

The Eruption of Mount St. Helens, 1980

BY LAUREN TARSHIS

en-year-old Eric Smith did not imagine that the world around him was about to explode.

Eric was enjoying a boys' weekend with his dad, Buzz, It was May 18, 1980, a glorious Sunday morning.

and his 7-year-old brother, Adam. They were camping

mountain in Washington State. The mountain towered over in a forest of fir trees near Mount St. Helens, the fifth-tallest

them, its perfect-triangle peak sparkling with snow.

ATTENDED TO

Why might it be important to learn about a volcano that erupted many years ago?

The Smith boys had spent the previous day hiking along forest trails. When night came, they and their father snuggled up in their tent and slept soundly under a sky illuminated by starlight. Now they were wide-awake, buzzing with excitement for another day of exploring. The woods were whisper quiet; the only sound was the sizzle of the bacon and eggs their dad was cooking on their camp stove.

But all was not as peaceful around Mount St. Helens that day as it seemed-because this mountain was not just a mountain.

It was a volcano. And it was about to erupt.

Eric and Adam had just finished breakfast when a noise shattered the morning quiet.

Crack! Crack! Crack!

Eric initially thought it was a hunter, but then he glimpsed something through the trees: a roiling gray cloud. It swept overhead, blocking out the sun. Strange rocks—hot and light rained down, bouncing off their heads like Ping-Pong balls. Moments later came an earsplitting roar, followed by a powerful blast of air. Eric stared in astonishment as 500-year-old trees toppled around them, flicked down as if they were as flimsy as cardboard. Hot ash poured from the sky.

Eric's father grabbed him and Adam, and they sprinted for safety under the trunk of a fallen tree. The ground shuddered. The air became searing hot, like an enormous dragon was huffing its fiery breath.

Make it stop! Eric's mind screamed. Make it stop!

But the terror was only beginning.

Dangerous Weather Changes

About 1,500 of the volcanoes on Earth are active, meaning they have erupted at least once in the past 10,000 years and are likely to erupt again. Some, like Hawaii's Kilauea, look like sciencebook volcanoes, oozing lava and

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belching out fire. Other volcanoes are worldfamous, like Italy's Mount Vesuvius, which erupted in the year 79 A.D. and buried the city of Pompeii.

Most active volcanoes, though, keep a low profile. They sit silently as people ski down their slopes or climb their rocky cliffs. Some wake up for a few weeks, release lazy puffs

of ash, and then go back to sleep. Major volcanic eruptions, like the one at Vesuvius, happen rarelyonce every decade or so.

When they do happen, however, they tend to be catastrophic. In fact, no natural force on Earth

For centuries, Mount St. Helens impressed people with its perfect snow-capped cone and thickly forested slopes and the crystal waters of Spirit Lake. Many said it was the most beautiful mountain in the Cascade Range. CANADA U.S. Tacoma Olympia WASHINGTON Mount St. Helens Q Portland OREGON Salem of map 50 MI

Before the eruption

has more destructive power. An earthquake can shatter a city in seconds. A hurricane can wash away an entire town. A large tornado can suck a whole neighborhood into the clouds. But a major volcanic eruption





unleashes the power of hundreds of nuclear bombs. It can kill tens of thousands. A big blast can trigger jet-speed landslides and massive waves of superheated rock, ash, and gas known as pyroclastic flows.

Sometimes that's only the beginning. A large eruption can blast hundreds of millions of tons of ash and rock miles into the sky. These ash plumes can circle the globe. They can block the sun's rays and cause dangerous weather changes that can linger for years.

For example, scientists suspect

that a series of prehistoric volcanic eruptions millions of years ago caused mini ice ages that could have pushed some dinosaur species into extinction. More recently, in 1815, the eruption of Indonesia's Mount Tambora killed more than 10,000 people within hours. Its enormous ash plume caused worldwide weather changes for years.

An Ancient Terror

Here in the U.S., 13 active volcanoes are lined up along America's western edge, in a mountain range called the Cascades. This range stretches from California through Oregon, Washington, and southern Canada.

Thousands of years ago, Native Americans witnessed the fearsome power of the Cascade volcanoes. Tribes told haunting myths explaining why the mountains sometimes exploded with fury. There was one volcano that they feared above all others: the native Cowlitz people called it Lawetlat'la—"mountain of fire." In 1792, a British explorer gave it another name: Mount St. Helens.

St. Helens is the youngest volcano in the Cascades and also the most active. It has had at least four major eruptions over the past 500 years. But in the late 1850s, Mount St. Helens went quiet.

Decades passed. Meanwhile, Washington became the 42nd American state. Seattle and other cities sprang up. Logging companies constructed thousands of miles of roads around the mountain, and nature-lovers flocked to the area's thick forests and rushing rivers.

Eric's dad worked as a logger on Mount St. Helens. He married Eric's mother, and they moved to a house eight miles from the mountain. Eric grew up hiking in the woods and boating in the crystal-blue waters of Spirit Lake, an especially beautiful spot at the base of St. Helens.

Like many people, the Smiths essentially forgot that their beloved mountain was actually a volcano.

Mount St. Helens Wakes Up

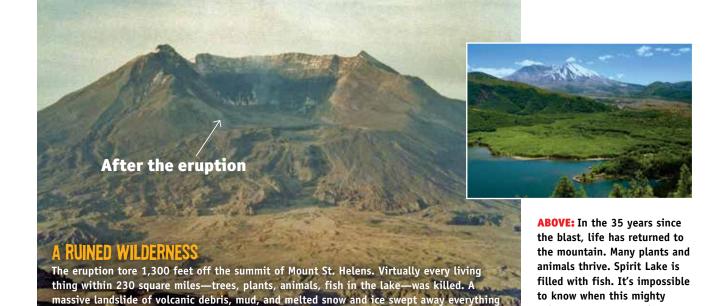
On March 20, 1980, they were reminded. That day-about two months before the camping trip-a moderate earthquake trembled beneath the mountain. Thousands more occurred over the following weeks. Pilots flying overhead spotted smoke rising from the mountain's peak.

After more than a century, Mount St. Helens was waking up.

Scientists swarmed the mountain, excited and frightened about what might come. Police encouraged people to evacuate, and many did. Logging companies kept workers away.

But soon the mountain quieted down. Many believed that the worst was over and that scientists were exaggerating the danger. After all, volcanoes are unpredictable. Some erupt with little or no warning, while others rumble for months and then go quiet for centuries.

By May, logging



companies had sent workers back into the forests around Mount St. Helens. Some hikers and campers returned as well. Eric's father brought Eric and Adam to a forest 11 miles from the mountain, believing they would be safe.

in its path. Spirit Lake was filled with ash, debris, and trees.

But he was wrong. They would soon be in the middle of the worst volcanic eruption in U.S. history.

Blizzard of Ash

It was 8:32 a.m. when the Smiths heard the crack, crack, crack. That was the sound of the mountain splitting open. The roar, which came seconds later, was the sound of ash, molten rock, and glacial ice being blasted into the sky. The strange light rocks that showered them were pumice—hardened lava. As the blizzard of hot ash whirled around them, the heat became unbearable. It was almost impossible to breathe.

"We've got to get out of here!" Eric's father shouted.

They began a torturous march

back to the road, mile after agonizing mile over fallen trees and piles of debris. Covered in ash, the Smiths looked like ghosts drifting through a ruined wilderness.

Eric fought fear and panic as the mountain rumbled behind them. What had happened to his mom and sister and their house on the other side of the mountain? Would there be another eruption? The ash and mud were so deep in some places that the family sank up to their knees. Sometimes the hot ground burned their feet, and they had to stand on logs for relief.

Worst of all was the thirst. They had run out of water, and the area's sparkling streams had become toxic soups of ash and mud.

At times it seemed impossible to keep moving, but Eric's father made sure they did. For energy they ate fruit rolls and packets of pancake syrup. Eric's father finally spotted water seeping up from the ground under a bridge. He managed to capture about two cups in his Thermos. It was warm and gritty, but Eric gulped it down.

volcano may erupt again.

They pressed on. Twelve brutal hours had passed when finally, they heard a new sound: helicopters.

Rescuers had been searching for survivors. And now they had found three-the exhausted and fortunate Smiths.

The helicopter carried them to safety, and they were reunited with Eric's mother and sister. Their house was gone, carried away by a massive landslide of volcanic debris and mud. Fifty-seven people were killed in the eruption, and nearly 250 square miles of wilderness was turned into a smoldering wasteland.

The Smiths built a new house, not very far from the site of their old one. For months, Eric and Adam were afraid to play outside. But eventually, their fear turned to gratitude.

Somehow, they had survived the fury of Mount St. Helens.

The Power of Natural Disaster Stories

How to triumph over tragedy **By Kristin Lewis**

everyone knew it was going to be a rough fire season in my home state of California this past year. Months of record drought and sky-high temperatures had turned the state into a giant tinderbox. When the fires began, I was glued to the news. I stalked the Facebook feeds of friends who lived in at-risk areas—and their friends, and their friends' friends. Tracking fire news on Twitter, I clicked on endless images of destruction. I was especially heartbroken when a fire ravaged Kings Canyon National Park, where I spent family vacations as a kid.

I was far from the only one closely following the wildfires. As humans, we are drawn to stories about natural disasters. Our interest goes beyond the real world too. Catastrophe movies like 2012 and San Andreas splash destruction across the screen—and rake in millions at the box office.

Human Drama

It's not that we find tragedy entertaining. It's that we emotionally connect to disaster victims and their stories. We imagine how we would feel if a volcano erupted near our house, or if an earthquake rocked our community—and that helps us empathize with strangers. At the same time, we are moved by the survivors who discover the depth of their own resilience. We are inspired by search-andrescue teams risking their lives to help victims. It's not surprising that after a natural disaster, aid organizations receive generous donations from all over the world.

But it isn't just the human drama that draws us



in. The disasters themselves are awesome displays of the power of the natural world. Humans have conquered nature in so many ways—we have houses that can withstand blizzards, air-conditioning that makes sweltering summers bearable, cars that enable us to travel great distances—so it's compelling to witness natural forces that are still beyond our control.

Incredible Challenges

Studying natural disasters, whether they happened yesterday or 100 years ago, makes us more prepared for the future. After the 1980 Mount St. Helens eruption, for example, scientists developed new high-tech gadgets and machines to precisely monitor volcanic activity, enabling us to better predict future eruptions. Indeed, natural disasters underscore the importance of preparedness. Last October, for instance, one of the strongest storms ever to make landfall hit Mexico. Although many homes were flooded, no lives were lost-in part because of how well-prepared the affected communities were. Tens of thousands of residents and tourists were evacuated to shelters well in advance of the storm.

Ultimately, what natural disasters reveal is a difficult truth: Many people on this planet—whether it's your neighbor down the street or a stranger in a far-off land—encounter incredible challenges. It is up to us to come together and support each other, to face whatever nature throws in our paths. Reading about natural disasters both near and far gives us the courage and knowledge to be able to do so.

WRITING CONTEST

In the essay above, the author writes that humans are drawn to stories about natural disasters. What about the story of Mount St. Helens might draw people in? Why is it important to remember what happened? Answer both questions in a short essay. Send it to VOLCANO CONTEST. Five winners will each get Eruption! by Elizabeth Rusch.

