

## Macro Roundup Article

**Headline:** [2021 North American Heatwave Amplified by Climate Change-Driven Nonlinear Interactions](#)

**Article Link:** <https://www.nature.com/articles/s41558-022-01520-4>

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**Summary:** We find that slow- and fast-moving components of the atmospheric circulation interacted, along with regional soil moisture deficiency, to trigger a 5-sigma heat event. Its severity was amplified by ~40% by nonlinear interactions between its drivers, probably driven in part by land-atmosphere feedback catalyzed by long-term regional warming and soil drying. Since the 1950s, global warming has transformed the peak daily regional temperature anomaly of the event from virtually impossible to a presently estimated ~200-yearly occurrence. Its likelihood is projected to increase rapidly with further global warming, possibly becoming a 10-yearly occurrence in a climate 2 °C warmer than the pre-industrial period, which may be reached by 2050.

**Primary Topic:** Science

**Topics:** Academic paper, Global Warming, Science

**Permalink:** <https://www.edwardconard.com/macro-roundup/temperatures-anomalies-that-were-once-in-1000-yearly-events-in-north-america-in-the-1970s-are-now-expected-to-be-5-yearly-events-according-to-new-research-in-nature?view=detail>

### Featured Image

**Link:** <https://www.edwardconard.com/wp-content/uploads/2022/11/11.28-Heatwave.jpg>