How Is America Going To End?

We could be crushed by a climate strongman.

By Josh Levin

Posted Tuesday, Aug. 4, 2009, at 7:06 AM ET

Hot and Bothered

PRINT
DISCUSS
E-MAIL
RSS
RECOMMEND...
SINGLE PAGE

For the doomsayers of the 1950s, there was no doubt how America would end—the only question was how big the mushroom cloud would be. Climate change is the nuclear war of the 21st century. The *Bulletin of the Atomic Scientists*' Doomsday Clock, inaugurated in 1947, has long charted the waxing and waning of the nuclear threat; in 2007, the clock operators started working the climate menace into their calculations. And just as political scientist Herman Kahn was the bard of nuclear terror, scientists like James Hansen and James Lovelock lay out our coming environmental apocalypse in gory detail: the droughts and fires, the drowned cities, the massive die-offs. In his latest book, *The Vanishing Face of Gaia*, Lovelock writes that "global heating may all but eliminate people from Earth."

There's a danger in believing that our generation's existential crisis will be the one that destroys us. In a *Weekly Standard* piece on "The Icarus Syndrome," Jim Manzi notes the parallels between Britain's 1860s "Coal Panic" and the modern disaster scenarios of peak oil and climate doom. But the fact that coal shortages and the Cold War didn't vanquish the modern world doesn't prove that climate-change fears are overstated. It just means we survived long enough for something else to destroy us. So, let's assume we can't stop climate change with policy, changed behavior, or by dumping iron into the ocean. How could global warming bring about the end of America?

It's reasonable to argue that climate change alone couldn't possibly kill the United States. Earth won't become a superheated sphere all at once, and we should have the wherewithal to adjust to a warmer world. Manzi argues that, given the Intergovernmental Panel on Climate Change estimate of a 3-degree increase in global temperature by 2100, "the United States is expected to experience no net material economic costs [from anthropogenic global warming] ... through the end of this century." At the other extreme is the specter of swift weather cataclysm. Peter Schwartz and Doug Randall, who wrote a brief on "abrupt climate change" for the Department of Defense, argue that climate chaos will be nonlinear—that "clear signs of environmental catastrophe will be evident in a few decades, not centuries."

Even if Manzi's calculus is correct—temperatures increase gradually and we learn to adapt—climate change could still melt America. It just won't happen in the next 90 years. Even in the best case, global warming has the potential to get worse over time, and to exacerbate a bunch of other potential America-killers. It is, in military parlance, a "threat multiplier": It will increase energy demands, intensify water shortages, and strain international relations. In a 2007 CNA Corporation report on climate change and national security, retired U.S. Navy Adm. T. Joseph Lopez predicts that global warming will bring on "[m]ore poverty, more forced migrations, higher unemployment. Those conditions are ripe for extremists and terrorists."

People around the world will, in short, be poorer, thirstier, and more desperate. This isn't just an educated guess—past societies have collapsed because of changes in temperature and precipitation. In *The Great Warming: Climate Change and the Rise and Fall of Civilizations*, Brian Fagan documents the demise of the Pueblo Indian civilization at Chaco Canyon (in what's now New Mexico) during the Medieval Warm Period (roughly between 800 and 1300 A.D.). Faced with massive droughts, individual families set out in search of more water and better land. Eventually, no one was left.

Dust storm approaching Stratford, Texas, 1935.

The Dust Bowl is modern America's closest analogue to Chaco Canyon. Okies began their migration slowly, with movement from the South and Great Plains to the West Coast picking up as droughts got worse and the national economy collapsed. Robert McLeman, a University of Ottawa geographer who studies climate migration, says the rich mostly stayed put, not wanting to abandon their land holdings. The poor couldn't afford to leave, instead packing into makeshift communities close to home—the Depression's version of refugee camps. The most mobile group: the working middle class, particularly those with Californian relatives.

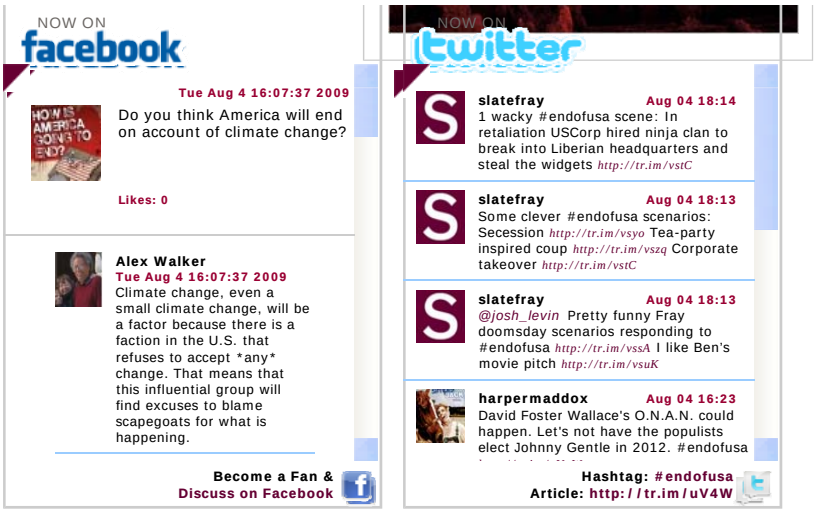
Depression-era climate migrants didn't get a friendly reception. In 1936, the Los Angeles Police Department set up a "bum blockade," forcing new arrivals with "no visible means of support" to turn around and go home. While the police claimed 60 percent of the travelers had criminal records, later LAPD research revealed "the 'Okies' were mostly religious, hard-working agricultural laborers with families." The blockade ultimately ended after just two months, both because it was completely illegal and on account of bad PR—a movie director named John Langan sued the police department when he was mistakenly stopped at the border. (He was wearing dirty clothes.)

Go on to the next page.

Join the discussion about this series on Facebook and Twitter

TODAY'S PICTURES | TODAY'S CARTOONS | TODAY'S DOONESBURY | TODAY'S VIDEO

Ruins.



Even if America sells its soul to keep everyone else out, the country will have to contract. The Great Plains could turn into a Sahara-style wasteland. Cities like New Orleans and Miami—and maybe Boston and New York—could be abandoned once recurrent storms and rising sea levels render them too expensive to save. (Recent climate models suggest that America's East Coast might see sea levels rising higher and faster than any other population center in the world.) There's also an unfortunate overlap between America's fastest-growing regions and the most-likely focal points of climate Armageddon. Phoenix, Los Angeles, and the rest of the West will have to deal with drought, extreme heat, and water shortages; Florida and Houston will get attacked by superstorms. Even worse, the U.S. population is expected to double by 2100—and those extra folks will continue packing into Arizona and California and Florida.

All of these people—a new generation of Okies—will need somewhere to go. Americans certainly have proved capable of big moves: the Great Migration of blacks from the South to the industrial North, the drift from the Rust Belt to the Sun Belt, the mass evacuation of inner cities for suburbia. A migration brought on by climate change would have a different tenor, however. The push to the frontier helped form America; the movement away from the frontier would unmake the country we know today. As more people pack into a smaller space, scarce resources will become scarcer. Those who stick it out in the inhospitable hinterlands could become a new generation of pioneers, heroes and innovators who work to once again make this territory hospitable for the masses. Or these die-hard localists could become impoverished and estranged from America—survivalist guerrillas who fight and scrounge for whatever they can get.

It's possible the government of Hot America would buckle under the weight of such a disaster. With those in the most-livable zones unwilling to pay for the rebuilding or relocation of vast swathes of the country, the nation could split regionally. Areas with common interests and problems—coastal areas in need of massive flood walls, the arid Southwest and Great Plains—could pool their resources and form locally focused, regional governments within the former United States. The places hit hardest by climate woe might offer hazard pay and other enticements to settlers in order to prop up the tax base. America's few oases, meanwhile, might build walls to keep the teeming masses out.

Where might these oases be? Robert Shibley, a professor of architecture and planning at the University of Buffalo, says it's "unconscionable" for people to keep packing into potential climate hot zones. His alternative destination: the shores of Lake Erie.

A century ago, Buffalo was America's eighth-largest city. When the Erie Canal opened in 1825, the city was perfectly positioned to become a transshipment hub and manufacturing center. Shibley, the co-author of Buffalo's comprehensive plan, drives me around in his Toyota Prius, pointing out the landmarks of this bygone age. "Here's where you see us in our heyday," he says as we turn onto Lincoln Parkway, a tree-lined thoroughfare abutting a park laid out by Frederick Law Olmsted.

By the time Shibley arrived in 1982, Buffalo was a textbook case of urban decay—one reason he moved was that the Rust Belt city "had every problem as an urban designer and a planner that I'd want to study." Buffalo is now America's third-poorest large city, behind only Detroit and Cleveland. The city proper has gone from a population of 580,000 in 1950 to an estimated 275,000 today. In working-class neighborhoods where grain scoopers and steel workers used to live, close-packed Queen Anne houses are now boarded up and

Temple of Music at the 1901 Pan-American Exposition, Buffalo, N.Y.

vacant, their former residents having left town along with the manufacturing work.

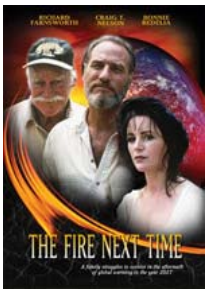
Sattler Theater, Buffalo, N.Y., 2006.

Buffalo and Detroit and Cleveland are today's equivalent of old West ghost towns. They are empty husks that have been strip-mined and abandoned, relics of America's manufacturing age. But when the country melts down, we'll remember that these Great Lakes cities were settled in America's early days for a reason. The five Great Lakes hold 21 percent of the world's fresh surface water—an H_2O supply that will come in handy in drier times. As for Buffalo's winning characteristics, Shibley notes that "you've got agricultural land around our perimeter, you have the power from the water and [Niagara] Falls, and you have the industrial infrastructure to die for, the roads and railroads." And even with all of those enticements, there's still plenty of primo waterfront land available for purchase. As he points out one inviting tract, Shibley shouts: "Come home, we're ready to go!"

In Hot America, Buffalo won't necessarily transform into a balmy paradise. Climate change will make extreme weather more extreme, so it's possible the city's brutal winters will become even less pleasant. But if large swaths of the country run out of water and are covered by swirling sands, the occasional blizzard doesn't sound so bad. It's no accident that apocalypticist James Howard Kunstler, who writes extensively about America's devolution in the post-petroleum age, resides in upstate New York. I "picked the place I live in for a reason," he writes in *The Long Emergency*. "[W]e are surrounded by excellent farmland here and I think my little corner of upstate New York may remain generally civilized."

If the Rust Belt becomes the best spot on the continent, Buffalo and Cleveland will no longer have to worry about massive population losses—their problem will be overpopulation. Of course, there's a lot more land abutting the Great Lakes, just across the border in Canada. In the event that North America's footprint shrinks, the condition of the Great White North will have a huge impact on the Lower 48.

There are two wildly incongruent ideas about how global warming will affect Canada. One possibility is that climate change will make the country more hospitable, increasing Canada's agricultural capacity as the rest of the world struggles to grow crops. Thomas Homer-Dixon, Canada's answer to societal-collapse guru Jared Diamond, says his home country needs to prepare for things to get much, much worse. The northern latitudes are "actually very vulnerable to climate change," he says. And while Canada's full of wide open spaces, most of that land is arid. "There's a reason America stopped at 49th parallel," he reasons. "They left England with land that was good for harvesting beaver pelts."



In the latter case, Canada will become Mexico—a nation whose citizens are driven to cross the border to improve their lot. In the former instance, in which the most-southerly parts of North America fare the worst, the U.S. becomes Mexico—and those wide open spaces to our north start to look mighty appealing. *The Fire Next Time*, a cheeseball TV miniseries from 1993, offers one vision of an America that's desperately pushing north. After a Louisiana shrimp fisherman (*Coach*'s Craig T. Nelson) loses everything in a massive hurricane, he pays a mule to smuggle his family across the border on a motorboat, dodging Canada's version of a bum blockade. They all eventually settle in an idyllic Nova Scotian village, though the movie's final scene features an ominous shot of the glowing sun—a raging fireball that will force them to wander north for the rest of their lives.

Robert McLeman, the University of Ottawa geographer, says four Canadian government departments have asked him for briefings on climate migration and security. Judging by the push to harden the Canadian border after 9/11, it's difficult to imagine we'd be friendlier neighbors in a hotter world. James Lovelock, never one to shy away from an extreme

hypothesis, has suggested that a hot-and-bothered United States might try to take Canada by force.

If conditions do deteriorate to the point that humanity's survival is in doubt, nationalism will be put to the test. Man-made borders—between Mexico and the U.S., and between the U.S. and Canada—may well bring out the worst in us. When the cone of unlivability expands, we could all converge on the continent's pools of fresh water and start shooting at one another from gun boats. If we want to ensure the survival of American civilization, however, it would make more sense to form a Great Lakes collective.

Canadians have already put down stakes in a hostile environment once. Settling a country despite harsh conditions bred a national spirit of collectivism. You can see it in the proliferation of financial and agricultural co-operatives and in the country's universal health care coverage, which dates back to the 1940s. Homer-Dixon says that even if global warming hits Canada harder than the U.S., the Northerners might deal with it better than the individualistic, entrepreneurial Americans. The best hope for North America's survival: Hope that Canada's socialist tendencies rub off on all of us.

Join the discussion about this story on Facebook and Twitter.

YOU MIGHT ALSO LIKE:

- Throwing Out the Wheat: Are we being too tolerant of gluten-intolerance?
- Blood for No Oil?: Our obsession with climate change is killing off animals left and right.
- The Politics of Climate Hacking: What happens if one country decides to start geoengineering on its own?
- What Else Are We Wrong About? : The danger of nuclear proliferation and other possible fallacies.

*Josh Levin is a **Slate** senior editor. You can e-mail him at sportsnut@slate.com and follow him on Twitter.*

Illustration by Jason Raish. Photograph of dust storm by NOAA George E. Marsh Album/Wikipedia. Photograph of the Temple of Music by C. D. Arnold/Wikipedia. Photograph of the Sattler Theater by Derrick Mealiffe/Wikipedia.

What did you think of this article?

Join The Fray: Our Reader Discussion Forum

POST A MESSAGE | READ MESSAGES

What Bill Clinton Could Actually Accomplish in North Korea

How Death Metal Can Help Disabled Iraq War Veterans

The Pro-Life Movement's Contraception Problem

Affirmative Action Has Done More for White Women Than for Anyone Else

Christopher Hitchens' Faith in Humanity Temporarily Restored by Japanese Festival

Shafer: Remember When Radio Was Going To Kill Off Newspapers?