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THIS WEEK

SPECIAL ISSUE: MT. ST. HELENS

Cover: Mt. St. Helens, caught in the midst of its cataclysmic May 18 eruption, has provided scientists a rare research opportunity. For some of their findings — and their problems — see stories beginning p. 58. (Photo: USGS)

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Science News Goes to the Mountain

VANCOUVER, WASH. — This is a blue-green country, the Cascades. As deeply hued as fine emeralds, Douglas fir, cedar and alder cloak the uneven, jutting mountains. Royal-blue, chilling blue, blue as a robin's egg, ribbon-like rivers and footprint-shaped lakes wink through the verdant mantle. On and on it stretches, until it seems that all the world must be this lush, this thickly alive.

The helicopter blades whack dully at the clammy air. We fly low, sandwiched between the forests and the leaden clouds. Down a valley, around a bend in the river, and suddenly—as abruptly as the flick of a switch changes a room from dark to bright — the greens and steely blues give way to a stark, putty-colored landscape. Still 15 miles from Mt. St. Helens and not within sight of it, we have entered the volcano's newly claimed domain.

First there are the trees. A seared fringe marks the boundary of the volcano's conquest. At the feet of those scarred sentinels lie thousands more that have been snapped off at the ground and tossed in careless array. Next are those that were ripped wholly from the ground, blasted of limbs and needles, swabbed with mud and ash and laid across the hills and valleys as neatly as the quills on a porcupine's back. From the air, they form graceful patterns, marking the eddies and swirls of the great volcanic hurricane that arranged them.

Then there is the mud. Like cement dumped from a colossal bucket, it coats everything. Freshly carved rivulets braid together where the river is struggling to retrench itself.

We near the foot of the mountain, but it is still invisible, shrouded by the low-slung clouds. There are no trees here, though once there were thousands. What was a part of the mountain's peak now lies splattered at its base in jagged heaps, still fresh and untouched by erosion. Deep calderas have formed where the heavy debris and ash have collapsed into hollows formed as the underlying ice melted away. Even now, a month since the volcano roared, still-fuming craters pockmark the vast flats where hot ash smolders beneath the surface.

Looking closer, streaks of ochre and rust smear the newly born hillocks. Here and there are puddles of murky pea-green, crimson-tinged and pale yellow water. It is a primordial palette and a scene from the beginning of time.

It is, as so many have said, awesome, an alien land. But it is not, as many others have said, a place of horror. Perhaps the mistake—and the irony—lies in the popular comparison with a nuclear holocaust. This scene is fashioned from no such malevolence; it is even less than impersonal. It obeys laws that, unlike our own, have no moral or ethical character. We can explain the volcano and understand its laws, but we cannot really touch it, for it acts without knowledge of its actions. We can, perhaps, recognize that this was supposed to happen, as it has happened here the same way, so often. And in that light, this vast, ruptured scene becomes even more awesome, part of a powerful renewal of the earth.

We bank to return to the familiar and the forests. The helicopter rises over a debris-matted ridge. Below, a seedling pushes its way between the fallen trees, so brightly green that it is nearly luminescent against the ash.

* * *

Among those who can most appreciate the "non personal" power of Mt. St. Helens are scientists, and the story of the volcano is uniquely a scientific one. With the first explosion of the mountain in March came an explosion of research possibilities. Consider all that the volcano has altered — wildlife, rivers, lakes, forests, the geology, the atmosphere. An entire living laboratory has been created in a region accessible to hundreds of researchers.

But this is the paradox of Mt. St. Helens: In spite of the bounty of opportunities, important research is being left undone. Many studies have begun and results are emerging, some that will have immediate impacts and others with more far-ranging effects. But certain areas of investigation have been stymied by government restriction, and the free flow of information from a singular scientific event has been thwarted. Both these important aspects — the scientific and the political — were explored in numerous interviews and during six days at Mt. St. Helens. In order to treat them fully, we have devoted this issue — including a list of books on p. 63 — to the eruption of Mt. St. Helens.

—Susan West

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