

Published August 11, 2021. Editor's Headline: "A Code Red for Humanity"

When I lived in Tennessee and taught as a lecturer *sans* summer employment, I spent the summer months with my son's family in Wyoming. Driving to get here, I broke up the trek with overnight visits to friends in Illinois and South Dakota. Invariably, as I entered the Black Hills, blue skies would appear. After nine months beneath overcast southern skies, Wyoming's skies were a welcome sight.

After retiring from college teaching I settled in Wyoming to luxuriate in its clean air and blue skies. Sadly, with a few years the beloved environment began to disappear into the black hole of climate change. Summer skies in today's Wyoming are obscured by the haze of smog from methane flares and the blankets of wildfire smoke. Even on the days when windstorms blow the smog and smoke elsewhere, blue skies appear only in ragged patches. Wyoming has acquired huge masses of clouds. Windstorms bring dry thunder whose lightning strikes ignite grassfires; without rain, they quickly race out of control. In California where I raised my children, huge wildfires burn out of control, adding their smoke to Wyoming's own. The fires, fueled by an ongoing drought, drive home that most Western states are under severe drought conditions.

"It's Not the Heat, It's the Damage," Bill McKibben titled his most recent *New Yorker* column. Kelp forests, the "rain forests of the sea" that cover a quarter of the planet's coastline, have shrunk by up to a third in the past decade alone. Other systems are in worrisome decline also. The Gulf Stream is slowing. We don't know how close we are to "tipping points that could rapidly turn the Amazon from rain forest into savanna," he writes. "In fact, name any large physical system on the planet, and chances are that it is now in chaotic flux."

U.N. Secretary-General António Guterres called "a code red for humanity" the most recent IPCC Climate Report. In it, scientists from around the world warn that we have fueled a "climate change with potentially catastrophic consequences." Scientists have no doubt that human activity is the culprit. The only uncertainty, the Climate Report authors say, is whether the world can muster the will to stave off a darker future than we have already carved out for ourselves. Thus far, the collective effort to slow climate change has been dismally insufficient. Global greenhouse gas pollution is growing; even the boldest pledges a few nations have put forth recently will leave the world on a perilous path.

But *The Wall Street Journal* called the report nonsense. "Economists have been rolling their eyes over this since climate politics began," wrote its reviewer. What chance do we have to address this emergency when entities like *The Wall Street Journal* deem scientific findings political posturing? It encourages corporations like Exxon to go on with business as usual, all the while giving lip service to correcting its earlier dissembling. It's not the heat, it's the damage.

Wyomingites suffer mosquito-borne diseases that previously appeared only in tropical countries—our warming climate encourages the mosquitos' move north. Meanwhile in Florida, another type of mosquito brought an outbreak of dengue fever. A global crisis is in public view. The summit slated for November in Glasgow, Scotland, may be our last chance to get runaway climate change under control. On the agenda is curbing emissions that will require countries to “accelerate the phase-out of coal,” “curtail deforestation,” “speed up the switch to electric vehicles,” and “encourage investment in renewables.” None of these sit well with Wyoming’s state legislators and our governor, all of whom are desperately trying to prop up the state’s coal production.

“I agree, the climate is changing,” a local farmer tells me. “But are humans to blame? I don’t think so. It’s Mother Nature.”

Yet the science is unequivocal. Go to grist.org, to its write-up on “The seven climate tipping points that could change the world forever.” You’ll find there an essay, illustrated by beautiful images and videos, on the seven basic earth systems, from the coral reefs that are bleaching to the rain forests in Brazil that, due to human folly, burn and are drying up. There’s visual evidence of melting ice sheets in Greenland and Antarctica and—more ominously yet—melting permafrost in Siberia and Alaska, where unprecedented wildfires have devoured boreal forests and left the ground too mushy to walk on. Melting permafrost releases tons and tons of methane and carbon into the atmosphere.

We need to slash greenhouse-gas emissions with incredible speed, warns McKibben, if we want a chance to reduce the total amount of warming and reduce the pushing and shoving on vital earth systems. But we also “need to prepare ourselves and our civilizations for massive dislocations.” He cites a landmark study of 1972, “The Limits to Growth,” of which the most worrisome of the researchers’ predictions, societal collapse, was set for “some time in the next few decades.” The collapse would arise from—at the time poorly understood—interactions of earth systems.

Already the world suffers unprecedented climate refugees. The desperate South American asylum seekers at the Mexican border—they arrive because they can no longer feed their children. We are in the midst of a climate disaster. Massive flooding in Europe and China have left hundreds dead and thousands homeless. My cousin in Germany tells me, the people displaced by recent floods won’t be allowed to rebuild the homes where they lost them—the flooded areas are prone to annual floods now.

It’s high time we took action. Even waiting for the November summit seems an unconscionable delay. Like it or not, we must get going to avoid our species facing a grim future.