

Letter from Exeter by William Shepherd¹

When the *Mayor of London* Boris Johnson entertained his readers with his account of a bike ride to the Chilterns, he described how he was greeted by the sight of ‘hawthorn blossom like gun smoke’ exploding across the hill-sides. What I suspect he saw was not an early sight of the frozen firework displays of hawthorn blossom, but this year’s late flowering of blackthorn, as Christopher Booker confirmed when travelling through the Chilterns last week, and seeing it still shining white in the hedgerows.²



It is true that for some years the hawthorn did flower very much earlier than normal (in 2010 the hawthorn was out in Somerset by April 25). This prompted environmental journalists who know little about nature to hail it as one of the proofs, along with primroses in December that the world was in the grip of runaway warming. But since nature has since returned to its former patterns (last year’s hawthorn didn’t come into flower until May 22), they have gone strangely quiet about such things.

The new party line, as we know, is to promote this *Carbonistas Cult* by going on about anything that can be called an “extreme weather event”, as if such things never happened before, so that any unusual

flood, drought or snowfall can be seen as further proof of warming that otherwise remains largely invisible.

A cursory reading of the diaries of Samuel Pepys and John Evelyn could hardly fail to note the plethora of “extreme weather events” in the 17th century, when scarcely a year went by when they could not describe some flood, drought, storm or blizzard as being “unknown in the memory of man”. There was even an extreme arson event in London in 1666 following an extreme pandemic event the previous year.

But the 17th century, of course, was the height of the *Little Ice Age*, when the world was colder than it had been in 13,000 years. Those environmental zealots so eager to blame any aberration in our weather on man-made warming seem to know as little of history as they do of nature.

Global warming is the theory that increased levels of carbon dioxide and certain other gases are causing an increase in the average temperature of the earth’s atmosphere because of the greenhouse effect.³

The manner in which it has captured the popular imagination, or at least the language, is most peculiar. Imagine the composition of the earth’s atmosphere as a 100 yard football field.

Most of the atmosphere is nitrogen so starting from the goal line this will get you to the seventy-eight yard line. Nearly all of what is left is oxygen which takes you to the ninety-nine yard line.

Most of what remains after that is the inert gas argon which brings you to within three and a half inches of the goal line. That’s pretty much the thickness of the chalk stripe.

How much of the remaining three inches is carbon dioxide? One inch. That’s how much CO₂ we have in our atmosphere. One inch in a hundred yard football field. And do you know how much it has increased on our football field in the last 50 years? Three-eighths of an inch...less than the thickness of a pencil.

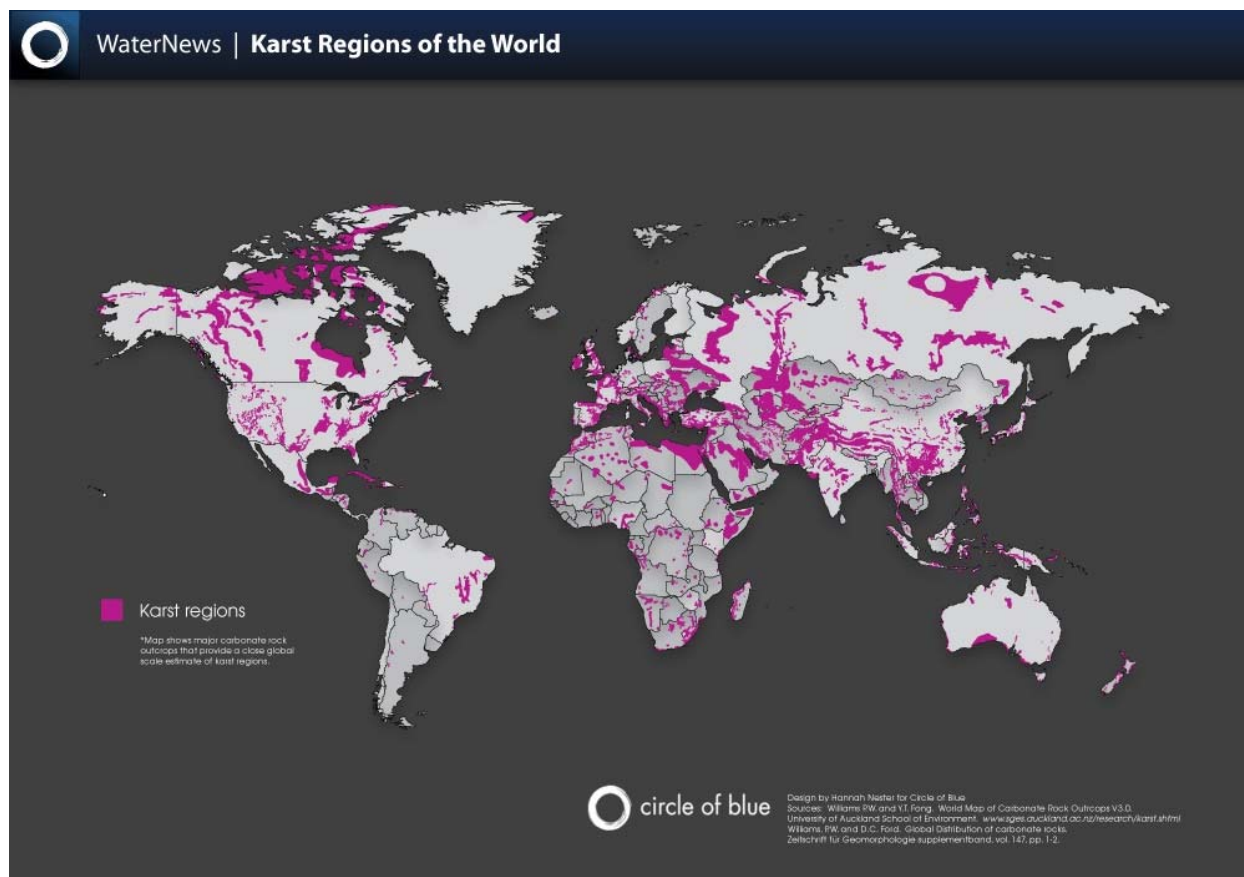


¹ First published in the [2006 Shepherd Chronicles](#) on Sunday 18th March 2006.

² *Strange weather is Normal* by Christopher Booker *Sunday Telegraph* on Sunday 12th May 2013. An alternative name for the hawthorn is the May Tree.

³ The level of CO₂ at the Zeppelin research station in Svalbard, about midway between mainland Norway and the North Pole, was measured at 393.7 parts per million on 28th April 2009, according to a report by the *Guardian's* science reporter John Vidal. He also noted that, before the industrial revolution, the level was about 280ppm; in 2008 it had been 394.5ppm; and a week earlier the level had 'peaked at more than 397 parts per million'.

The moral of the story is to treat CO₂ statistics with considerable scepticism...and perhaps just a smidgeon of contempt.



In fact global CO₂ cycles are extremely complex and are still very poorly understood. Karst formations, for instance, and limestone in general perform a critical function on Earth by serving as vast planetary storehouses of carbon dioxide. Calcium carbonate in karst absorbs dissolved carbon dioxide like a sponge, helping to regulate and stabilize our oxygen environment. The amount of carbon dioxide stored within sedimentary rock is more than six hundred times the total carbon content of the Earth's air, water, and living cells combined.

Instead of demonising CO₂...to the private profit of a tiny corrupt elite...we should be praising it to the heavens and using our scientific wizardry to exploit the abundance of CO₂ because laboratory experiments have shown plants become more efficient in the presence of greater levels of carbon dioxide so one obvious line of research is in force feeding plant growth...in real green houses not in hypothetical ones...to produce the agro-fuels the people of the world continue to crave for rushing themselves and their stuff around.

This makes more sense than the criminal enclosure by the rich and powerful of our One World Island with *Bio-fuel Plantations*.

Carbon is the building block of life and oxygen is the breath of life. How did we ever allow ourselves to be duped into demonising one of the two most important molecules on our planet?⁴

We cannot say that oil, natural gas and even coal are running short and at the same time state that greenhouse gas emissions will continue to grow indefinitely. The two issues are inextricably linked and the catastrophic scenarios of endless growth in emissions are simply absurd. The atmosphere cannot receive more CO₂ of fossil origin than the total of the planet's underground carbon reserves. In fact it will receive even less due to the natural regulation that absorbs half the emissions.⁵

	Year 1	Year 2	Year 3	Year 4	Year 5	Year 6
Year 1	100%	50%	25%	12%	6%	3%
Year 2	-	100%	50%	25%	12%	6%
Year 3	-	-	100%	50%	25%	12%
Year 4	-	-	-	100%	50%	25%
Year 5	-	-	-	-	100%	50%
Year 6	-	-	-	-	-	100%
Total	100	150	175	187	193	196

⁴ The other is the water molecule H₂O.

⁵ Quoted from the English translation of *CO₂: Un Mythe Planétaire* by the French engineer Christian Gerondeau available in English as *Climate: The Great Delusion* (2010, Stacey International, London, 150 pages, £98.99, ISBN 978 1 906768 41 6).

The CO₂ arithmetic goes like this. It is not rocket science. No computer is required. And you can work it out on the back of an envelope.

Based on the assumption ⁶ that within 12 months half the CO₂ produced during the year is removed from the atmosphere through natural planetary mechanisms, after five years the amount of CO₂ left in the atmosphere from Year 1 will be less than 3%. So as a first approximation the level of CO₂ in the atmosphere will peak at twice the maximum annual steady state emissions...see table.

Industrial growth and economic development in the past 200 years have given the rich countries 150 energy slaves for each of their citizens. ⁷ The poor countries will have caught up by the end of the 21st century...and will use any available fossil fuels to make sure they do.

This is why the engineers in the *Chinese Politburo* took the lead at Copenhagen in December 2009 in refusing to countenance curbing CO₂ emissions. Natural depletion, improved energy efficiency and man's virtually unlimited capacity to innovate and invent will deal with CO₂ emissions.

Far from being a catastrophe, burning oil, gas and coal for economic development will be viewed by future historians as one of the great successes of the adventure of civilisation on *Spaceship Earth* in the third millennium.

As the world learns to do more with less, this ratio of 150 energy slaves per person will come down dramatically to perhaps a quarter or a fifth of this...30 energy slaves per person may be a reasonable goal.

The potential energy efficiency gains alone are enormous. Amory Lovins set out the design parameters sixty years ago in *Soft Energy Paths*...and subtitled his book '*towards a durable peace*' thereby making the connection between energy and war.

At the start of the last century CO₂ levels were stable at 280 parts per million, which meant there was 2000 billion tons of CO₂ in the atmosphere. ⁸ If this was in approximate steady state condition then our CO₂ arithmetic predicts that annual CO₂ emissions would have been half of this or 1000 billion tons per year.

According to Gerondeau's estimates, annual emissions from the burning of carbon fossil fuels during the 21st century are likely to peak at 60 billion tons per year in the second half of the century, petering out completely as oil, gas and coal reserves are used up. Steady state will be at 2120 billion tons...2000 billion tons from the same natural processes driving the complex CO₂ cycles before the advent of the industrial age and 120 billion tons from peak industrial fossil fuel consumption.



Just six percent of the maximum CO₂ in the atmosphere in the 21st century will be caused by man ⁹...an entirely different ballpark to the cumulative, exponential and catastrophic increases in CO₂ that have been claimed with ever increasing stridency by the *Alarmist Tendency* within the *Environment Movement*.

This 6% increase in atmospheric CO₂, over and above what it might be in a world of pastoral hunter gatherers, will have no observable effect on climate and will be used to lift billions of people in the poorest countries of the world out of poverty and into the sustainable middle class lifestyle that is craved by the vast majority of their citizens...an argument made persuasively by Dr Bjorn Lomborg of the *University of Aarhus*.¹⁰

⁶ This figure of 'a half' is mentioned in passing by Christian Gerondeau and the depletion rate of 50% has been used for a back-of-the-envelope calculation.

⁷ The idea of energy slaves and this particular calculation was first discussed by Buckminster Fuller in *Critical Path* (1981).

⁸ 1 part per million (ppm) is equivalent to 7.3 billion tons of CO₂.

⁹ Adding in some sensitivity analysis at 20%...the bottom of the likely range...gives an asymptotic value of 485 instead of 195, which changes the ratio at peak CO₂ of natural to man-made contributions from six to 43 percent (94:06 to 57:43).

¹⁰ See [Kyoto Economics](#) by William Shepherd.