

FEATURE

A flooded street in an oceanside community shows the power of Hurricane Sandy, a powerful storm which crashed into the Eastern USA. A porch which has been torn off of a house lies in the flooded street.

# Forces of Nature

## Connecticut Isn't Immune to Wild Weather

By JOEL SAMBERG

**A**s Connecticut's smartest and most notable conversationalist once said, "It is best to read the weather forecast before we pray for rain."

Mark Twain was simply alluding to the old proverb that what will be, will be. In other words, if nasty weather is on the way, there's not much we can do about it, other than be prepared. Some Connecticut residents take that platitude in stride, simply because our state seems to avoid the massive meteorological and geographical events from which others often suffer, such as gargantuan hurricanes, town-clearing tornadoes, ground-leveling earthquakes, Noah-like floods and unrelenting wildfires.

But if we're to be as wise as that noted raconteur from Farmington Avenue in Hartford, then we should listen carefully to the

experts before we boast about our relatively moderate state of affairs.

What do the experts say? Basically, that since natural and weather-related disasters have happened in the past, they'll most likely happen again.

"We've had some pretty nasty weather that can rival what happens in other parts of the country," notes Bruce DePrest, chief meteorologist for WFSB. DePrest, now in his forty-first year as a weather broadcaster, points to several

examples, including blizzards in 1888, 1978 and 2013 that dropped massive amounts of snow, caused widespread damage – and in the case of the 2013 storm, plunged hundreds of thousands of Connecticut residents into darkness for days. There have also been tornadoes (including one in 1979 that killed three people, injured 500 and destroyed many homes and businesses), a number of serious floods, some







Hartford residents glide down Pleasant Street. Photo courtesy of The Connecticut Historical Society.

earthquakes and, if you search the files, a handful of wildfires.

"We live in this powder keg where you get cold air from Canada meeting the warm gulf stream," DePrest explains. "That provides a tremendous amount of temperature differential, and that's when ingredients are in place for big weather events to happen very fast." Over at WTNH Channel 8, Chief Meteorologist Gil Simmons adds the unknown calendar to the equation. "Time is ticking for a large impact hurricane. Tornadoes are likely, as well. Connecticut's climate does go through active and quiet periods," he says, noting how such a realization requires us to stay alert. "In fact, we had a record number of tornadoes in 2018. Every season can offer something tough to deal with. We have to be ready."

## FLOODS

Floods, too, can develop with relative ease and speed because Connecticut has no lack of roads and parking lots, both of which disallow heavy rain and overflowing rivers from draining into the ground. In a video called "Rising Waters: Planning for Flooding in Connecticut," Diane Ilkovic, the state of Connecticut's National Flood Insurance Program (NFIP) coordinator, declares that flooding is the most prevalent and frequent natural hazard in the state.

In 2017, the Connecticut Institute for Resilience & Climate Adaptation (CIRCA) at the University of Connecticut issued a report warning that local sea levels

are likely to rise as much as 20 inches by 2050. That, in concert with the roads and parking lots, will add to increased flooding. Furthermore, snow melt from Vermont and New Hampshire can swell the Connecticut River, which then engulfs portions of Wethersfield, Cromwell, Rocky Hill and Glastonbury. Even smaller bodies of water, such as the Farmington River, can overflow their banks, turning communities into lakes.

Unfortunately, Connecticut has already experienced severe damage and human devastation from floods. In August 1955, the Great Flood struck 71 of Connecticut's 169 towns and villages, killing 77 people and leaving hundreds of people homeless. Torrington, Ansonia, Naugatuck, Winsted, Putnam and the Unionville section of Farmington were among the most drastically affected but some 20,000 families across the state suffered some flood damage, and cleanup and repair costs soared into the millions. There are also more recent examples. In 2011, Nod Road in Simsbury became a virtual tributary of the river, as did Folly Farm at the base of Talcott Mountain.

## VOLCANOES AND EARTHQUAKES

Talcott (also known as Avon Mountain) is one of several ranges in the state. Although they don't rival those of many other states, their mere existence underscores the fact that geologic activity from eons ago may have left a shadow or a specter of what's to come. Hamden, for example, is situated between two formations known as "trap rock," and geologists speculate that the ridges of these formations



resulted from massive volcanic eruptions more than 170 million years ago. In the 16th Century, indigenous people in that area reported what they called “earthshaking” events. Moodus, a Haddam village, is a Native American word loosely translated as “a place of noise.”

While there is no evidence that ancient volcanoes under Connecticut are planning a comeback any time soon, seismologists report that a volcano is indeed forming under a large swath of the northeastern United States. Vadim Levin, a geophysicist and professor in the Department of Earth and Planetary Sciences at Rutgers University, coauthored a paper for the journal *Geology* in which he and his team report there are ongoing seismic forces at work. His team assessed data from the National Science Foundation, which used thousands of scientific instruments to monitor volcanic and earthquake data.

“It is not Yellowstone-like, but it’s a distant relative in the sense that something relatively small – no more than a couple hundred miles across – is happening,” Levin wrote in the report. But for such a small state, a couple of hundred miles could one day be a big deal; on average, our state is a little more than 100 miles long and 70 miles wide.

“Furthermore,” adds Bruce DePrest, “in New England, the rock under the surface is older and more rigid, which means that there can be an earthquake up in Quebec and we’ll feel it here in Connecticut.” That happened in 1925. A 1944 earthquake centered in Massena, New York and a 2011 quake near Richmond, Virginia also shook violently in our state. Between October 2014 and July 2015, a swarm of more than 100 small earthquakes shook the ground at Wauregan, part of Plainfield, including a magnitude 3.1 earthquake on January 12, 2015.

## WILDFIRES

While we don’t have many earthquakes, we do sometimes have a lack of rain and excessive heat. Both are known to spark other kinds of events, one of which is not often associated with Connecticut: wildfires.

As one of the smaller states, we have less uninterrupted acreage than others to burn during a wildfire sparked either naturally or through human intervention. Also, those same roads and parking lots that exacerbate flooding act as barriers to wildfires. But wildfires can, and have, occurred.

“We had a fire in Cornwall which went to 400 acres,” recalls Richard Schenk, fire control officer at the Connecticut Department of Energy and Environmental Protection. “It posed no real threat, had good containment lines, and wasn’t going anywhere else – but it was smoldering on the ground for months.” The 2016 fire started in mid-September and firefighters were still finding hotspots in January.

“Any fire that’s 500 acres or more in Connecticut becomes very complex because of the density and the fact that homeowners and local governments aren’t used to dealing with them,” says Schenk, who is quick to add that Connecticut fire departments are well trained. He has fought fires all over the country, including Alaska, as well

as in Canada, and does not discount the fact that even in Connecticut, with the right conditions, a wide-ranging, long-lasting fire episode is entirely possible.

Several decades ago, there were far more major fires in Connecticut when the farmland that had dotted the landscape prior to World War II was ignored and became more susceptible to fire. But even though old farmland is now less of a problem, other issues that can increase the possibility of wildfires have taken its place, such as gypsy moth defoliation, increased leaf debris and more dumping of wood ash into gardens.

“What’s more,” Schenk adds, “if it’s a dry winter and spring, our own houses can become part of the fuel chain that feeds a major fire event – even here in Connecticut.”

So are we ready for any weather catastrophe or natural disaster?

If history is any guide, the answer is that no one really knows. That’s because Connecticut residents have reacted to different events in different ways at different times. The middle of 1816, for example, was known as one of the coldest summers in Connecticut history, and resulted in widespread crop failures. According to state historian Walter Woodward (who is also an associate professor of history at UConn), residents reacted “by throwing in the towel and migrating to places like western New York and the Ohio Western Reserve to seek better opportunities.”

By contrast, he says, after a major flood in 1936 and a destructive hurricane in 1938, residents worked together to implement full-scale, multi-year recovery efforts. Even though there’s a world of difference between 1816 and 1938, sometimes human emotions are unable to tell time. Woodward notes that there is now a larger tendency to rely on federal, state and local resources for help, and that alone can cause some residents to be less than diligent. Then the question becomes whether or not the government is ready on our behalf.

According to Regina Rush-Kittle, deputy commissioner at the Connecticut Department of Emergency Services and Public Protection, Division of Emergency Management and Homeland Security, “The state is well-positioned to handle any disaster or emergency.” Connecticut, she explains, is divided into five emergency planning regions, each with a full team of representatives from local communities who can skillfully provide support functions that include, among other things, evacuation assistance and mass injury care.

Twain once joked that we must never put off till tomorrow what can be done just as well the day after tomorrow. Back then, people knew far less about hurricanes, earthquakes, volcanoes, floods and wildfires, and how they can all happen even in a fairly quiet state like Connecticut.

But the earth is a complicated place, with tricks up its sleeve that won’t amuse us. There’s nothing we can do about it except be ready. After all, as Twain also said, “The world owes us nothing. It was here first.” ■