

In the foreground of this image, the dark trunk of a tree stands, burning. Alone in the foreground on smouldering turf, flames climb from its base. The fire seems to stop part way up the tree, giving way to the blackened bark, before another small oval-shaped fire burns in the centre of the trunk.

The only flames in the image are on this tree. In the background, there are clusters of evergreen trees, untouched by fire, while plumes of smoke rise from the ground. The image has cool, blueish tones, making the flames look out of place in its centre. I took this photograph after sunset, and the main light source comes from the two little fires, dancing on the tree.

The essence of fire becomes clear at dusk: an unrelenting force that forces its way through the trees and eats them from within. A diagonal line of turf moves from left to right in the background. It's a trench, intended to isolate and contain the fire.

The image is from my series, "As Frozen Land Burns". In 2021, I spent several weeks on a comprehensive permafrost thaw and forest fire project in Sakha (also known as Yakutia), in the Russian Far East. That year, the region experienced devastating wildfires, severe smoke pollution, and melting of its essential permafrost.

Sakha extends over more than three million square kilometres in the far northeast of the country – and 40% of the region lies within the Arctic Circle. It's one of the coldest inhabited places on earth.

Temperatures plummet to -60°C in winter, while climbing to 40°C in summer. Residents endure the coldest winters outside Antarctica with little complaint. But in recent years, summer temperatures in the Russian Arctic have reached 100° Fahrenheit, causing enormous wildfires that are thawing what was once permanently frozen ground.

The Arctic Monitoring and Assessment Programme reports that the Arctic is heating three times faster than the global average. In Sakha, even though fires are a natural part of the ecosystem, a mild spring followed by extremely hot and dry weather led to a record-breaking fire season.

That year, more than 18.16 million hectares were ravaged by fire, according to Greenpeace – a record since satellite monitoring began. The fires were larger than those in Greece, Turkey, Italy, the US, and Canada combined. NASA satellite imagery showed smoke from the wildfires to have travelled more than 3,000 kilometres to the North Pole.

Firefighters told me they lacked the personnel and equipment to deal with the fires. Many claim a 2015 law that allows authorities to let wildfires burn if the potential damage is considered not worth the costs of containing them.

As well as wildfires, there are indications that higher average temperatures are leading to degradation of permafrost – soil and rocks held together by ice and containing large amounts of organic carbon from frozen plant material.

As permafrost melts, this material rots, releasing carbon dioxide and methane, which can be an even more potent greenhouse gas. Environmentalists fear the fires will thaw more Siberian permafrost and peatlands, releasing more carbon from the frozen tundra.

On July 5, we approached Kürelyakh, where we'd received reports of severe fires threatening the village. It is remote, and built on the permafrost in the middle of the dense taiga.

We watched as plumes of thick smoke rose from the forest and followed a convoy of local volunteers as they drove towards the flames on old off-road vehicles and motorbikes.

It's mainly residents of Kürelyakh who fight these fires, with their bare hands, shovels, and small water bags. And because this taiga is their lifeblood, they have no choice but to protect it.

They use the forest for wood, for hunting, and to forage for berries and mushrooms. So, they spend all summer in the taiga, fighting the fires melting their frozen land.

This project contradicted my idea of what fighting wildfires would be like. In Sakha, it isn't dramatic scenes of towering flames being extinguished by water. Instead, it mostly happens at night, when, as the locals say, "the fire sleeps." In darkness, the intense heat from the sun is gone, the humidity has increased, and firefighters have the best chance of driving away the smoke to provide enough visibility to locate and control the fire.

From there, locals dig trenches around the fires to stop them from spreading. But the region is so far north that the days are long, and the sun almost never sets on Midsummer Night.

2021 was the third consecutive year that residents of north-eastern Siberia were left reeling from the worst wildfires in memory – and many felt helpless, angry and alone.

When we think of forest fires, we may think of Mediterranean countries, the USA, or Australia, but many people are unaware that the coldest place in the world burns too; and it's warming at an alarming rate.

I hope this photograph, taken with my Canon EOS R, 35mm, helps us confront what's happening here. To the people and the permafrost.

Greenhouse gases and even diseases have been preserved in the frozen ground for millions of years. When permafrost thaws, they're released into the atmosphere. We must do all we can to prevent it.

Personally, this picture symbolizes the fragility of nature; as the understated flames destroy the tree from within, climate change quietly marches on.

Yet the image also reflects the beauty of the natural world, and the fire as a natural element, both alluring and destructive.

I was in Sakha with journalist Anton Troianovski, who wrote the accompanying story for the New York Times.

A man who volunteered to fight the fires told us: Any victory over the ravages of the changing climate would be temporary.

"This is not a cycle," he said. "This is the approach of the end of the world. Mankind will die out, and the era of the dinosaurs will come."

It's up to all of us to prove him wrong.