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## DIRE FORECAST

# The Congressman Who Warned Us About Climate Change in 1864

**George Perkins Marsh wrote a best-selling book warning about the devastation of man-made climate change in the 19th century. We've been backsliding ever since.**



[Andrew Belonsky](#), 04.20.18 11:02 PM ET

George Perkins Marsh minced no words: “Man everywhere is a disturbing agent. Wherever he plants his foot, the harmonies of nature are turned to discord.”

So began *Man and Nature*, the Vermont congressman and U.S. ambassador’s in-depth summation of [man-made climate change](#), a book that laid out in simple terms how man changed the world for the worse and how that change was going to bury us in dust. A bestseller, it was

hailed as a sea-change when it first hit shelves in 1864.

Yeah, you read that right: 1864, 154 years ago. Why hasn’t America listened?

Marsh’s love for nature is traced to Woodstock, Vermont, where this son of a prominent lawyer grew up in the early 1800s, when the land was still frontier wild and where Marsh communed with the ancient oaks, maple, and ash endemic to the region.

“The bubbling brook, the trees, the flowers, the wild animals were to me persons, not things,” he wrote later. “[One] would find it hard to make out

as good a claim to *personality* as a respectable oak can establish.”

It was in Vermont too that Marsh first glimpsed how man negatively influenced the environment, how clearing trees led to flooding and increased temperature.

“Having been personally engaged to a considerable extent of clearing lands... I have had occasion both to observe and feel the effects resulting from an injudicious system of managing woodlands,” he wrote in 1849. He would keep this knowledge close to his heart after studying law and linguistics at Dartmouth and after being elected to the House of Representatives in 1843. For example, in 1847 he warned Vermont farmers against denuding land, saying that resultant temperature spikes and drought would “[convert] smiling meadows into broad wastes of shingle and gravel and pebbles, deserts in summer, and seas in autumn and spring.”

Initially limited to just his native environs, Marsh’s ecological thinking expanded after traveling through the Mediterranean, Europe, and Northern Africa, first as Minister to Turkey in 1850, and later as the U.S. ambassador to Italy, a role to which he was appointed by [Abraham Lincoln](#) in 1861. It was there, overseas, in the shadows of fallen and depleted empires in Greece, Rome, and then-Palestine, that Marsh saw the larger implications of contemporary erosion. If once fertile lands like those could be vanquished, so too could America.

He wrote of the Nile in 1851, “The delta, and I suppose the whole valley of the lower Nile, resemble in many points those of the Mississippi, the most striking difference being that the banks of the Nile have no forests, nor indeed any trees of spontaneous growth.”

Describing the landscape outside Jerusalem, he wrote, “The country between Hebron and Jerusalem consists of a succession of low rounded limestone hills, with narrower valleys

between, anciently terraced and cultivated to the tops, but now for the most part barren and desolate.” (It was also during this period that Marsh famously, among his fans, at least, became enamored with the camel, championing its adoption as transit in the American West.)

Seeing that America could very well end up as desolate as the deserts of the Middle East, Marsh in the early 1860s wrote his lucid, fact-filled tome to show “unlearned eyes” how plants, animals, man, and other geographical forces are held in balance, walking the reader through the interconnectedness of trees to soil and ocean currents to sea life, before showing how one change can have a ripple effect, leading to [rising temperatures](#), exhausted soil, flood, [droughts](#), and [other ecological disasters](#), and how human action is throwing that balance off-kilter, decimating forests, extinguishing species. Man has “increased the erosion of running waters... has promoted the deposit of solid matter in the sea... and invaded the realm of the ocean by constructing... wharves, piers, lighthouses.” In other words, “Man has brought the face of the earth to a desolation almost as complete as that of the moon.”

Not only that, but humans risk incurring nature’s wrath, as well: “The ravages committed by man subvert the relations and destroy the balance which nature had established between her organic and her inorganic creations; and she avenges herself upon the intruder, by letting loose upon her defaced provinces destructive energies hitherto kept in check by organic forces...”

The only way to save the planet, and thus ourselves, Marsh insisted, is to become more responsible in our interactions, to start replanting forests, cleaning waters ways, and replenishing our soil posthaste. “[Man must] become a coworker with nature in the reconstruction of the damaged fabric.” And if we don’t, Marsh says, we face the end of days: “The earth is fast becoming an unfit home for its noblest

inhabitant, and another era of equal human crime and human improvidence... would reduce it to such a condition of impoverished productiveness, of shattered surface, of climatic excess, as to threaten the deprivation, barbarism, and perhaps even extinction of the species.”

“‘Man and Nature’ was a game-changer. Greeted not with jeers, as such a book might be today, Marsh’s book, an instant bestseller, was cheered as a turning point.”

Marsh wasn’t the first American to write about climate change. Colonial leaders and founding fathers were well aware of climate change, and in fact worked to change the climate for their purposes, clearing forests and draining swamps to bend the earth to their will. Puritan minister Cotton Mather noted in 1721, “Our cold is much moderated since the opening and clearing of our woods, and the winds do not blow roughly as in the days of our fathers, when water, cast up into the air, would commonly be turned into ice before it came to the ground.” In 1745, Thomas Jefferson noted, “A change in our climate... is taking place very sensibly... The elderly inform me, the earth used to be covered with snow about three months in every year. The rivers, which then seldom failed to freeze over in the course of the winter, scarcely ever do now.”

Nor was Marsh the first American to warn against ecological waste: President James Madison warned against “injudicious” deforestation in 1818. But Marsh was the first to illustrate and elucidate the interconnectedness of seemingly disparate environmental realms, revealing a larger tapestry that connected the seas and fields and forests, showing how “improvidence, wastefulness and wanton violence” worked in tandem on myriad climates, creating a storm of “conflicting or coincident forces.”

It was a game-changer. Greeted not with jeers, as such a book might be today, Marsh’s book, an instant bestseller, was cheered as a turning point. One reviewer said, “The young to observe and

take delight in Nature, and the mature to respect her rights,” and later commentators would deem Marsh “America’s first environmentalist.”

His work had an immediate impact, inspiring a new generation of environmental writers, activists like Allen Lapham, the Wisconsin scientist who urged Americans in 1866 to be more mindful when cutting down trees: “[A] day shall come when the winds and droughts shall reduce the plains of Wisconsin to the condition of Asia Minor; trees alone can save us from such a fate,” and Reverend Frederick Starr, who penned an 1869 Agriculture Department report warning of the “impending danger” our “improvident waste” may yield. And Marsh’s work primed the pump for pro-Gaia legislative actions like the 1872 founding of Yellowstone and the 1885 establishment of Adirondack Park. But we today know all too well that Marsh and his contemporaries’ efforts failed to turn back climate change or dramatically influence the public at large. But why?

There are several reasons. First, plain ignorance: Marsh believed that Americans were simply not aware of climate change: “The decay of these once flourishing countries is partly due, no doubt, to that class of geological causes, whose action we can neither resist nor guide, and partly also to the direct violence of hostile human force; but it is, in a far greater proportion... the result of man’s ignorant disregard of the laws of nature.”

That ignorance is still in play today: 90 percent of Americans don’t know there’s a [scientific consensus](#) that man contributes to climate change. More alarmingly, 45 percent of Americans don’t think climate change will affect them, making them less likely to care about it. Another major contributor to a lack of progress over 150 years: The American economy has always relied on mining natural resources, especially our forests. As [Donald Trump](#) said during last year’s Forest Products Awareness Week, “[Forests] provide 2.4 million jobs, primarily in rural communities across America,

and produce products that help improve our everyday lives.” (And it’s not just conservatives: [President Obama](#) made similar remarks a few years earlier, noting, “Forests generate billions of dollars in economic growth, sustaining local economies and enhancing communities across our country.”) For a country that sees so much of the world in dollars and cents, that’s a significant draw against meaningful change.

But potentially more powerful—and definitely more dangerous—than economic hindrances or even ignorance of climate change is the anthropocentric idea that humans are the most important creature on the planet and therefore can only do good; it’s largely an extension of the Christian idea that humans, God’s favorite creatures, are chosen and can do whatever we damn please, the idea that we are natural and our output is therefore natural. That’s partially why it’s so hard to convince many climate change deniers to get on board today: A huge number of them are Evangelical Christians, a large demographic who are less likely to see climate change as human driven and more likely to attribute it to natural patterns, as [Pew found in 2015](#). They are also more likely to believe God is playing a hand in the climate, according to the [Center for Applied Research in the Apostolate at Georgetown](#).

Now, this should not imply that all evangelicals or religious people don’t believe in climate change: Professor Katharine Hayhoe is making great headway bringing the climate change world into religious settings. But there is clearly more work to be done, and luckily, Marsh’s work offers some tactic for even die-hard religious naysayers, and secular folk, too.

Marsh wrote in an era even more intensely and overtly religious than today, and his Christian faith is all over his work: references and allusions to the “Creator” appear over and over again, as

in, “All nature is linked together by invisible bonds, and every organic creature, however low, however feeble, however dependent, is necessary to the well-being of some other among the myriad forms of life with which the Creator has peopled the earth.”

It’s with this belief system in mind that Marsh implores his reader, “Man has too long forgotten that the earth was given to him for usufruct alone, not for consumption; still less for profligate waste.”

Marsh draws upon this religion-infused rhetoric when offering a way forward, too, using the idea that man is God’s greatest creation to challenge his contemporaries and future generations to use their unparalleled imaginations to dream up viable solutions. If we really are so great, he says, then we should be able to use our God-given abilities and imaginations to solve organic problems. As he wrote in his preface, “The object of the present volume... [is] to illustrate the doctrine that man is, in both in kind and degree, a power of a higher order than any of the other forms of animated life.”

Since mankind is so great and has come up with so many great technologies, Marsh believed, we should have no trouble solving nefarious climate change. “Since we have seen aerostation [hot air balloons], the motive power of elastic vapors [steam], the wonders of modern telegraphy... nothing in the way of mechanical achievement seems impossible, and it is hard to restrain the imagination from wandering forward a couple of generations to an epoch when our descendants shall have advanced... far beyond us,” Marsh wrote. But if we can’t come up with any solutions, “[the country] will continue to sink into yet deeper desolation.”

Considering Marsh wrote those words over a century-and-a-half ago, it’s time to get cracking.