

# TNT letters to the editor

BY THE NEWS TRIBUNE

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## CLIMATE CHANGE

Re: “Alaska Smashes heat record for December” ([TNT](#), 12/29)

Temperatures in the Arctic are warming twice as fast as the rest of the planet, due in large part to two perpetuating feedback loops.

First, the sea ice has diminished by anywhere from a third to a half in the last 20 years. Known as the albedo effect, sunlight is reflected off the ice sheet back into the atmosphere. Where there is no ice, sunlight is absorbed by the darker water, thereby increasing its temperature. Also known as arctic amplification, the ice retreats from shorelines, affecting the ability of polar bears to survive.

Secondly, the permafrost in the Northern Hemisphere contains twice the carbon of the atmosphere, and three times more than in the global forests. Arctic warming promotes conversion of that carbon into carbon dioxide and methane, thereby promoting the feedback loop that drives global warming.

Further, such warming has altered the pattern of the northern jet stream, leading to such events as the “polar express” — i.e. the Texas ice storm — and the Northwest “heat dome.”

Our year of 2021 was a destructive year for extreme weather — what does the future hold for our good Mother Earth?

Chuck Jensen, North Tacoma