

Heat wave driven by climate change bakes the Pacific Northwest of the US and Canada

David Fitzgerald**28 June 2021**

The Pacific Northwest of the United States and Canada is experiencing a heatwave more intense than any other that has been recorded in human history. The National Weather Service described the weather as “historic, dangerous, prolonged and unprecedented.” At first, meteorologists throughout the region struggled to grasp how a heatwave of this magnitude was possible. How could an event with a 1/1,000, or even 1/10,000 chance of occurring, take place now? The only explanation is that the consequences of human-induced climate change are creating a “new normal” for a region that typically experiences wet, temperate weather.

More than 20 million people throughout the region are experiencing excessive heat. Seattle, Washington, recorded a temperature of 104 degrees Fahrenheit on Sunday, breaking the previous record of 103. Portland, Oregon, surged to an unprecedented temperature of 112 degrees that same day. This is the highest temperature ever recorded in the city. The highest temperature ever recorded in Canada was reached in Lytton, British Columbia, when the temperature reached 116 degrees. A number of cities further from the coast in Oregon and Washington have reached from 115 to 120 degrees.

This historically unprecedented heatwave has been caused by a “heat dome.” Layers of hot air have increased the thickness of the atmosphere across the region, creating a “dome.” The heat increases the thickness of the air, further increasing temperatures. Numerous climate scientists have noted that the movement of jet streams is becoming more abnormal because of climate change. Scientists hypothesize that jet streams are becoming more elongated, leading to more streams “splitting off” and spinning in place. The pools of heat intensify within the separated portions of the stream.

Heat kills more people in the US annually than any other extreme-weather event. Two deaths have been recorded near the cities of Kirkland and SeaTac in Washington. Both men drowned after diving into cold lakes to escape the sweltering heat. More individuals are drowning each year as temperatures rise because the shock of exiting blistering heat and entering cold water is often debilitating.

Masses of people have been left wholly unprepared for the heatwave. Only 31 percent of households in the Seattle area had air conditioning in 2013, although this rose to 44 percent in 2019 due to the consistent rise in temperatures. Seattle has fewer air conditioners per household than any other metro area in the US, according to the American Housing Survey. Only 34 percent of households that bring in incomes of \$50,000 or less have air conditioners.

The failure of the ruling elite’s policies to contain COVID-19 has created a situation in which those suffering from the heat will crowd into libraries, stores and community centers turned into cooling centers where they will be placed at risk of contracting and spreading the more infectious Delta variant.

A substantial homeless population in the region is at risk from the extreme heat. The 2020 census counted more than 11,751 people experiencing homelessness on one night in January in Seattle, with 53 percent sheltered and 47 percent unsheltered. Portland has at least 14,655 people experiencing homelessness on any given day. These populations are especially vulnerable to the heat due to lack of access to air conditioning and shelter.

Agricultural workers are facing horrific and potentially fatal conditions. These workers already work through an average of 21 days when temperatures rise past what is safe. It is now cherry-picking season in

Washington state, where 10 million pounds of cherries are harvested every day. The heat can destroy the crop, putting even more pressure on workers to pick them as quickly as possible. Federal laws intended to protect agricultural workers are usually ignored, since they cut into the profits of the enormous agricultural monopolies.

More than 100 locations across the Pacific Northwest have experienced record-breaking temperatures, dramatically increasing the likelihood of wildfires. The West Coast already experienced major fires across the region in 2020 that broke records. Last year's fires were the worst in 18 years. The fires burned through 10.2 million acres, killed 32 people and caused nearly \$20 billion in damages. This latest unprecedented heatwave will only exacerbate this crisis.

Extreme-weather events, driven by climate change, have increased in frequency across the US. The National Climate Assessment states on its website that “over the last 50 years, much of the U.S. has seen increases in prolonged periods of excessively high temperatures, heavy downpours, and in some regions, severe floods and droughts.” Record-breaking heat was recorded in the Midwest in 2012, and in Texas in 2011. The website also states that “prolonged (multi-month) extreme heat has been unprecedented since the start of reliable instrumental records in 1895.”

An extreme heat wave swept through the Southwestern United States from June 11 to June 19 that broke temperature records, fueled wildfires, and threatened to overwhelm power grids. The region has already had to contend with years of droughts. Tucson, Arizona, had at least eight consecutive days of at least 110-degree temperatures, breaking previous records. Phoenix also broke records with six days of at least 115-degree temperatures. Michael Crimmins, a University of Arizona environmental scientist, emphasized to the *Arizona Daily Star* that “I think it’s really hard to explain this heat wave without having climate change at least in part of the equation.” The Southwest was subjected to a “heat dome” very much like what the Pacific Northwest and Canada are enduring now.

The international climate situation is dire. The website “Carbon Brief” notes that between 1984 and 2015, human-induced climate change has doubled the area affected by wildfires. The average rainfall brought

by hurricanes has notably increased since pre-industrial times across regions affected by hurricanes. The Mediterranean has continued to become much drier from 1970 to 2010 compared to 1901 to 1970. An increase in the magnitude and frequency of flooding has been recorded in Southeast Asia.

Climate change is fueled by the burning of fossil fuels by transnational corporations and the release of carbon dioxide and other greenhouse gases into the atmosphere. Dr. Michael Mann, distinguished professor of atmospheric science at Pennsylvania State University, speaking to CBS News, explained the issue bluntly: “We will continue to see more and more extreme heat waves, droughts, wildfires and floods as long as we continue to warm the planet through fossil fuel burning and carbon emissions.”

The nation-state system, which exists to defend the private property of competing ruling elites, is utterly incapable of reversing this course. The US ruling class is escalating the war drive against Russia and China, and is primarily concerned with what President Joe Biden called “winning the 21st century.” In other words, the ruling elite in the US is focused on placing the US economy on a war footing. Climate change is not of immediate geo-strategic significance.

The COVID-19 pandemic has starkly revealed that the global capitalist system, and the division of the world into rival nation-states, is totally incapable of responding to a predictable global crisis. The belief that rival ruling elites will cooperate to address climate change has been refuted by the past half-century and has no historical foundation of support.

It is not merely “irresponsible” to argue that such an international economic and political system can solve the global climate crisis; it is theoretically, politically and morally bankrupt. The intervention of the international working class on the basis of a socialist program without concern for national divisions is necessary to solve the climate crisis, halt the war drive, and put an end to the assault on democratic rights.



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