

June heatwave was the 'most extreme' on record for North America

The devastating heatwave that struck the Northwest US and southwest Canada in June was "the most extreme summer heatwave" ever recorded in North America, according to a new analysis from nonprofit research group Berkeley Earth. That's based on the magnitude of the heatwave, or how much warmer it was than normal. Record temperatures in the region reached roughly 20 degrees Celsius (or 36 °F) hotter than average in June.

Canada recorded its hottest temperature ever on June 29th when the village of Lytton in British Columbia reached an astonishing 49.6 degrees Celsius (121 degrees Fahrenheit). Typical temperatures there in June are closer to 20 to 30 degrees Celsius (68 to 86 degrees Fahrenheit).

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The consequences of that heat are staggering. Scorching temperatures fed wildfires, which burned down 90 percent of Lytton. There were at least 570 heat-related deaths in Canada and at least 194 in the US. Thousands more people wound up in emergency departments.

The late June heatwave was a "1,000-year event...hopefully," according to a preliminary analysis by the National Oceanic and Atmospheric Administration (NOAA). The severity of the heat would have been "virtually impossible" without human-caused climate change, both NOAA and a separate analysis from an international team of researchers found.

For the entire Northern Hemisphere, it was the warmest June on record averaged across all land areas. Nearly 4 percent of the surface of the Earth hit record high average temperatures during the first half of 2021, according to the Berkeley Earth analysis. That's despite the cooling effect of a La Niña event. Looking at the first six months of the year, "Nowhere has been record cold," tweeted Berkeley Earth lead scientist Robert Rohde.

The odds of more "record-shattering" heatwaves

Globally, the odds of more "record-shattering" heatwaves like the one that took such a huge toll in the US and Canada in June are likely on the rise. Prolonged, record-breaking extreme heat events are two to seven times more likely to take place from now until 2050 compared to the previous three decades, according to research published earlier this week. That estimate is based on a scenario in which greenhouse gas emissions stay high, like they are today. There's still some hope of avoiding that future – but first, humanity will have to stop burning quite so many fossil fuels.

<https://www.theverge.com/2021/7/30/22602208/june-heatwave-most-extreme-summer-record-north-america>