Volume-with-covers.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, Nongovernmental International Panel on Climate Change (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

CEI Petitions EPA to Correct 2009 Endangerment Finding

By Myron Ebell, CEI, May 17, 2019

<https://cei.org/blog/cei-petitions-epa-correct-2009-endangerment-finding>

Half of 21st Century Warming Due to El Nino

By Roy Spencer, May 13, 2019

<http://www.drroyspencer.com/2019/05/half-of-21st-century-warming-due-to-el-nino/>

Want an Energy Revolution?

It won't come from renewables—which can never supply all the power we need—but from foundational scientific discoveries.

By Mark Mills, City Journal, May 3, 2019 [H/t Cooler Heads]

<https://www.city-journal.org/next-energy-revolution>

Energy and Information Infrastructure: Part 5: Robots Eat Too: Huang's Law & The Voracious Appetite of Artificial Intelligence

By Mark Mills, Real Clear Energy, May 16, 2019

https://www.realclearenergy.org/articles/2019/05/16/energy_and_the_information_infrastructure_part_5_robots_eat_too_huang_s_law_the_voracious_appetite_of_artificial_intelligence.html

'Gimme Gimme Shock Treatment'

By Joe Bastardi, Patriot Post, May 17, 2019 [H/t ICECAP]

<https://patriotpost.us/opinion/63094-gimme-gimme-shock-treatment>

Mass extinction lie exposed: life is thriving

By Gregory Wrightstone, Inconvenient Facts, May 13, 2019 [H/t Paul Homewood]

<https://inconvenientfacts.xyz/blog/f/mass-extinction-lie-exposed-life-is-thriving>

Anxious About Extinctions? Go Check The Facts

By Paul Homewood, Not a Lot of People Know That, May 17, 2019

<https://notalotofpeopleknowthat.wordpress.com/2019/05/17/anxious-about-extinctions-go-check-the-facts/>

How capitalism will save endangered species

By Dan Hannan, Washington Examiner, May 10, 2019

<https://www.washingtonexaminer.com/opinion/how-capitalism-will-save-endangered-species>

Defending the Orthodoxy

Spotlight on the pulse of our planet

By Staff Writers, Paris (ESA), May 14, 2019

http://www.spacedaily.com/reports/Spotlight_on_the_pulse_of_our_planet_999.html

"Satellites deliver crucial information to help solve what is our biggest global problem: climate change. As well as taking the pulse of our planet, satellite data are used in a myriad of daily applications, and are also used increasingly in business. It's no surprise then that over 4 000 people have flocked to Milan to hear the latest scientific findings on Earth's natural processes and global change, and to learn about the wealth of new opportunities that Earth observation has to offer."

[SEPP Comment: No mention of global atmospheric temperature trends from 40 years of satellite data or changing infrared energy from earth to space from over 16 years of data.]

Guardian updates style: Climate change now 'climate emergency, crisis or breakdown'

By Rachel Franzin, The Hill, May 17, 2019

<https://thehill.com/policy/energy-environment/444327-guardian-updates-style-climate-change-now-climate-emergency-crisis>

[SEPP Comment: Great propaganda photo of unidentified chimneys belching black stuff in low light, probably steam under special effects.]

These Climate Change Arguments Need to Die

Recent climate protests have been met with a wave of dangerous cynicism that needs to be defeated.

By Joe Sandler Clarke, VICE, May 15, 2019

https://www.vice.com/en_uk/article/zmp3me/these-climate-change-arguments-need-to-die?utm_campaign=RevueCBWeeklyBriefing&utm_medium=email&utm_source=Revue%20newsletter

We just broke a CO2 record. Here's why it matters

By Chelsea Harvey, E&E News, May 16, 2019

<https://www.eenews.net/climatewire/2019/05/16/stories/1060340447>

“Atmospheric CO2 levels are directly correlated with rising global temperatures.”

[SEPP Comment: Bunk! Some readers may not be able to link to the article.]

Questioning the Orthodoxy

Neff: when reason is pushed to the corner

By Ondřej Neff, a Czech science-fiction writer and the editor-in-chief of The Invisible Dog, the Reference Frame, May 11, 2019

<https://motls.blogspot.com/2019/05/neff-when-reason-is-pushed.html#more>

“From a rational viewpoint, environmentalism is perfectly absurd in the conditions of the Western world. The environment has been self-evidently improving for decades. It has never gotten as much attention as it is receiving today, the air has never been as clear as today, fish are returning to rivers where they haven't been seen for decades. All this reality has been called ‘the state of emergency’ while a three-year limit has been claimed to quantify the point-of-no-return.”

Scientific Hubris and Global Warming

Guest Post by Gregory Sloop, WUWT, May 17, 2019

<https://wattsupwiththat.com/2019/05/17/scientific-hubris-and-global-warming/>

Is the Long Renewables Honeymoon Over?

By John Constable, GWPF, May 11, 2019

<https://www.thegwpf.com/is-the-long-renewables-honeymoon-over/>

Recent Studies Indicate Species Extinctions Decline With Warming – Mass Extinction Events Due To COOLING

By Kenneth Richard, NO Tricks Zone, May 16, 2019

<https://notrickszone.com/2019/05/16/recent-studies-indicate-species-extinctions-decline-with-warming-mass-extinction-events-due-to-cooling/>

Our Urban Climate Crisis

By Jim Steele, His Blog, May 14, 2019

<http://landscapesandcycles.net/our-urban-climate-crisis.html>

“Given that weather stations around the globe only record local conditions, it is important to understand over one third of the earth’s weather stations report a cooling trend (i.e. Fig 4 below) Cooling trends have various local and regional causes, but clearly, areas with cooling trends are not facing a “warming climate crisis”. Unfortunately, by averaging cooling and warming trends, the local factors affecting varied trends have been obscured.”

Why Does McKinsey Distort the Facts?

By Donn Dears, Power For USA, May 14, 2019

<https://ddears.com/2019/05/14/why-does-mckinsey-distort-the-facts/>

[SEPP Comment: *McKinsey is a “worldwide management consulting firm,” demonstrating incompetence?*]

After Paris!

It's Cheaper to Talk than to Cut Emissions

By Bjørn Lomborg, Project Syndicate, May 17, 2019

<https://www.project-syndicate.org/commentary/climate-change-emissions-rhetoric-reality-by-bjorn-lomborg-2019-05>

Brazil cancels another UN climate change event

By Staff Writers, AP, May 14, 2019 [H/t GWPF]

<https://www.dailymail.co.uk/wires/ap/article-7029289/Brazil-cancels-UN-climate-change-event.html>

Who knew? The fourth largest nation has threatened to pull out of the Paris Agreement

By Jo Nova, Her Blog, May 17, 2019

<http://joannenova.com.au/2019/05/who-knew-the-fourth-largest-nation-has-threatened-to-pull-out-of-the-paris-agreement/>

Green Flop: Falling Renewables Investments Stalls Paris Climate Goals

By Staff Writers, Financial Times, May 14, 2019

<https://www.thegwpf.com/green-flop-falling-renewables-investment-stalls-paris-climate-goals/>

Change in US Administrations

Trump Administration Might “Re-Examine” Climate Modeling

Environmental advocates are troubled by statements EPA Administrator Andrew Wheeler made at a gathering of environment ministers

By Jean Chemnick, E&E News, Via Scientific American, May 10, 2019

<https://www.scientificamerican.com/article/trump-administration-might-re-examine-climate-modeling/?redirect=1>

[SEPP Comment: *Why worry, the science is settled! Or is it?*]

Can Trump Save Your Air Conditioner from the Deep State?

By Ben Lieberman, CEI, May 14, 2019

<https://cei.org/blog/can-trump-save-your-air-conditioner-deep-state>

Trump vs. the Green New Deal

By Robert Bradley Jr. Master Resource, May 16, 2019

<https://www.masterresource.org/trump-donald/trump-vs-gnd-la/>

Problems in the Orthodoxy

German Employer’s Association Op Ed: “No Expert Politician In Berlin Believes In Switch To Green Energies Any More”

By P Gosselin, No Tricks Zone, May 14, 2019

<https://notrickszone.com/2019/05/14/german-employers-association-op-ed-no-expert-politician-in-berlin-believes-in-switch-to-green-energies-any-more/>

German onshore wind ‘collapse’ jeopardises EU renewable energy goals

The country installed only 134MW of new onshore wind capacity in the first three months of 2019 – its worst first quarter since 2000

By Priyanka Shrestha, Energy Live News, May 13, 2019

<https://www.energylivenews.com/2019/05/13/german-onshore-wind-collapse-jeopardises-eu-renewable-energy-goals/>

German Energiewende Flops – Despite Spending Billions of Euros

By Staff Writers, Daily Telegraph, Via GWPF, May 15, 2019

<https://www.thegwpf.com/german-energiewende-flops-despite-spending-billions-of-euros/>

Alberta premier Jason Kenney says provincial carbon tax will die May 30

By Dean Bennett, National Post, May 14, 2019

<https://nationalpost.com/pmn/news-pmn/canada-news-pmn/alberta-premier-says-provincial-carbon-tax-will-die-may-30>

UN Biodiversity Officials Fail Transparency Test

IPBES provides no CVs for most members of its influential panel.

By Donna Laframboise, Big Picture News, May 13, 2019

<https://nofrackingconsensus.com/2019/05/13/un-biodiversity-folk-fail-transparency-test/>

Seeking a Common Ground

ExxonMobil, National Renewable Energy Laboratory Launch \$100 Million Partnership For Low-Emissions Technologies

By Michael Sandoval, Western Wire, May 8, 2019

<http://westernwire.net/exxonmobil-national-renewable-energy-laboratory-launch-100-million-partnership-for-low-emissions-technologies/>

[SEPP Comment: Doubt this will deflect attacks against ExxonMobil or accusations against skeptics of taking money from ExxonMobil.]

Why resources aren't 'natural' and will never run out

By Steve Goreham, Washington Times, May 14, 2019

<https://www.washingtontimes.com/news/2019/may/14/why-resources-arent-natural-and-will-never-run-out/>

“Last week, the World Wildlife Fund proclaimed May 10 to be Europe’s Overshoot Day, the day that Europe consumed its portion of Earth’s resources for the year.”

Review of Recent Scientific Articles by CO2 Science

Response of a Tropical Tree Exposed to Elevated CO2 and Drought

de Oliveira, M.F. and Marenco, R.A. 2019. Gas exchange, biomass allocation and water-use efficiency in response to elevated CO₂ and drought in andiroba (*Carapa surinamensis*, Meliaceae). *iForest* 12: 61-68. May 9, 2019

<http://www.co2science.org/articles/V22/may/a5.php>

“Noting that climate models project the Amazon region could experience periods of prolonged drought in the future in consequence of CO₂-induced climate change, de Oliveira and Marenco (2019) set out to ‘assess the effect of elevated CO₂ (eCO₂) and drought on photosynthetic rates, water-use efficiency, and biomass allocation in andiroba (*Carapa surinamensis*).’

“In light of all the above, it is clear that andiroba tree growth will benefit from rising atmospheric CO₂ concentrations, which will stimulate their growth and improve their use of water, especially so during times of drought.”

The Interactive Effects of CO2 and Light Intensity on Orchid Flowering

Cho, A.R., Song, S.J., Chung, S.W. and Kim, Y.J. 2019. CO₂ enrichment with higher light level improves flowering quality of Phalaenopsis Queen Beer 'Maneforn.' [Really] *Scientia Horticulturae* 247: 356-361. May 16, 2019
<http://www.co2science.org/articles/V22/may/a8.php>

The Impact of Elevated CO₂ on Soybean Growth and Herbivore Resistance

Zhang, Y., Dai, Y., Wan, G., Liu, B., Xing, G. and Chen, F. 2018. Effects of elevated CO₂ on plant chemistry, growth, yield of resistant soybean, and feeding of a target Lepidoptera pest, *Spodoptera litura* (Lepidoptera: Noctuidae). *Environmental Entomology* 47: 848-856. May 15, 2019

<http://www.co2science.org/articles/V22/may/a7.php>

“Thus, in the future, farmers who grow the Lamar cultivar might be best able to take advantage of the plant yield-enhancing and pest damage-reducing effects observed here from rising atmospheric CO₂.”

The Effects of Elevated pCO₂ Seawater on Pacific Cod Larvae

Hurst, T.P., Copeman, L.A., Haines, S.A., Meredith, S.D., Daniels, K. and Hubbard, K.M. 2019. Elevated CO₂ alters behavior, growth, and lipid composition of Pacific cod larvae. *Marine Environmental Research* 145: 52-65. May 13, 2019

<http://www.co2science.org/articles/V22/may/a6.php>

Measurement Issues -- Surface

415.26 parts per million: CO₂ levels hit historic high

By Patrick Galey, Paris (AFP), May 14, 2019

http://www.spacedaily.com/reports/41526_parts_per_million_CO2_levels_hit_historic_high_999.html

What's Wrong With The Surface Temperature Record? Guest: Dr. Roger Pielke Sr.

By Anthony Watts, WUWT, May 13, 2019

<https://wattsupwiththat.com/2019/05/13/whats-wrong-with-the-surface-temperature-record-guest-dr-roger-pielke-sr/>

No Hockey Sticks: Studies Reveal Long-Term Lack of Warming

By Vijay Jayaraj, WUWT, May 16, 2019

<https://wattsupwiththat.com/2019/05/16/no-hockey-sticks-studies-reveal-long-term-lack-of-warming-and-a-recent-cooling-trend/>

A new temperature reconstruction, using proxy temperature measurements from locations in central Asia, has revealed that there has been no warming in the past 432 years.

Earth experiences second hottest April on record

By Miranda Green, The Hill, May 17, 2019

<https://thehill.com/policy/energy-environment/444268-earth-experienced-its-second-hottest-april-on-record>

Link to data: Tokyo Climate Center, WMO Regional Climate Center in RA II (Asia)

Monthly Anomalies of Global Average Surface Temperature in April (1891 - 2019, preliminary value)

https://ds.data.jma.go.jp/tcc/tcc/products/gwp/temp/apr_wld.html

“The monthly anomaly of the global average surface temperature in April 2019 (i.e. the average of the near-surface air temperature over land and the SST) was +0.43°C above the 1981-2010

average (+0.82°C above the 20th century average), and was the 2nd warmest since 1891. On a longer time scale, global average surface temperatures have risen at a rate of about 0.78°C per century.”

[SEPP Comment: Based on very sparse, or spotty, data.]

Robots Recreating Past Temperatures – Are Best to Avoid Australian Data

By Jennifer Marohasy, Her Blog, May 17, 2019

<https://jennifermarohasy.com/2019/05/robots-recreating-past-temperatures-are-best-to-avoid-australian-data/>

“While artificial intelligence, and in particular ANNs, are now considered a mature technology used for a variety of tasks that require pattern recognition and decision making and forecasting – their capacity is denied by mainstream climate scientists. One of the reasons is that leading climate scientists claim the natural climate cycles have been so perturbed by carbon dioxide that the patterns no longer persist. This is of course little more than a hypothesis, which can be tested using ANNs as a research tool.”

[SEPP Comment: Unfortunately, the term ANN is not defined; it probably refers to neural networks of computing systems – a framework of many different machine learning algorithms.]

Measurement Issues -- Atmosphere

Orbiting NASA instrument to examine Boston's carbon emissions, plant life

By Kat J. McAlpine for BU News, Boston MA (SPX) May 15, 2019

http://www.spacedaily.com/reports/Orbiting_NASA_Instrument_to_Examine_Bostons_Carbon_Emissions_Plant_Life_999.html

Much closer to home, researchers in Boston have the critical job of validating the data that will be coming down from OCO-3 by comparing the measurements with those taken from the ground.

Measurement Issues – Energy Flow

CO2 Climate Forcing In The Earth System Context: The Honey Bee Versus The Sun

By Kenneth Richard, No Tricks Zone, May 13, 2019

<https://notrickszone.com/2019/05/13/co2-climate-forcing-in-the-earth-system-context-the-honey-bee-versus-the-sun/>

Changing Weather

A New US Areal No Drought Record

By Roger Pielke Jr. His Blog, May 16, 2019

<https://rogerpielkejr.com/2019/05/16/a-new-us-areal-no-drought-record/>

[SEPP Comment: The proportion of US Land area not in drought is increasing.]

Cold Throttles N. Hemisphere Spring: “It’s Been Brutal” ...”Can’t Remember Such A Delayed Spring” ...”Barely A Hint Of Leaves On Trees”

By P Gosselin, No Tricks Zone, May 17, 2019

<https://notrickszone.com/2019/05/17/cold-throttles-n-hemisphere-spring-its-been-brutal-can-t-remember-such-a-delayed-spring-barely-a-hint-of-leaves-on-trees/>

[SEPP Comment: Where it is cooling, it’s called weather; where it is warming, it’s called climate.]

Deluge in California

By Cliff Mass, Weather and Climate Blog, May 15, 2019

<https://cliffmass.blogspot.com/2019/05/deluge-in-california.html>

New potential for tracking severe storms

By Staff Writers, Paris (ESA), May 15, 2019

http://www.spacedaily.com/reports/New_potential_for_tracking_severe_storms_999.html

Changing Climate

The Little Ice Age: What Happened Around the World

Between 1300 and 1850, the Earth experienced a Little Ice Age whose cause to this day is not known.

By Marcia Wendorff, Interesting Engineering, May 15, 2019 [H/t GWPF]

<https://interestingengineering.com/the-little-ice-age-what-happened-around-the-world>

Changing Seas

New Findings Contradict Alarmist Rahmstorf: Arctic/Greenland Ice Melt “Barely Impacting AMOC”

Gulfstream “barely impacted” by Arctic ice melt

By Die kalte Sonne (German text translated/edited by P Gosselin), No Tricks Zone, May 12, 2019

<https://notrickszone.com/2019/05/12/new-findings-contradict-alarmist-rahmstorf-arctic-greenland-ice-melt-barely-impacting-amoc/>

Drilling into the seabed beneath Earth’s most powerful ocean current

International expedition studies current’s past dynamics to understand its future

By Staff Writers, NSF Public Affairs, May 15, 2019

https://www.nsf.gov/discoveries/disc_summ.jsp?cntn_id=298544&WT.mc_id=USNSF_1

“The Antarctic Circumpolar Current is the planet’s most powerful and arguably most important current. It is the only current to flow clear around the globe without being diverted by any landmass.”

Low ocean oxygen levels can blind sea creatures

Vision in marine invertebrates very sensitive to oxygen in the water

Media Release, National Science Foundation, May 16, 2019

https://www.nsf.gov/discoveries/disc_summ.jsp?cntn_id=298549&WT.mc_id=USNSF_1

Link to paper: Vision is highly sensitive to oxygen availability in marine invertebrate larvae

By Lillian R. McCormick, et al, Journal of Experimental Biology, Apr 21, 2019

<http://jeb.biologists.org/content/early/2019/04/24/jeb.200899>

[SEPP Comment: Has usual and questionable assertions of human-caused changes.]

Changing Cryosphere – Land / Sea Ice

Jakobshavn Isbrae: Mighty Greenland glacier slams on brakes

By Jonathan Amos, BBC, May 14, 2019 [H/t GWPF]

<https://www.bbc.com/news/science-environment-48265217>

Study finds 24% of West Antarctic ice is now unstable

Press Release, American Geophysical Union, EurekAlert, May 16, 2019

https://www.eurekalert.org/pub_releases/2019-05/agu-sf2051619.php

Link to paper: Trends in Antarctic Ice Sheet Elevation and Mass

By Andrew Shepherd, et al., Geophysical Research Letters, May 16, 2019

<https://agupubs.onlinelibrary.wiley.com/doi/abs/10.1029/2019GL082182>

[SEPP Comment: The opening sentence of the press release demonstrates its alarmist tone: "In only 25 years, ocean melting has caused ice thinning to spread across West Antarctica so rapidly that a quarter of its glacier ice is now affected, according to a new study." The data starts 25 years ago, we have no idea what was occurring before!]

New study boosts understanding of how ocean melts Antarctic Ice Sheet

By Staff Writers, Hobart, Australia (SPX) May 15, 2019

http://www.spacedaily.com/reports/New_study_boosts_understanding_of_how_ocean_melts_Antarctic_Ice_Sheet_999.html

Link to paper: Seasonality of warm water intrusions onto the continental shelf near the Totten Glacier

By Alessandro Silvano, JGR Oceans, May 3, 2019

<https://agupubs.onlinelibrary.wiley.com/doi/abs/10.1029/2018JC014634>

Acidic Waters

Better understanding of coral-algae relationship could help prevent bleaching

By Brooks Hays, Washington (UPI), May 13, 2019

http://www.terrordaily.com/reports/Better_understanding_of_coral-algae_relationshipCould_help_prevent_bleaching_999.html

"Little is known about the molecular mechanisms underlying their symbiotic relationship -- how can we understand the break-up if we don't understand the relationship in the first place?" Cheong Xin Chan, a researcher at the University of Queensland and its Institute for Molecular Bioscience, said in a news release.

[SEPP Comment: The research measuring the changing pH of the critical region for coral growth is an important step.]

An Ocean Acidification Experiment

By Michael Chase, clisciwatch May 2019 [H/t WUWT]

<https://clisciwatch.wordpress.com/2019/05/13/an-ocean-acidification-experiment/>

Agriculture Issues & Fear of Famine

Global wheat production set to hit record 777Mt: USDA

By Staff Writers, Grain Central, May 13, 2019

<https://www.graincentral.com/markets/global-wheat-production-set-to-hit-record-777mt-usda/>

Lowering Standards

Climate Change Killing Frogs, Say BBC

By Paul Homewood, Not a Lot of People Know That, May 13, 2019

<https://notalotofpeopleknowthat.wordpress.com/2019/05/13/climate-change-killing-frogs-say-bbc/>

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

Guardian Lauds Coal Free Week- But Forgets To Mention Gas Supplied 49%!

By Paul Homewood, Not a Lot of People Know That, May 11, 2019

<https://notalotofpeopleknowthat.wordpress.com/2019/05/11/guardian-lauds-coal-free-week-but-forgets-to-mention-gas-supplied-49/>

[SEPP Comment: Pie charts based on data from the Balancing Mechanism Reporting Service (BMRS)

“This BMRS is the primary channel for providing operational data relating to the GB Electricity Balancing and Settlement arrangements. It is used extensively by market participants to help make trading decisions and understanding market dynamics and acts as a prompt reporting platform as well as a means of accessing historic data.”]

<https://www.bmreports.com/bmrs/?q=help/about-us>

Communicating Better to the Public – Make things up.

BBC Claims Poor Countries Are Worse Off Because Of Fossil Fuels

By Paul Homewood, Not a Lot of People Know That, May 12, 2019

<https://notalotofpeopleknowthat.wordpress.com/2019/05/12/bbc-claims-poor-countries-are-worse-off-because-of-fossil-fuels/>

Video: Netflix, Attenborough and Cliff-Falling Walruses, the Making of a False Climate Icon

By Staff Writers, GWPF, May 17, 2019

<https://www.thegwpf.com/netflix-attenborough-and-cliff-falling-walruses-the-making-of-a-false-climate-icon/>

Communicating Better to the Public – Use Propaganda on Children

Nature Advocates Using Children To Propagandize Parents

By William Briggs, His Blog, May 14, 2019

<https://wmbiggs.com/post/27131/>

Children can foster climate change concern among their parents

By Danielle F. Lawson, et al. Nature, Climate Change, May 6, 2019

<https://www.nature.com/articles/s41558-019-0463-3>

Brainwashing Children Works?

By John Hinderaker, Powerline, May 12, 2019

<https://www.powerlineblog.com/archives/2019/05/brainwashing-children-works.php>

Questioning European Green

EU Faces Plastic Waste Crisis in Wake of New Export Restrictions

Press Release by GWPF, May 15, 2019

<https://www.thegwpf.com/eu-faces-plastic-waste-crisis-in-wake-of-new-export-restrictions/>

Link to EU “recycling” study: Save the Oceans: Stop recycling plastic

By Mikko Paunio, GWPF, 2019

<https://www.thegwpf.org/content/uploads/2019/05/Paunio-Baselagreement.pdf>

[SEPP Comment: Under “recycling,” no longer can the EU ship it to Asia and Africa where it becomes a major part of the ocean trash.]

Questioning Green Elsewhere

On the Energy Innumeracy of the supporters of Canada’s Green New Deal

By Blair King, A Chemist in Langley, May 7, 2019 [H/t Cooler Heads]

<https://achemistinlangley.net/2019/05/07/on-the-energy-innumeracy-of-the-supporters-of-canadas-green-new-deal/>

[SEPP Comment: The US is not the only country where bold new plans for energy fail to recognize simple physics and chemistry.]

Subsidies and Mandates Forever

Democrats Try to Extend Wind, Solar Aid They Agreed to Let Die

By Ari Natter, Bloomberg, May 15, 2019 [H/t Cooler Heads]

<https://www.bloomberg.com/news/articles/2019-05-15/democrats-try-to-extend-wind-solar-aid-they-agreed-to-let-die>

Critics blame solar farms for high electricity bills as it emerges owners earn more money from taxpayer-funded handouts than selling energy [UK]

By Colin Frenandez, Daily Mail, May 12, 2019 [H/t GWPF]

<https://www.dailymail.co.uk/news/article-7021119/Solar-farms-millions-taxpayer-handouts-make-selling-electricity.html>

EPA and other Regulators on the March

Modus Operandi: How the EPA and the Agency for Toxic Substances and Disease Registry Keep Your Fears Alive.

By Frank Schnell, Science 2.0, **Nov 7, 2018**

https://www.science20.com/frank_schnell/modus_operandi_the_methods_by_which_epa_atsdr_keep_the_fear_alive-235123

Energy Issues – Non-US

Energy and the Information Infrastructure Part 5: Robots Eat Too: Huang's Law & The Voracious Appetite of Artificial Intelligence

By Mark Mills, Real Clear Energy, May 16, 2019

https://www.realclearenergy.org/articles/2019/05/16/energy_and_the_information_infrastructure_part_5_robots_eat_too_huang_s_law_the_voracious_appetite_of_artificial_intelligence.html

Fossil Fuels vs. Climate Politics: Two Graphs

By Robert Bradley, Jr. IER, May 15, 2019

<https://www.instituteforenergyresearch.org/renewable/fossil-fuels-vs-climate-politics-two-graphs/>

Corbyn's Power Grab: Prospects for Public Ownership of the UK Energy Sector

By John Constable, GWPF, May 15, 2019

<https://www.thegwpf.com/prospects-for-public-ownership-of-the-uk-energy-sector/>

Energy Issues -- US

Natural Gas Is Good, but Opposition Escalates

By Kenneth Costello, Master Resource, May 15, 2019

<https://www.masterresource.org/natural-gas-politics/natural-gas-is-good-but-strong-opposition-has-escalated/>

Washington's or State Government's Control of Energy

Another Day, Another Blocked Pipeline into New York

By Ben Lieberman, CEI, May 17, 2019

<https://cei.org/blog/another-day-another-blocked-pipeline-new-york>

Oil and Natural Gas – the Future or the Past?

US oil, LNG export buildout takes shape on Gulf Coast

By Meghan Gordon, et al, S&P Global, Platts, May 13, 2019

<https://www.spglobal.com/platts/en/market-insights/latest-news/oil/051319-us-oil-lng-export-buildout-takes-shape-on-gulf-coast>

Alternative, Green (“Clean”) Solar and Wind

Tesla's Solar Business Approaches Terminal Decline

By John Engle, Seeking Alpha, May 6, 2019

<https://seekingalpha.com/article/4260665-teslas-solar-business-approaches-terminal-decline>

[SEPP Comment: *SolarCity in Buffalo, NY, is failing?*]

The Problem of Renewable Energy and Intermittency

By Cornelis van Kooten, Master Resource, May 14, 2019

<https://www.masterresource.org/renewable-energy-fallacies/the-problem-of-renewable-energy/>

[SEPP Comment: *Discussion of back-up choices. How is the cost of back-up allocated?*]

Energy & Environmental Newsletter: May 13, 2019

By John Droz, Jr. Master Resource, May 13, 2019

<https://www.masterresource.org/alliance-for-wise-energy-decisions/energy-environmental-newsletter-may-13-2019/>

Alternative, Green (“Clean”) Vehicles

States Start Hitting America’s Electric Drivers With Higher Fees

Other nations want to boost electric cars. In the U.S., they’re a threat to gasoline-tax revenue.

By David Bakers, Bloomberg, May 13, 2019

<https://www.bloomberg.com/news/articles/2019-05-13/states-start-hitting-america-s-electric-drivers-with-higher-fees>

California Dreaming

Trump administration cancels \$929-million grant for California bullet train

By Ralph Vartabedian and Stuart Leavenworth, LA Times, May 16, 2019

<https://www.latimes.com/local/california/la-me-high-speed-rail-loses-federal-funding-20190516-story.html>

California’s CO2 reduction claim bogus, ignores states forest management and wildfire emissions debacle

Guest essay by Larry Hamlin, WUWT, May 17, 2019

<https://wattsupwiththat.com/2019/05/17/californias-co2-reduction-claim-bogus-ignores-states-forest-management-and-wildfire-emissions-debacle/>

Health, Energy, and Climate

LED light can damage eyes, health authority warns

By Amlie Baubeu, (AFP) May 15, 2019

http://www.spacedaily.com/reports/LED_light_can_damage_eyes_health_authority.warns_999.html

“The ‘blue light’ in LED lighting can damage the eye’s retina and disturb natural sleep rhythms, France’s government-run health watchdog said this week.

‘New findings confirm earlier concerns that ‘exposure to an intense and powerful [LED] light is ‘photo-toxic’ and can lead to irreversible loss of retinal cells and diminished sharpness of vision,’ the French Agency for Food, Environmental and Occupational Health & Safety (ANSES) warned in a statement.’

[SEPP Comment: *A great advance in energy efficiency is dashed? Is it time to throw away cell phones and similar health hazards?*]

'Mexican Blood Flu' A Hoax, Started By Supplement-Selling Dirtbags

By Josh Bloom, ACSH, May 16, 2019

<https://www.acsh.org/news/2019/05/16/mexican-blood-flu-hoax-started-supplement-selling-dirtbags-14031>

Environmental Industry

WWF support for sterilization programs and “shoot on sight” [of humans?] uncovered by Dutch TV

By Staff Writers, Survival, May 17, 2019 [H/t GWPF]

<https://www.survivalinternational.org/news/12142>

Other News that May Be of Interest

Rebounding sea lions offer entertainment, havoc at marinas

By Tom Banse, AP, May 13, 2019

<https://www.eenews.net/eenewspm/2019/05/13/stories/1060327515>

[SEPP Comment: *The US Marine Mammal Act has been a great success, to the dismay of many humans living near the exploding mammal populations.*]

BELOW THE BOTTOM LINE:

Bill Nye tees off on climate change skeptics: 'The planet is on f---ing fire!'

By Joe Concha, The Hill, May 13, 2019

<https://thehill.com/homenews/media/443372-bill-nye-tees-off-on-climate-change-skeptics-the-planet-is-on-f-ing-fire>

"Activist and television host Bill Nye said the Earth is "on f---ing fire" in a new video warning about climate change, with the self-described 'Science Guy' urging lawmakers to "grow the f--- up" and allocate money to fight rising emissions."

Internet Science Made Stupid: "Scientists Warn Gulf Of Mexico 'Supervolcano' About To Erupt"

Guest geological storytelling by David Middleton, WUWT, May 15, 2019

<https://wattsupwiththat.com/2019/05/15/bad-internet-science-scientists-warn-gulf-of-mexico-supervolcano-about-to-erupt/>

ARTICLES

1. Roundup of Cancer Evidence

The EPA says the weed killer is safe and noncarcinogenic.

Editorial, WSJ, May 14, 2019

<https://www.wsj.com/articles/roundup-of-cancer-evidence-11557876010>

The editorial states:

"A California jury awarded a stunning \$2.055 billion Monday to a couple who claim that Bayer AG's Roundup weed killer caused their cancer. But would the judgment have been different if the judge had allowed the jury to see contradictory evidence?

“That’s the question Bayer will raise in its appeal thanks to Judge Winifred Smith, who presided over the trial. The Alameda County Superior Court judge denied a request by Bayer’s lawyers to inform the jury that the Environmental Protection Agency concluded last month that Roundup’s active ingredient, glyphosate, is noncarcinogenic and poses no risk to public health when used as directed.

‘What’s the relevance?’ Judge Smith asked before dismissing Bayer’s request. But if glyphosate is safe, then it isn’t responsible for the non-Hodgkin lymphoma of Alva and Alberta Pilliod. The verdict follows two other recent cases awarding \$158 million against Roundup. Bayer now faces lawsuits from some 13,400 plaintiffs bringing similar claims.

The plaintiff lawyers behind these cases rely heavily on the World Health Organization’s International Agency for Research on Cancer (IARC), which claimed glyphosate is ‘probably carcinogenic.’ But the EPA’s new glyphosate assessment is far more robust than that 2015 analysis. Among other considerations, the EPA’s experts looked at 167 epidemiological, animal carcinogenicity, and genotoxicity studies. The agency excluded 39 of those studies over concerns about quality.

The IARC relied on fewer than half as many such studies. It was ‘limited to data published in openly available scientific literature and as such only considered a subset of the studies that EPA considered,’ says Alexandra Dunn, the assistant administrator at EPA’s Office of Chemical Safety and Pollution Prevention.

The international agency also failed to nix research focused on non-mammalian species like worms or reptiles, which the EPA considered irrelevant in determining human risk. And in 2017 Reuters reported the IARC ignored and omitted evidence that glyphosate was noncarcinogenic.

The IARC has issued cancer risk warnings for more than 1,000 products and activities, including hot beverages, aloe, red meat and working the night shift. An adviser for its glyphosate assessment, Christopher Portier, was accepting pay from Lundy, Lundy, Soileau & South, a firm known for its cancer class-action lawsuits. Mr. Portier now appears as a witness for the plaintiffs in the Roundup litigation.

The EPA’s glyphosate judgment is an interim finding and awaits final approval. But it follows similar judgments by regulators from the European Union, Australia, Japan, Canada and other developed countries after comprehensive evaluations. A longitudinal study published in 2017 in the Journal of the National Cancer Institute tracked cancer incidence among nearly 45,000 licensed pesticide applicators who used Roundup. The study found that ‘in unlagged analyses, glyphosate was not statistically significantly associated with cancer at any site.’

The EPA also looked for possible hazards to those who ate crops exposed to glyphosate. The agency made conservative assumptions about the levels of glyphosate residue on the crops and drinking water and concluded there is no risk to human health.

That sure sounds relevant, and perhaps the jury would have agreed. Big business isn’t popular these days, but companies don’t deserve to be looted based on a biased presentation of scientific evidence. [Boldface added.]

