A Grand Fir Tree Died in the Heat

By Lisa J. Watt

The climate crisis is real.

It's heartbreaking and expensive.

All living things and every landscape around the world are experiencing extreme weather events as a result of the climate crisis. Rising temperatures, severe storms, flooding, drought, and devastating wildfires are part of our daily lives now. Our household experienced a climate-related event and learned that the impacts of climate change can be subtle, heartbreaking, and expensive.

In June 2021, an unprecedented heat dome settled over Portland and the Pacific Northwest for five consecutive days. Temperatures soared to 116°F, a record for the coastal temperate rainforest and a new, frightful experience for residents of this region.

Around the same time, smoke from massive wildfires in Central Oregon and Canada blanketed Portland and surrounding areas. The smoke was so thick it seeped into our well-insulated home. Throughout the Willamette Valley the sun and color of the sky turned orange and in some places ash fell from the sky like a gentle snow. Local news stations encouraged everyone to stay indoors for nearly a week. I found myself wide awake at night, worried about the trees.



Extreme weather events in the summer have become predictable occurrences in recent years. So much so that my memories of glorious Portland and Pacific Northwest summers — warm, sunny days and cool nights, without humidity or mosquitoes — have given way to climate anxiety and an intense fear of stifling heat.

The silent impacts of that heat dome in 2021 continued to be felt in 2023 as trees, especially **western red cedars**, one of the symbols of the Pacific Northwest, became distressed, diseased, or died. If you looked closely around your neighborhood you probably saw dead or dying trees but didn't know what you were seeing. My husband and I couldn't help but notice one tree in particular.

On the northside of our property stood a 90-foot tall, 70-year-old grand fir tree. Grand firs can grow up to 250 feet tall and 250 years of age. Ours was quite short and young by comparison. Still, it was beautiful. It had a 120-inch circumference, a relatively smooth, grayish trunk, and graceful limbs that swept upward. It wasn't the tallest tree in the neighborhood but it was one of the only grand firs around. Arborists told us grand firs normally grow at higher elevations which made this one unique. We knew it was special.

In May 2023, we noticed the needles on its south side started to turn brown and fall. Soon, a slow wave of dead needles steadily replaced its signature evergreen. Three arborists confirmed what we instinctively knew and dreaded. It was dying. It had been fried — literally — during the heat dome two years earlier, as it stood totally exposed, without the shade from other trees to help protect it. Area arborists told us they had seen this type of heatinduced tree death everywhere between Portland and Seattle.

The arborists said there was nothing we could do to save it. We were heartbroken. As dramatic as that word is, no other word honestly expressed our disappointment, especially since we knew its death didn't have to happen.

Since the tree was located next to a street, it became a safety hazard. We wanted to be responsible neighbors and we didn't want it to fall on our or the

neighbors' homes. This once gorgeous tree had to come down.

It took a crew of five highly-skilled and brave men with long chainsaws and heavy-duty climbing ropes to dismantle it. What took 70 years to grow came down in less than eight hours. One man, wearing a harness and held on belay, sawed off each limb as he climbed to the top. Then he looped a rope around the narrowest part of the tree, cut the trunk with the chainsaw, and pushed it over. That same rhythm was repeated 7-foot section by 7-foot section at a time. The men below lowered each one gently to the ground.

The top was chipped and the chips were spread across our property. We kept each section intact because they were massive and architecturally impressive. Using a mini skid steer, the workers laid them horizontally near the tree. About 30 feet of the base trunk was left standing as a snag for birds and as a reminder of the tree's existence and the reason it died. This once-magnificent tree had become a tragic casualty of the climate crisis on a personal and intimate scale.

The cost to remove one tree?

\$6,000.

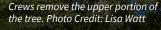
We easily imagined one hundred better ways to spend \$6,000.

But climate impacts on trees are often not as subtle. Severe weather events can be terrifying for the speed and severity with which they occur. In January 2024, the city of Portland and western Oregon were hit by an arctic blast so strong, trees fell everywhere across the city and indiscriminately damaged or destroyed homes and property. Ice covered the streets. At least fifteen people died due to weather-related emergencies. Over 150,000 households were without power. Imagine the loss.

I suspect many residents who are fortunate enough to live with big trees view them differently now.

There is no way to prevent future storms and destruction. More will come. The irrational solution is to cut down all the trees that surround our buildings and

In a forest, snags can provide valuable wildlife habitat, but in an urban environment they can be hazardous to people and property if left unmanaged. Photo credit: Lisa Watt



The remaining snag will provide habitat for wildlife without posing a significant threat to safety. Photo credit: Lisa Watt





infrastructure. But that's neither wise nor plausible. One possible solution — or at least a good first step in the right direction — is to admit the existence of the climate crisis, understand the real and potential short- and long-term impacts, and imagine a future if or when insufficient action is taken to avert climate collapse. It could be a harrowing vision.

The scientific data around global warming is irrefutable, gathered and interpreted over decades by expert scientists from around the world. The United Nations first mentioned climate change as far back as 1972. In this country, we are guided by the **Fifth** National Climate Assessment which "provides the scientific foundation to support informed decision-making across the United States" concerning climate issues. First published in 2000, the national assessment provides authoritative information about climate change risks, impacts, and responses. Priorities include curbing greenhouse gas emissions and developing clean energy technologies and efficiencies, among other goals. It is the roadmap and timetable we need.

But are we paying enough attention to it? Have we sufficiently heeded its

warnings or seriously taken up the recommendations offered by scientists and experts in this field?

We must demand more leadership and action from politicians and business leaders. They need to start by prioritizing the environment and our collective well-being above profits and politics. We need to rebuild a strong sense of community, to recreate that once-held belief 'we're in this together'. We're going to need each other. And we need to believe in the intelligence and expertise of our scientists rather than play political football with their words and data. Too much is at stake for all of us.

Finally, political and business leaders must be driven by an all-consuming sense of urgency to prioritize swift, unequivocal climate action both here and abroad. They can do it. We've watched them drive change when an issue is important. None is more important than protecting the earth and all that lives on it.

If thinking about the world and its potential demise is too much to bear, start small by thinking about your own backyard, neighborhood, city, region, and the impacts of human-induced climate emergencies. Considerations around your pocketbook and your and your family's well-being should quickly change the calculus.

Sure, my husband and I had one dead tree — a once beautiful 90-foot tall, 70 year old grand fir — but what happened in our yard is a subtle and frightening symbol of a future in the coastal temperate rainforest and beyond.



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