

# Mount St. Helens National Volcanic Monument August 10-11, 2013

## Hiking Into the Dead Zone

Trees killed by the 1980 eruption of Washington's Mount St. Helens (in the background) still cover much of the surface of Spirit Lake.

STORY INSIDE

## Hiking Into the Dead Zone



David Claudino leading our hike toward Mount St. Helens' open crater – obscured here by clouds – along Windy Ridge, which was denuded of forest by the volcano's eruption.



Volcanologist David Johnston photographed at his observation post 13 hours before the eruption that killed him.

The radio in the U.S. Geological Survey office in Vancouver, Wash., crackled to life at 8:32 a.m. Sunday, May 18, 1980.

"Vancouver! Vancouver! This is it!"

It was the voice of 30-year-old USGS volcanologist David Johnston, who was manning an observation post about six miles north of Mount St. Helens, which had been rumbling for a couple of months after its north face bulging outward at a rate of 5 feet a day.

They were the last words ever heard from Johnston but it was the first report rest of the world that the dormant

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volcano just across the Columbia River from Portland, Ore., had exploded.

Its bulging face collapsed in the largest landslide in recorded history, releasing a blast of poisonous gases, volcanic ash, boulders and mud that shot northward at nearly supersonic speed killing Johnston and 56 others, obliterating 230 square miles of forest and destroying millions of salmon, elk, bear and other inhabitants of the surrounding national forest.

Johnston's body and those of many other people were never found, either because they were vaporized or because they lie buried under hundreds of feet of ash and mud.

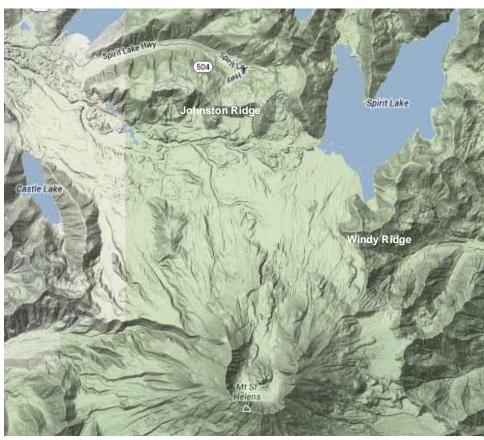
Thirty-three years after the eruption, my friend David Claudino and I came to

Washington State to hike into the blast zone, which has been designated the Mount St. Helens National Volcanic Monument, to see how life has slowly been reclaiming a seared and sterilized landscape.

David's cover photo was shot on our hike down to the shore of Spirit Lake, looking into the open crater of the volcano almost seven miles away.

The blast came directly toward where we stood, pushing lake water ahead of it like a tidal wave. The wave traveled 800 feet up the mountains behind us flattening tens of thousands of trees, then sucking them off the mountainsides and into the lake where they still drift today in mats covering hundreds of acres of the lake's surface.

The U.S. Forest Service has left the land within the monument untouched for the most part, allowing hikers only on marked trails so that scientists can study how the



This terrain map of Mount St. Helens shows clearly how its north face was blasted away leaving a horseshoe-shaped mountain. The eruption also blew off the upper 1,313 feet of the mountain, shortening it to 8,365 feet.

environment recovers from such a wound.

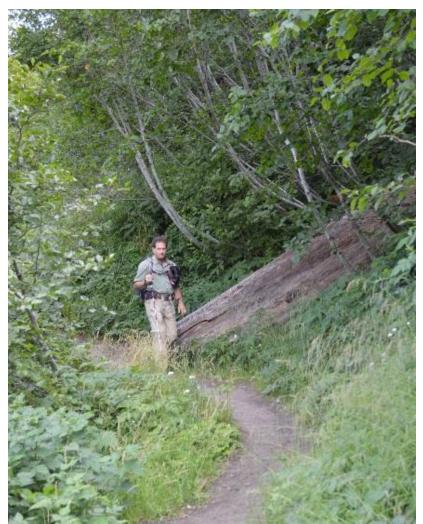
Almost every Pacific Northwest volcano has a similar devastated area, but the one at Mount St. Helens is the first to be studied in detail from its creation.

In the Gifford Pinchot National Forest surrounding the monument, millions of fir and spruce trees have been replanted. Dead trees – flattened by the blast as far as 12 miles from the volcano or killed by the heat but still standing as far as 17 miles away – have been removed as much as possible to allow the forest to recover and be used again for timber.

Since that first explosion, Mount St. Helens has had periodic bouts of small scale activity including two periods of "dome building" in which lava forced up from deep within the earth has begun building a new mountain within the crater.



This hill reveals a lot about the eruption from Mount St. Helens, which is out of the frame to the right. The blast hit the south (right) side of the hill, flattening the trees there. But the hill sheltered vegetation on its north side and tall trees, though killed by the nearly 700-degree heat, still stand. Our trail up from Spirit Lake, which is the dark diagonal line in the bottom left corner of the picture, goes through lush vegetation which does not exist on the slope facing the volcano.



David descends the trail to Spirit Lake through the greenery on the sheltered side of the hill above.

#### See Mount St. Helens in action

- See a 17-second time-lapse video of the beginning of the eruption at http://youtu.be/bgRnVhbfIKQ
- See a 1-minute, 27-second time lapse video of the crater dome's growth from 2004-2008 at http://youtu.be/h6B1myUKAS4
- See a 42-minute documentary produced in 2010 for the 30<sup>th</sup> anniversary of Mount St. Helens' eruption at

http://youtu.be/Ifohb8 2WhE

### Life returns, naturally and with help



The Clearwater Creek Valley – outside the monument but within the blast zone – is among the areas where 18.5 million mostly fir tree seedlings were replanted. They now average 75 feet tall. Weyerhaeuser removed more than 600 truckloads of downed timber a day for  $2\frac{1}{2}$  years.



About the length and circumference of a pencil, a snake swims across a spring we discovered on an otherwise desiccated mountainside. Some animals survived the eruption because they were hibernating in the ground beneath the snow.

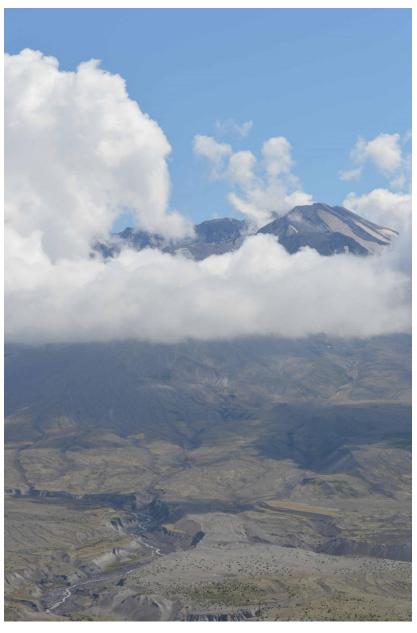
Mount St. Helens plays peek-a-boo in the clouds as seen from the approximate position where David Johnston was killed. Once known as Coldwater Ridge, it was renamed Johnston Ridge in his honor as was the national forest volcano observatory located there. The North Fork of the Toutle River, which originates from a glacier inside the volcano's crater, flows through the pumice field at the base of the mountain and carved a canvon 200 feet deep through debris.

## Where did that name come from?

British Royal Navy Capt. George Vancouver explored most of the west coast of the United States and Canada between 1791 and 1795 and named many of its prominent natural features for friends and crew members.

He named this volcano for Alleyne FitzHerbert, the first Baron St. Helens, who was a British diplomat, serving as ambassador first to Russia and then to Spain.

FitzHerbert died without an heir, never having married, and the title thus became extinct.





Nearly 10 miles from the volcano, Windy Ridge is still heavily scarred.





Foxglove, left, blooms at Coldwater Lake. Blueberries, above, on the trail to Spirit Lake. Below, lupine blooms behind a tree downed by the blast on Johnston Ridge.



