
Damn lies and climate stats

We have far greater control over our environment than the apocalyptic news media suggest.

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Early last year, newly elected 29-year-old US congresswoman Alexandria Ocasio-Cortez sat down for an interview with a correspondent for The Atlantic. AOC, as she is known, made the case for a green New Deal, one that would address poverty and social inequality in addition to climate change. She pushed back against critics who claimed it would be too expensive. “The world is going to end in 12 years if we don’t address climate change,” she said, “and your biggest issue is how are we gonna pay for it?”

The next day a reporter for news website Axios called several climate scientists to get their reactions to AOC’s claim that the world was going to end in 12 years. “All the time-limited frames are bullshit,” said Gavin Schmidt, a NASA climate scientist. “Nothing special happens when the ‘carbon budget’ runs out or we pass whatever temperature target you care about. Instead the costs of emissions steadily rise.”

Andrea Dutton, a palaeo-climate researcher at the University of Wisconsin-Madison, said: “For some reason the media latched on to the 12 years (2030),

presumably because they thought that it helped to get across the message of how quickly we are approaching this and hence how urgently we need action. Unfortunately, this has led to a complete mischaracterisation of what the (Intergovernmental Panel on Climate Change) report said.”

What the IPCC had actually written in its 2018 report and press release was that to have a good chance of limiting warming to 1.5C from pre-industrial times, carbon emissions needed to decline 45 per cent by 2030.

The IPCC did not say the world would end, or that civilisation would collapse if temperatures rose above 1.5C.

Scientists had a similarly negative reaction to the extreme claims made by Extinction Rebellion. Stanford University atmospheric scientist Kerry Emanuel told me: “I don’t have much patience for the apocalypse criers. I don’t think it’s helpful to describe it as an apocalypse.”

An AOC spokesman told Axios: “We can’t quibble about the phraseology, whether it’s existential or cataclysmic.” But, he added: “We’re seeing lots of (climate-change-related) problems that are already impacting lives.”

But if that’s the case, the impact is dwarfed by the 92 per cent decline in the decadal death toll from natural disasters since its peak in the 1920s. In that decade 5.4 million people died from natural disasters. In the 2010s, 0.4 million did. Moreover, that decline occurred during a period when the global population nearly quadrupled.

In fact, both rich and poor societies have become far less vulnerable to extreme weather events in recent decades. In 2019, the journal *Global Environmental Change* published a major study that found death rates and economic damage dropped by 80 to 90 per cent during the past four decades, from the 1980s to the present. While global sea levels rose 0.19m between 1901 and 2010, the IPCC estimates sea levels will rise as much as 0.66m by 2100 in its medium scenario, and by 0.83m in its high-end scenario. Even if these predictions prove to be significant underestimates, the slow rise of sea levels will likely allow societies ample time for adaptation.

We have good examples of successful adaptation to rising sea levels. The Netherlands became a wealthy nation despite having one-third of its landmass below sea level, including areas a full 7m below sea level, as a result of the gradual sinking of its landscapes. Today, our ability to modify environments is far greater than before. Dutch experts are working with the Bangladeshi government to prepare for rising sea levels.

What about fires? Jon Keeley, a US Geographical Survey scientist in California who has researched the topic for 40 years, told me: “We’ve looked at the history of climate and fire throughout the whole state, and through much of the state, particularly the western half of the state, we don’t see any relationship between past climates and the amount of area burned in any given year.”

In 2017, Keeley and a team of scientists modelled 37 regions across the US and found that “humans may not only influence fire regimes but their presence can actually override, or swamp out, the effects on climate”. Keeley’s team found that the only statistically significant factors for the frequency and severity of fires on an annual basis were population and proximity to development.

As for the Amazon, The New York Times reported, correctly, that “the 2019 fires were not caused by climate change”.

Early this year, scientists challenged the notion that rising carbon dioxide levels in the ocean were making coral reef species oblivious to predators. The seven scientists who published their study in the journal Nature had, three years earlier, raised questions about the marine biologist who had made such claims in the journal Science in 2016. After an investigation, Australia’s James Cook University concluded that the biologist had fabricated her data.

When it comes to food production, the Food and Agriculture Organisation of the UN concludes that crop yields will increase significantly under a wide range of climate change scenarios. Humans today produce enough food for 10 billion people, a 25 per cent surplus, and experts believe we will produce even more despite climate change.

Food production, the FAO finds, will depend more on access to tractors, irrigation and fertiliser than climate change, just as it did in the previous century.

The FAO projects that even farmers in the poorest regions today, such as sub-Saharan Africa, may see 40 per cent crop yield increases from technological improvements alone.

In its fourth assessment report, the IPCC projected that by 2100, the global economy would be three to six times larger than it is today, and that the costs of adapting to a high (4C) temperature rise would reduce GDP by just 4.5 per cent.

Does any of that really sound like the end of the world?

Exaggeration rebellion

California suffers from two major kinds of fires. First, there are wind-driven fires on coastal shrub land, or chaparral, where most of the houses are built. Think Malibu and Oakland. Nineteen of the state's 20 most deadly and costly fires have taken place in chaparral. The second type is forest fires in places such as the Sierra Nevada where there are far fewer people.

Mountain and coastal ecosystems have opposite problems. There are too many fires in the shrub lands and too few prescribed burns in the Sierras. The only solution to fires in the shrub land is to prevent them and/or harden homes and buildings to them.

Before Europeans arrived in the US, fires burned up woody biomass in forests every 10 to 20 years, preventing the accumulation of wood fuel, and fires burned the shrub lands every 50 to 120 years. But during the past 100 years, the US Forest Service and other agencies extinguished most fires, resulting in the accumulation of wood fuel.

Keeley published a paper in 2018 finding that all ignition sources of fires had declined in California except for electric power lines. "Since the year 2000 there've been a half-million acres burned due to powerline-ignited fires, which is five times

more than we saw in the previous 20 years,” he said. “Some people would say, ‘Well, that’s associated with climate change.’ But there’s no relationship between climate and these big fire events.”

What then is driving the increase in fires? “If you recognise that 100 per cent of these (shrub land) fires are started by people, and you add six million people (since 2000), that’s a good explanation for why we’re getting more and more of these fires,” Keeley said. What about the Sierra? “If you look at the period from 1910 to 1960, precipitation is the climate parameter most tied to fires. But since 1960, precipitation has been replaced by temperature, so in the last 50 years, spring and summer temperatures will explain 50 per cent of the variation from one year to the next. So temperature is important.”

But isn’t that also the period when the wood fuel was allowed to accumulate, I asked, due to suppression of forest fires?

“Exactly,” said Keeley. “Fuel is one of the confounding factors. It’s the problem in some of the reports done by climatologists who understand climate but don’t necessarily understand the subtleties related to fires.”

Would we be having such hot fires in the Sierra, I asked, had we not allowed wood fuel to build up over the last century? “That’s a very good question,” said Keeley. “Maybe you wouldn’t.”

Fires in Australia are similar. Greater fire damage in Australia is, as in California, due in part to greater development in fire-prone areas, and in part to the accumulation of wood fuel. One scientist estimates there is 10 times more wood fuel in Australia’s forests today than when the Europeans arrived. The main reason is that the government of Australia, as in California, refused to do controlled burns, for environmental and human health reasons. As such, the fires would have - occurred even had Australia’s climate not warmed.

The media depicted the 2019-20 fire season as the worst in Australia’s history but it wasn’t. It ranked fifth in terms of area burned, with about half of the burned acreage of 2002, the fourth-placed year, and about a sixth of the burned acreage of the worst season in 1974-75. The 2019-20 fires ranked sixth in fatalities, about half as

many as the fifth-placed year, 1926, and a fifth as many fatalities as the worst fire on record in 2009. While the 2019-20 fires are second in number of houses destroyed, they razed about 50 per cent less than the worst year, the 1938-39 fire season. The only metric by which this fire season appears to be the worst is in the number of non-home buildings damaged.

Climate alarmism, animus among environmental journalists towards the current Australian government and smoke that was unusually visible to densely populated areas appear to be the reasons for exaggerated media coverage.

The bottom line is that other human activities have a greater impact on the frequency and severity of forest fires than the emission of greenhouse gases. And that's great news, because it gives Australia, California and Brazil far greater control over their future than the apocalyptic news media suggested.

*Michael Shellenberger is president of Environmental Progress, an independent research and policy organisation. This is an edited extract from his new book *Apocalypse Never: Why Environmental Alarmism Hurts Us All*, published by HarperCollins Australia and available in e-book and audio.*