
JOHN TOWN

Kamchatka: Living with the Giant

(Plates 55–58)

Russia is the biggest country on earth. As the summer sun sets on Moscow, it has already risen on the country's Pacific seaboard, nine time-zones to the east. Here, on the Kamchatka peninsula, which stretches south some 750 miles from the easternmost part of Siberia, lies one of the highest and most active volcanoes in the world, almost forgotten for most of the century. Klyuchevskaya Sopka, c4750m, is the highest peak in Russia east of the Urals, and the highest active volcano in Europe or Asia. This is the north-western perimeter of the Ring of Fire, where the Pacific plate sinks beneath the continental crust to fuel a line of 29 active volcanoes scattered the length of the peninsula.

Klyuchevskaya is the biggest and most active of all Kamchatka's 'Living Giants' – a huge glaciated cone rising 4500m above a base 70km in diameter. The summit is rarely without a plume of steam or ash. In the forty years between 1944 and 1987 there were 25 major summit eruptions, some lasting up to 18 months, and a further ten major flank eruptions. The mountain produces 60 million tons of material each year – the same as the rest of Kamchatka's volcanoes put together. In flank eruptions a vent may open anywhere on the middle slopes, releasing a stream of lava and quickly building a cone of ash. After several weeks or months of violent activity the vent slowly dies, leaving a reddish cone and a petrified river of lava. There are eighty of these spent fireworks scattered across the slopes of Klyuchevskaya, some up to 150m high and half a kilometre across. They form a lasting record of the mountain's violent history – some less than a decade old. Other cones, at lower altitude, now covered in grass or willow scrub, date back many centuries.

It is difficult to look at Klyuchevskaya and to believe that the whole of this massive mountain is less than seven thousand years old. It defies imagination to be told that it grew from nothing to its present height in its first thousand years.

Klyuchevskaya and its surrounding peaks: Kamen (4579m), Khrestovsky (4108m), Ushkovsky (3943m) and Tolbachik (3682m), lie at the end of the earth. Kamchatka's capital, Petro-Pavlovsk, is nine hours' flight from Moscow. Otherwise the peninsula is only accessible by sea, during the six ice-free months of the year. From the city, these mountains are a 400-mile drive on mostly dirt roads. For many years the peninsula was tightly closed

to foreigners – Klyuchevskaya itself is so remote from major centres of population that its explosive propensities created few headlines. Even the inhabitants of the large village of Klyuchy, 30km from the crater, live in relative safety. The native Kamchatkans keep well away from the volcanoes, believing that eruptions occur when the spirits that live there are disturbed.

It is not surprising, therefore, that the mountain has held most of its secrets until the present century. Sometime during the 1940s Soviet Academician V I Vlodavets rediscovered a paper by Dr de Huhn of Riga, published in French in 1809, which contained an account by Daniil Gauss, a mining engineer, of his part in the nine-year expedition led by Billings and Sarychev which explored Kamchatka and NE Siberia during 1785–1794. Probably something of an independent initiative, it is not mentioned in the two official reports. The expedition travelled from Irkutsk to Yakutsk and on over the Yudoma/Okhta watershed, eventually reaching the coast at Okhotsk. A party led by Elistratov then investigated the western shore of Kamchatka and moved east across the peninsula. Between 4 and 8 August 1788 Gauss and two companions slowly made their way up the mountain, eventually reaching the summit crater. His topographic illustration, his detailed description of the climbing and of the peculiar features of the crater leave no doubt that he did indeed climb the mountain. Thus one of the highest and most dangerous mountains in Russia was climbed long before the commonly accepted birth of Russian mountaineering, and the ascent was then forgotten.

For 150 years either lack of interest or a suitable caution ensured that the mountain saw no further excursions – after all, no one knew that it had been and therefore could be climbed. The 1930s brought growing Soviet confidence in the fields of science and mountaineering. Though it is difficult to piece together the facts, it appears that in 1931, after two previous attempts, a party of six set out, led by G Semienova and V Dinges. Two of them, 16-year-old Nikolai Ogorodov and female volcanologist Alevtina Bylinkina, succeeded in making the first ascent of modern times. They were caught in rockfall on the descent and Bylinkina was killed, leaving Ogorodov to return alone.

As the number of climbers and volcanologists based in Kamchatka increased, so further ascents followed, though not at the rate one might have expected. Regular eruptions rendered the summit inaccessible for long periods and a dangerous place for much of the rest of the time. Stonefall continued to be a major danger on the final slopes of the mountain. A network of seismological stations and observatories were gradually erected from the 1950s onwards, but most expeditions contented themselves with a limited penetration of the upper slopes. Helicopters allowed relatively painless observation of the crater, so long as samples were not required. The dangers of the mountain are not all volcanic. Storms sweep in from the ocean with regularity, even in summer, and on the middle slopes the



55. Avacha volcano on the Kamchatka peninsula. At the edge of the crater, steam from a line of fumaroles is expelled hundreds of metres into the air. (*John Town*) (p153)



56. Avacha volcano from the west. (*John Town*) (p153)

chaotic mixture of lava flow and glacial debris can make navigation very difficult. Over forty people have died on the mountain so far, despite a probable average of less than two ascents a year.

Kamchatka was finally opened to foreigners in 1991. Three Japanese parties attacked the mountain in close succession, with the 'first foreign ascent' going to those who got there earliest – a Doshisha University party of six, led by Yasuo Kawai, accompanied by 13 Russians, led by Viktor Popov. On 23 March, despite temperatures of -35°C on the summit, three Japanese and nine Russians were successful. They took between seven and eight hours from the col to the south. On 2 May three members of the Tokyo Unryo Kai team reached the summit. Between 31 July and 2 August a Hokkaido team put 13 members on the summit, accompanied by eight Russians.

More foreign parties followed in 1991, and in 1992 David Koester, Tim Byrnes and Fred Menger made the first American ascent. Koester commented:

It was sometimes like climbing under gunfire. Some of the rocks were large enough to kill. As soon as they gained much speed, they would break up as they crashed into other rocks. One particularly impressive one flew by 40ft above the slope at what looked like 100mph, spinning and whirring like a firework ...

A major summit eruption occurred during the summer of 1993, pushing a substantial lava flow down the Khrestovskiy trench and preventing ascents. In June 1994, the British traveller Rowan Laxton, together with the Russian Artur Bilichenko, made a lightning attack on the mountain, reaching the outer crater rim in a five-day round trip from Klyuchy, but not continuing to the highest point.

What we knew of the mountain thus provided little reassurance as, on the afternoon of 27 July 1994, we first peered into the impenetrable cloud drifting over the slopes. Around our base at the Padkovo Volcanologists' hut, long-dead ash cones and petrified lavas bore silent witness only to a distant past. Apart from the wind it seemed ominously quiet. It was difficult to equate these gentle grassy slopes with the 'living giant' we knew hung above us.

We had flown into Petro-Pavlovsk two weeks earlier, gaining a spectacular view of Koryaksky and Avacha volcanoes which overlook the city. Escaping the clutches of Aeroflot, who had surpassed all previous standards of avarice and disorganisation, we put ourselves in the extremely capable hands of Sergei Zharinov and Alpha Tour. Our expedition, sponsored by Regatta, consisted of myself, Richard Wojtaszewski, Alyson Starling and Huw Davies. Petro-Pavlovsk enjoys a fine position overlooking the huge natural harbour of Avacha Bay but it looks a little battered these days. The roads are filled with right-hand drive used cars, imported direct from Japan,

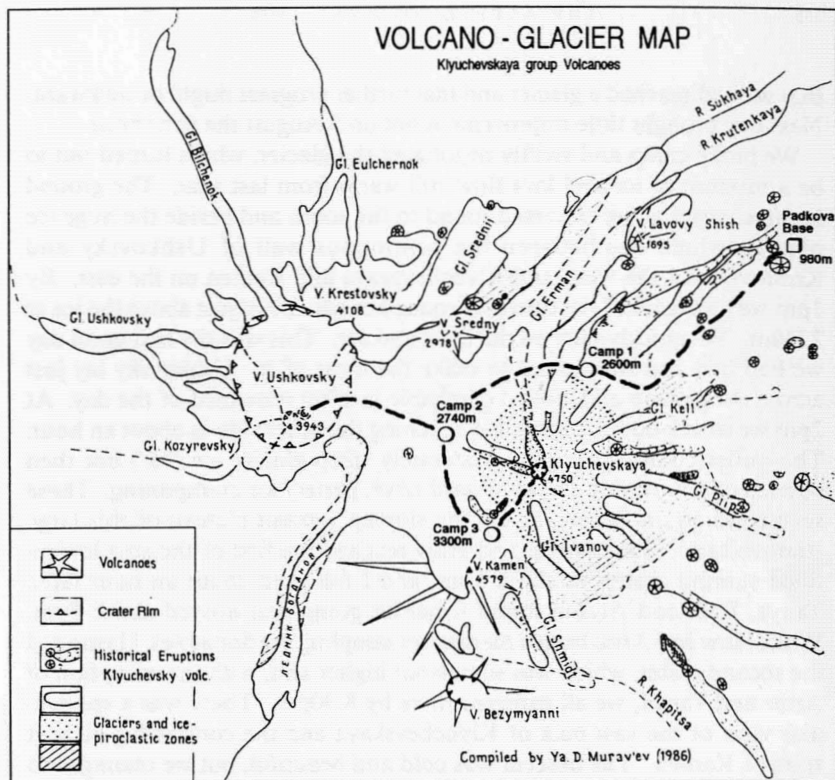
but the locals still drive on the right. The next day, after visiting the Institute of Volcanology, we and our Russian companions piled into our FWD lorry and headed for the volcanologist's hut just below the low col between Avacha and Koryaksky. The route, up shallow river beds and over snowfields, was certainly wild, but our destination proved home to quite a colony of skiers, trekkers and climbers.

Here we got to know our Russian companions: Slava Muraviev, their leader, a glaciologist from the Institute; Tatyana Kadomtseva, our translator, another glaciologist from Moscow; Viktor Vavilionuk, Ivan Benedikt, Vadim and Denis, also from the Institute.

Next day, despite still suffering from the 12-hour time difference, we walked the 1800m up Avacha – hardly a gentle start, but then this was Kamchatka. Scrambling over the lip of the crater, we were stunned at what faced us. The entire crater, perhaps 600m across, was filled almost to the top with black steaming lava. Clouds of steam and sulphur dioxide rolled out of the junction between the lava and the reddish cinder of the crater's edge. At the more active northern edge, a line of formidable fumaroles jetted steam hundreds of metres into the air. We donned our filter masks and embarked on an orgy of photographic activity. A Russian climbed onto the lava crust itself – and returned, surprisingly, intact. Others held their breath to dig for molten sulphur just beneath the ground. We circled the rim to get as close to the big fumaroles as we dared, but eventually fought shy of scrambling blind in the clouds of steam. On the way down, Viktor and Tanya skied the last two-thirds of the descent in a matter of minutes.

After a rest day, we attempted Koryaksky, a more technical climb and a staggering 2250m above the hut. We demurred at this kind of masochism and climbed some of the route in the afternoon, making an intermediate camp. The weather looked dubious and by evening we were caught in winds of 60-70mph. One of our tents, not designed for such conditions, was destroyed and Rick and Huw bivouacked in the remains. The bivouac was blown to pieces at 1am and they baled out. In the morning things were little better and I, with Viktor, Tanya and Ivan, followed them down.

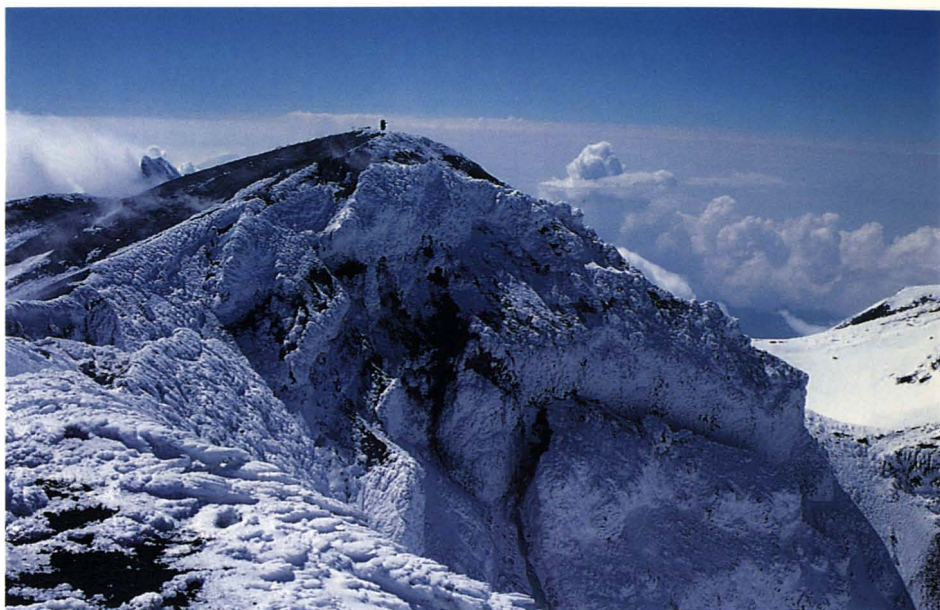
Back in the city we moved from our hotel to the infinitely more hospitable home of Valentina, widow of Slava's mentor V Vinogradov, and spent a day at the market and the seaside (black sand, cold Pacific). Our party grew to 14, including Artur Bilichenko, and it was time for the 600km journey to Klyuchevskaya. After a picnic at the hot springs in Malki, it became increasingly apparent that we had lost our second lorry, which had set out late owing to the temporary detention of our driver Nikolai Gregorievich for alcoholic over-exuberance. We then drove around in circles until after midnight, only to have our collars felt by the local fish police while camping by their river. Daylight revealed the glories of the town of Milkovo, where we stayed until 4pm when a sheepish Slava arrived by public transport to say that the other lorry was 100 miles up the road at



Kozyrevsk. Another late night drive ensued, but at least provided a first magnificent sunset view of Tolbachik as we were ferried across the Kamchatka river.

Our third day on the road took us to Klyuchy, entering via back roads to avoid the military checkpoint, and then east along river beds and great ash-covered flood plains, before turning north onto the mountain. The track up to Padkovo was little more than two immense ruts. On the steepest section it was necessary to leap out and cut down the surrounding jungle to pile beneath the wheels. Eventually the taiga gave way to willow scrub and then to the alpine meadows surrounding the hut.

At six the next morning the mountain revealed itself for a few minutes. Shining with new snow, the cone swept up to an impossible height – the summit hung four vertical kilometres above us. The next four days brought little but wind, rain and a million mosquitoes. Rick and Huw helped the Russians carry to two caches of indeterminate location at about 2500m and we went on windswept nature walks and training runs up cinder cones and lava flows. By 1st August the weather had not improved, so we set off anyway. After a short lorry ride to 1430m, above the Tsirkovaya cones and hut, we flogged endlessly up and round over tediously awkward ground in almost zero visibility. Only Russians enjoy picnicking in a snowdrift as snowflakes swirl around them. Eventually a halt was called on the grounds



57. The summit of Klyuchevskaya Sopka, c4750m, the highest active volcano in Europe or Asia: a huge glaciated cone rising above a base 70km in diameter. (*John Town*) (p153)



58. Ushkovsky (L), 3943m, and Khrestovskiy, 4108m, seen from Camp 3. (*John Town*) (p153)

that we had reached a glacier and that further progress might be awkward. Next day brought little improvement but on 3 August the sun shone.

We broke camp and swiftly negotiated the glacier, which turned out to be a mixture of ice and lava flow still warm from last year. The ground became easier as we traversed round to the south and beside the huge ice plateau which lies between the continuous wall of Ushkovsky and Krestovsky on the west, and Klyuchevskaya and Kamen on the east. By 1pm we had reached the canvas bivouac hut which lies just above the ice at 2740m. We quickly pitched the tents and ate. This was the first good day we had had and we wanted to make the most of it. Ushkovsky lay just across the plateau and looked climbable in what remained of the day. At 2pm we struck out across the ice, reaching the other side in about an hour. The initial climbing was up moderately steep glacier ice (45°) but then opened out onto wide slopes of hard névé, perfect for cramponing. These seemed to go on forever, as did the sloping summit plateau of this large stratovolcano. Slava, Artur and Huw reached the first of the smaller ice-filled summit craters at about 5pm, and I followed about an hour later. Tanya, Rick and Alyson found it harder going and arrived about 7pm. While Huw and Artur busied themselves sampling the fumaroles, I inspected the second crater, which was somewhat higher and, with the exception of Artur and Tanya, we all gathered there by 8.30pm. There was a spectacular view of the vast bulk of Klyuchevskaya and the contrasting elegant spire of Kamen. The descent was cold and beautiful, but we managed to reach the plateau at 11.45pm in the last of the light.

Next day we rested and watched as a front hit the massif. Since it was abundantly clear that waiting out bad weather was not going to get us up the mountain, we climbed the short distance up to the col (at 3280m) between Kamen and Klyuchevskaya. A major storm closed in just before we made camp, and pinned us in the tents for the next 48 hours. Alyson had started from the plateau with a bad cold and at the end of the storm this had moved to her chest. She and Richard took the sensible decision to escape downwards while the door was still open. Six of us remained, with one day left before we must start down.

The next day, 8 August, dawned clear and cold, the peaks still powdered and well frozen from the storm. Intending to leave at six, we eventually left at eight. We were soon strung out across the slopes, each moving at his own pace. I held my breath for the stones, but they did not come. Our Living Giant slept, every rock frozen silently in place. The slope was comfortable – no more than 45° at the steepest (reported average 35°). Rocky outcrops provided occasional alternatives to hard névé, sometimes overlaid with powder. Only the thermal zone just below the crater proved exotic. The steep gravel was by turns frozen solid, requiring front points, or a warm sliding mush. At 2pm I hauled myself over the lip of the crater to join Huw, who, with Slava and Artur, had once again beaten me by about an hour.

We were faced with a confusing and chaotic view: the shallow ill-defined outer crater, about 700m across, held a number of higher points, as well as a big fumarole which was shooting steam a hundred metres into the air. We picked the nearest outcrop, which looked as if it might be the highest, and climbed the last 50m up it. Here we found ourselves on the highest point of a steep inner crater, which fell away 60m beneath us in ice-encrusted cliffs. A series of angry fumaroles around the rim leaked sulphur, hydrogen sulphide and steam, which had recondensed as ice on any exposed rock. Gasping for air behind our masks, we peered down to the silent crater floor and its soft carpet of snow. To the south, the icy pyramid of Kamen was our only companion. It was a truly wonderful place.

The descent to the camp was accomplished in two to three hours, but the weather returned to hammer us the following two days, finishing off another tent at the plateau, before we finally escaped onto the lower slopes. The truth, however, was that our Living Giant had been kind, playing dead while the storms raged and letting us slip away.

Three weeks after our lorries rolled away, the rumbling began and, on 1st October, the mountain exploded with the biggest bang for 50 years. The inner crater rim, where we had stood, was blown ten miles into the air, threatening air traffic with a cloud of ash 900 miles long.

'Would you go back?', I was asked shortly afterwards ...
Would you?

Summary: Taking part in the Regatta Kamchatka Volcanoes Expedition were Richard Wojtaszewski, Alyson Starling, Huw Davies and John Town, joined in Kamchatka by Slava Muraviev, Tatyana Kadomtseva, Victor Vavilionuk, Ivan Benedikt, Artur Bilichenko and four others. Members climbed Avacha volcano (2751m) near Petro-Pavlovsk, but failed on its neighbour Koryaksky (3456m), before moving north to the Klyuchevskaya region, where they made the first British ascents of Ushkovsky (3943m) and the highest point of Klyuchevskaya (c4750m) on 3 and 8 August 1994.

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