## **Christmas In Paradise**

Berthold K.P. Horn

It started to snow. The wind swirled the flakes around the floor of the caldera in patterns mimicking the ropy flows of the lava itself. Soon the frozen lava lake two hundred meters below was hidden from view. I was not too surprised; first the high cirrus clouds and then the squall lines had blown in on the Kona winds from the badweather direction over the Pacific. Alone on the volcano, I had no idea just how intense the storm was going to be. The lightning had been unpleasantly close the night before, as the loud claps of thunder echoed between the steep cliffs of the summit depression.



Moku'aweoweo, Mauna Loa's caldera, is 4 km long and 2.5 km across. Most of the present floor consists of 1984 lava flows. Mauna Kea, slightly higher at 4205 meters, appears in the middle background—43 km away.

Now that daylight had come, my situation was painfully obvious: I was stranded in a white-out on top of a mountain composed in part of iron-bearing minerals known to deflect compass needles; a long way from anywhere. It was not going to be easy to find the way down in the blowing snow since the gentle slope would not provide much of a directional cue.



The edge of the caldera drops nearly vertical about 200 meters—only half as much as a century ago.

In this island chain, the lava oozes out in a form that flows easily to add one thin layer after another to build huge shield volcanoes. There are few explosive eruptions, at least until late in the life of a particular volcano. Consequently, the mountains look like giant pockmarked pancakes, with slopes of only perhaps ten-degree inclination. It is hard to get a feeling for their scale from below. The silhouette starts at one point on the horizon, gradually rises, then slowly descends to the opposite point on the horizon. One cannot get near without standing on the extensive skirt of the mountain. The Big Island consists of five volcanoes, two extinct, one dormant and two active. The ocean is over 5000 meters deep here, so measured from base to summit, these are the highest mountains in the world. They have enormous volumes, as much as a hundred times that of a typical steep strato- cone made of congealed lava of a more viscous nature.



The 1949 cone—right on the edge of the caldera—provides one of the few ways of getting into the caldera. It is still steaming from heat retained from the 1984 erruption in which a curtain of fire sprang from a crack running across the caldera floor.

I had hoped for snow—lots of it. Much of the lava up here is the loose, blocky, highly abrasive 'a'a. It is unpleasant, at best, to walk on the clinkers, much worse than on the smooth, although often hollow, pillows of pahoehoe. The caldera has not been circumnavigated, except on snow shoes, when a substantial layer of the white stuff hides the treacherous stretches of 'a'a near the South pit. I had planned to walk around the caldera. At an altitude of over 4000 meters, the fifteen kilometers would have taken me the better part of a day.



The caldera of Mauna Loa on a calm day just after sunset. Alpenglow on the cinder cones of Mauna Kea in the distance.

My timing was just off—it should have snowed before I got up here. The locals, as well as tourists visiting this tropical paradise, had watched with amusement as I arrived burdened with pile, down and gortex. It was worth it though, I had the whole mountain to myself. Few ascend it in winter and in any case the upper part had been off limits for a while since an eruption near the summit disgorged quantities of lava that obliterated a substantial part of the trail, as well as the ahus, stone cairns marking the path. In past years numerous sections of the trail had to be relocated on this, the world's most active volcanoe.

I dropped down into Moku'aweoweo (the

section of a red bigeye fish) and concentrated on avoiding Lua Poholo, a deep pit crater with steep sides left over from one of the more spectacular secondary eruptions featuring a high lava fountain. Thirty kilometers to go. Passing Jaggar's cave on the way out of the North pit I cursed the wind as it caught my backpack. Toppling over at irregular intervals when gusts caught me unprepared, I picked my way through the recent lava flows. Hours of slow progress and constant attention to weak parts of the fresh crust took their toll. A broken leg could be disastrous in this exposed area far from shelter or help.



What looks like a snow-covered trail along the caldera's edge is actually a hidden crack running parallel to the caldera's edge. There is a faint rainbow in the supercooled water droplets in the mist.

The first part of the trail passes a number of distinctive landmarks. It was important to try and find these despite the fog and blowing snow. First Pohaku Hanalei, then

I had to retrace my steps when I stumbled into Puka uahi (smoking hole) rather than skirting it on the right. I paused to check my dwindling supplies. There was not much water left, but that would not be a problem now since I might be able to start up the stove in one of the lava caves to melt snow. On the way up I had been disappointed to find only bits of dirty ice in these rare holes known to occasionally retain rain water. I rose to continue to do battle with the wind.



Eight hundred meters from pendulum peak, where Charles Wilks set up camp in 1841 when the U.S. exploring expedition came up here, is a lava crack containing ice and sometimes a bit of dirty water in summer. The place is marked by a huge ahu or stone cairn.

Hours later the smell of sulphur confirmed that I was still on the North-East rift zone. I had seen the bright yellow surfaces of the deposits on the way up near the cracks from which the gases emanated. It was for-Steaming cone, followed by Dewey's cone. tunate that I had not wandered any closer, for the noxious fumes can leave one gasping for air. Not much later I passed a number of steaming vents. Very tempting to someone wishing to warm up. But wet clothing would have accelerated the hypothermia beginning to set in. It was pleasant to walk on fields of golden pumice near a spatter rampart formed by a recent eruption. Then the wind tore a hole in the clouds and Mauna Kea came into view. Slightly higher than the mountain I was on, and brilliantly white today, it provided a reassuring landmark for a while.



The morning mist softens the extreme contrast between lava and snow.



Pattern of melting and refreezing snow on 'a'a lava far below in the caldera.



The so-called observatory trail follows a recent spatter rampart North towards Mauna Kea. The start of the trail at 3350 meters is 30 km from the saddle road. From there it is another 46 km to Hilo on the coast.

There was still a long way to go, but I knew now that things would work out—wind or not. The hours to Pu'u 'Ula'ula (red hill) at about 3000 meters passed unevent-fully. I rested there before starting on the long haul down to the head of the trail the

next day. It had been interesting to study Note: page down for enlarged images.

next day. It had been interesting to study the many colors and textures of the lava. Still, it was refreshing to see green again at around 2500 meters, after days in this desolate terrain.

I was happy too that the earthquake damage that had closed the access road a year ago had been repaired, saving twentytwo kilometers on the way out.

Maybe there will be good snow cover next year. They say that he who does not climb Mauna Loa once is a fool; he who climbs it twice is also a fool. The next time on the long mountain will be my third.



A crevasse on a volcanoe! Blowing snow covers deep cracks wide enough to swallow the unwary.























