

EDITORIAL

Our previous editorial addressed the need to rediscover unity in how we (humanity around the globe) approach the quest for a healthy and sustainable environment (*EPL* 48(6): 331–332).

In the course of the research and discussions behind that editorial, we were struck by a phenomenon identified long ago by our founder, then-Editor-in-Chief Wolfgang E. Burhenne – the great harm that can result from the making of dire environmental predictions, when/if later the predicted events do not occur. Both then and now, the focal points of concern have been the myriad climate change predictions of dire geographical and environmental consequences that will manifest by a specified date, if certain measures are not taken.

These predictions are rampant following model-based discussions such as those issued by the IPCC in its 1990 report. There, the IPCC consensus indicated that the sea level would rise, but reached varying conclusions on its dimension. It offered a range of 30–120 cm by 2100, encompassing the “low”, “best” (majority), and “high” estimates. Following release of the IPCC’s predictions, however, even its highest estimates were vastly overshadowed by public statements that the rise would be much higher and occur much more quickly, with some suggesting that a more correct figure for the total rise by 2100 was approximately double the IPCC analysis, and others emphasising that the IPCC’s high estimate would be reached much sooner (*i.e.*, in 2060).

In time, even those pronouncements were surpassed, in statements that characterised the threat as even more imminent. Oppenheimer and Boyle stated that, by 1995, climate change would “desolat[e] the heartlands of North America and Eurasia with horrific drought, causing crop failures and food riots” and that within another year, “the Platte River would be dry, while a continent-wide black blizzard of prairie topsoil will stop traffic on interstates, strip paint from houses and shut down computers” (Oppenheimer, M. and Boyle, R.H. 1990. *Dead Heat*. New York: St Martin’s Press). The press and others virtually trumpeted reports of this kind, presumably to stifle three primary criticisms: (i) (from residents in coastal areas) that there had been little, if any, change in tide levels over the past 50–60+ years; (ii) that few land-based residents and businesses locate themselves in any area whose elevation is less than four feet above the coastal high-water mark; and (iii) that “predictions” about what would happen in 2100 are unhelpful, given their present uncertainty and the fact that the predictors and their target audience will all be dead by then.

In the 1990s, these increasingly dismal climate headlines were given little credence, in part due to recent history. As recently as the 1970s, academics and members of the news media were making headline-grabbing statements that, by the turn of the 21st century (*i.e.*, more than 19 years ago), the world would become significantly *colder*: “If present trends continue, the world [global mean temperature] will be about four degrees colder ... in 1990, but 11 degrees colder by the year 2000” (Watt, K.E.F. In: *Earth Day*, 1970). Another noted scientist, Nobel prize-winning biologist George Wald, was widely quoted in that year for saying that “civilization will end within 15 or 30 years [*i.e.*, by 1985 or 2000] unless immediate action is taken against problems facing mankind”. In 1968, a noted Stanford University Professor claimed in print that, by 1980, “[t]he death rate will [have] increased until at least 100-200 million people per year will be starving to death” (Ehrlich, P. 1968. *The Population Bomb*. New York: Sierra Club/Ballantine). He also famously claimed that “[i]f I were a gambler, I would take even money that England will not exist in the year 2000”.

Such statements are still being made (with adjusted “doomsday” deadlines), by persons with fewer scientific credentials but higher levels of general notoriety and access to the media. For example, Alexandria Ocasio-Cortez, a newly elected US congresswoman has stated (without authority or scientific basis) that “the world is going to end in 12 years if we don’t address climate change” (see, *e.g.*, Cummings, W. 2018. “The world ... Ocasio-Cortez says”. *USA Today*. Online at <https://www.usatoday.com/story/news/politics/onpolitics/2019/01/22/ocasio-cortez-climate-change-alarm/2642481002/>). These days, nearly every weather statistic, storm or hot day is sure to be media tagged by someone as the “worst on record” and attributed to climate change. This is all the more troubling to those of us still in possession of our faculties, who recall hotter days, higher annual precipitation, *etc.*, in the same area, within the past 40 years.

Although others have also mentioned a 12-year deadline (often attributed to the IPCC), most if not all have been more circumspect, merely claiming this time period as a “tipping point” by which serious (unspecified) efforts must start, if the world is to prevent the negative climate impacts predicted for 2100 (see, *e.g.*, Gore, A. 2018. “Statement by Former Vice President Al Gore on the IPCC Special Report on Global Warming”. Online at <https://www.algore.com/news/c439f640-2507-4040-b996-c18edc46ee32>).

The perils of doomsaying are generally well recognised. In the children’s fable, Chicken Little (in some countries known as “Henny Penny”) got plenty of attention with his story that the sky was falling, but became an object of derision when the story proved untrue. In a similar fable, a shepherd boy who had too often roused the community by falsely claiming that a wolf was attacking the flock, was ignored in an actual wolf attack. Dr Burhenne, a committed environmental activist, worried about these effects being caused by dire climate predictions. Such a reaction appears likely, in light of recent “end-of-the-world” quotations.

In the midst of the various media circuses, there is serious evidence available, if we would only focus on it. Such evidence is valuable and rare. Hard data on “global modelling” is nearly impossible to produce, given that there is no second planet available to serve as an experimental “control”. Evidence gathering is difficult, requiring the collection of hard data for a significant period of time following the predictions and comparing it to them. Scientists have apparently done this with sea-level data. Reports of satellite telemetry show that the sea-level rise in the first 25 years was 3.72 cm, essentially matching the “best” (middle) estimate of the IPCC report, which predicted a rise of approximately 4.5 cm over baseline, as of 2015. As the IPCC noted, virtually all scientists agree on the annual rate of sea-level rise since the last ice age. The telemetry data indicates, during the past 25 years, a threefold increase over the average rate in the 20th century.

These results ought to spark important discussions over questions as varied as the extent to which the “normal” ebb and flow of the inter-ice-age sea-level rises can be estimated and deduced from the current statistics, and whether the telemetric data indicates that all four factors underlying the IPCC reports performed as expected. Argument could focus equally on minimising the anthropomorphic contribution to climate change and on finding ways to protect against naturally caused climate change for as long as possible. Instead, however, the media and other commenters spend time pointing fingers at failed predictions and picking at details. In doing so, they give great support and attention to those who take the spotlight to chide governments and specified industries, but who do not promise, take or even propose specific action to abate the problem.

There is no doubt that anthropomorphic impacts on the environment abound, indeed, numerous articles within *EPL*’s pages have noted that the planet has moved from the Holocene Epoch to the Anthropocene, in which human impacts are more significant than any other factor in determining the fate of the planet (see *e.g.*, Robinson, N. 2014. “Fundamental Principles of Law for the Anthropocene?” *EPL* 44(1-2): 13–27; and Brown Weiss, E. at page 3 in this issue). Most of the largest cities around the world are facing devastating challenges to human health and ecosystems caused by air pollution (for the time being at least, cities in some major developed countries have been relatively successful in addressing air quality issues). Hazardous wastes and chemical-based industries, too, have been pervasive, and the challenge of providing uncontaminated drinking water affects both developed and developing countries alike. Plastic garbage in the oceans beyond national jurisdiction is defiling the “last frontier” on Earth and posing a serious hazard to major sources of food for the planet’s burgeoning population. These are only a few of the documented environmental challenges to be addressed.

The unwarranted attention given to irresponsible, but dramatic climate-based doomsday predictions, both when made and when they fail, is preventing the very thing that all of us, on all sides of the climate issue, should want – immediate action to resolve known and serious environmental problems. As we said in the last issue, shouldn’t systematic action on the environment be an equal priority for us all?

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