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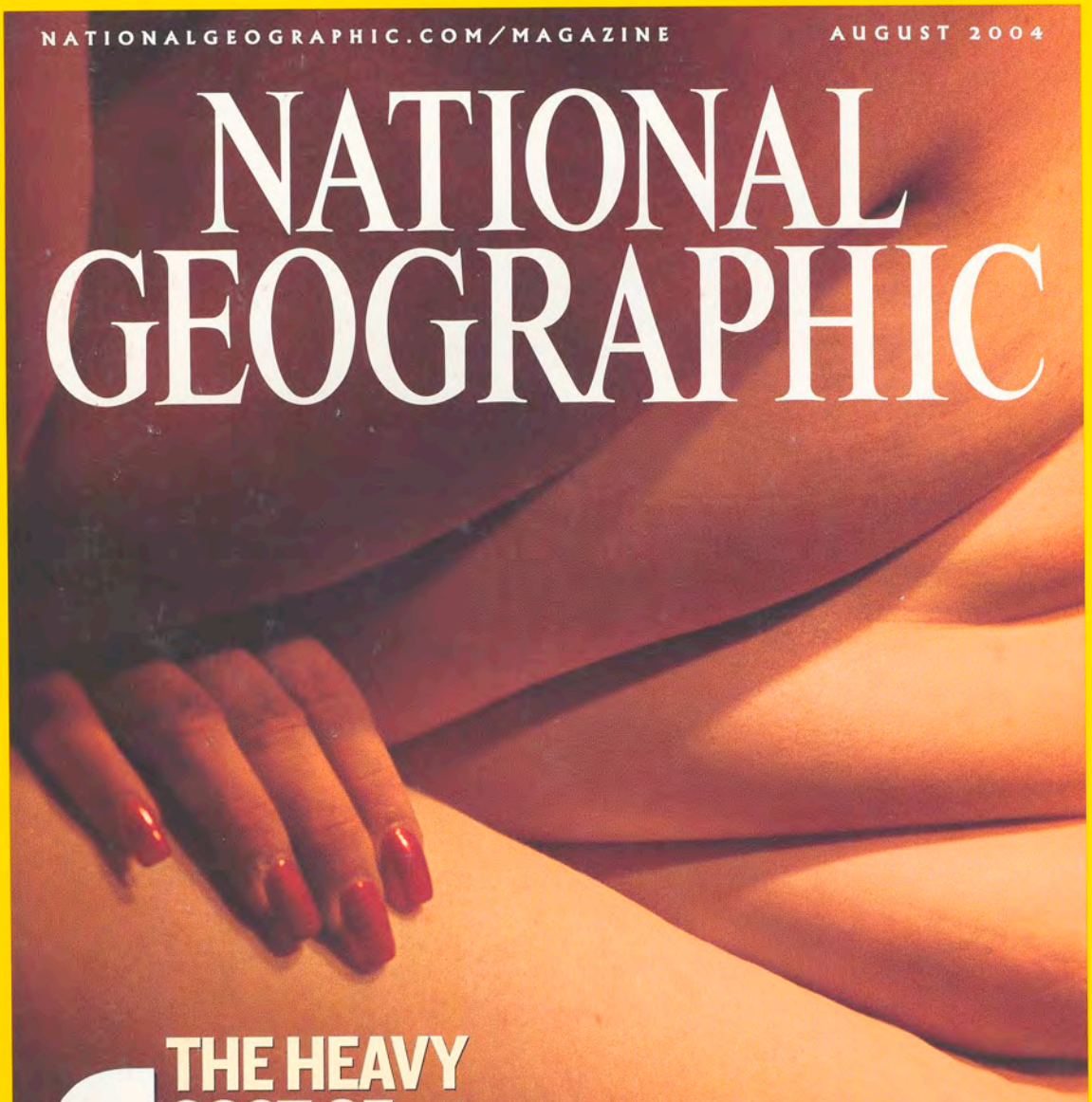
NATIONAL GEOGRAPHIC



THE HEAVY COST OF fat

Big Ice

The route was steep, our sleds heavy, the snow blinding. Just another perfect day on PATAGONIA'S Southern Ice Field.

By Børge Ousland • Photographs by Thomas Ulrich

It took all my strength, and crampons on my boots, to pull a sledful of gear up slopes of hard blue ice in southern Chile.

You can't get away from the weather on the Southern Patagonian Ice Field, although the word "weather" doesn't do justice to the elemental forces that rule this expanse of glaciers in southern Chile and Argentina, the largest on Earth outside Antarctica and Greenland. The wind knocks you down. The snow buries you alive. The icy mists blot out visibility for days. It's a place that makes you feel small—but also very alive.

No one had ever crossed the length of the Southern Ice Field without resupplying before. Most expeditions had been pinned down by bad weather. But photographer Thomas Ulrich and I had a plan: We would use satellite images and a handheld GPS to find the best routes around the deadly crevasses and over the snow-blasted peaks, routes we could follow in almost any weather. We'd combine Thomas's skills as a mountaineer and mine as a polar explorer to move as quickly and as safely as possible. And we'd make our start in late winter, when it's colder and darker, but when the snow bridges are stronger and the winds more predictable.

We left the Chilean town of Tortel on August 24, 2003, with four kayaks, enough food and gear to keep us alive for 67 days, and a healthy anxiety about what lay ahead. Then the hard work began.

SOCIETY GRANT

This Expeditions Council project was supported by your Society membership.

Chunks of ice littered the beach like messages from the glacier.

We started our journey in sea kayaks, each towing 285 pounds of food, equipment, and fuel to the mouth of the Jorge Montt Glacier. From there we went on foot and skis, scrambling over crevasses and snow bridges. It rained constantly, bogging us down. One day it took us 11 hours to pull our smaller kayak sleds only a mile and a half in the rotten snow. "We must not drive ourselves as hard as we did today," I wrote in my journal. At last we reached the end of the glacier, where Thomas (below) looked back on two weeks of hard work. Next: the massive ice field plateau.

BØRGE OUSLAND

BØRGE OUSLAND

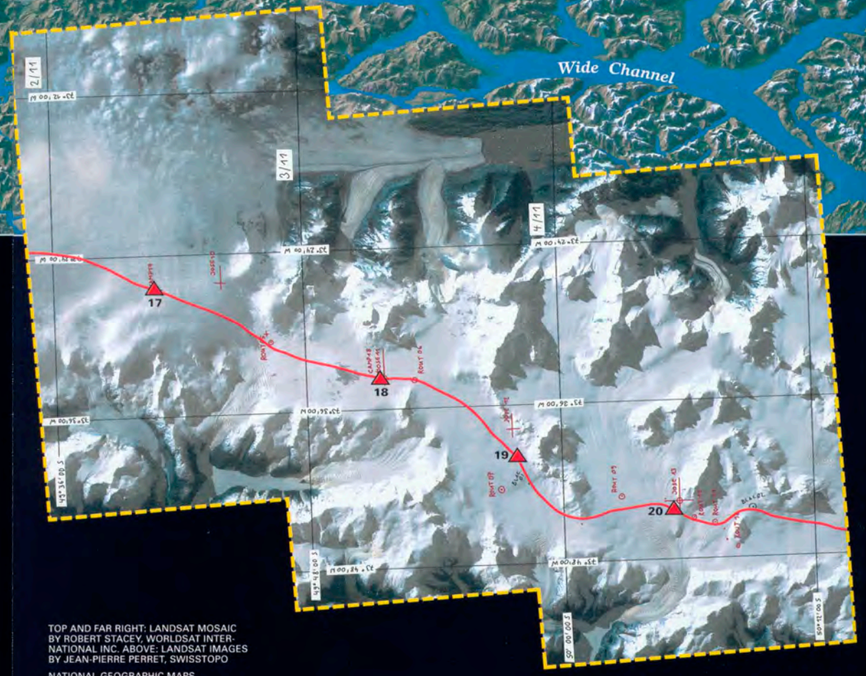
The wind shook our tent so violently we couldn't get any sleep.

After being trapped for three days at camp 22 by 60-mile-an-hour gusts, we dug out our sleds, which were buried in the snow. Thomas found the ropes and climbing gear (left) we needed for one of the most dangerous parts of the trek: descending a huge icefall to Falla Reichert Pass. The icefall contains many crevasses, but it was better than another night in this exposed camp.

charting the trek

We couldn't find conventional maps with enough detail to plan our 325-mile route, so we created something better. The Canadian Space Agency gave us Radarsat images revealing likely areas for crevasses, and we bought Landsat photos showing terrain. In Coihaique, Chile, I spread out a string of these photos (left) to double-check GPS waypoints Thomas had plotted. We took the photos (right) with us to find the best routes and campsites, shown as red triangles in a newly created satellite mosaic (above).

▶ Zoom in on the explorers' route and campsites at nationalgeographic.com/magazine/0408.



TOP AND FAR RIGHT: LANDSAT MOSAIC BY ROBERT STACEY, WORLDSAT INTERNATIONAL INC. ABOVE: LANDSAT IMAGES BY JEAN-PIERRE PERRET, SWISSTOPO

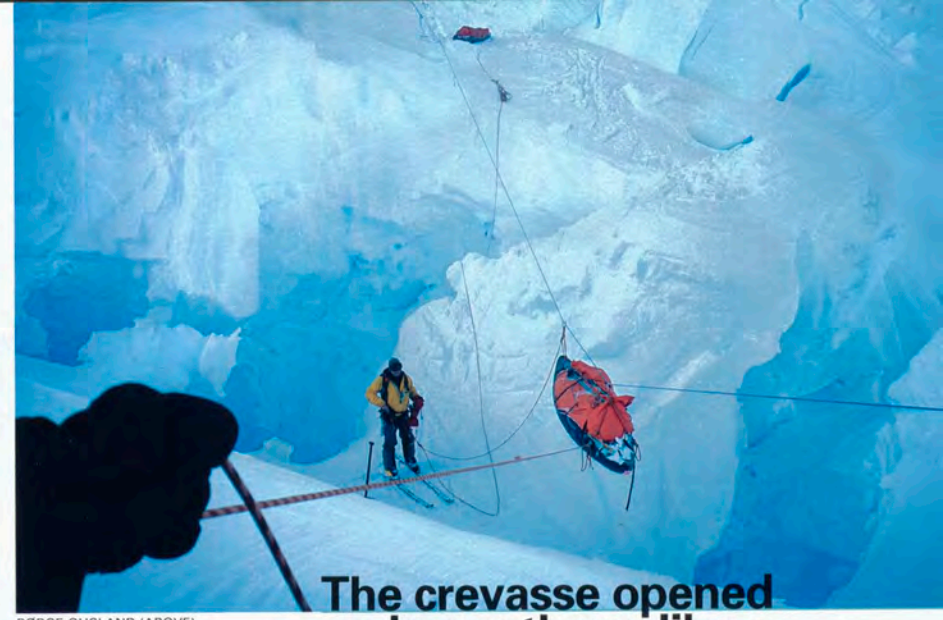
NATIONAL GEOGRAPHIC MAPS

Delayed by winds, snow, and whiteouts, we took 16 days to travel just 8 miles through Falla Reichert Pass, seen in a detail (right) of the larger satellite image (above). After descending 3,000 feet of a jumbled icefall with giant overhanging blocks, we climbed 4,500 feet up an icy peak, then rappelled down a cliff on the other side. We knew we were taking chances in avalanche-prone gullies, yet our spirits were lifted by the sight of as many as 13 condors soaring high above us.

"Open the tent!" I shouted, wearing little more than my hat.

Tired of getting my clothes plastered with wet snow, I decided to answer the call of nature without them. We tried everything we could think of to keep our gear from getting soaked by the weather at camp 25. The highlight of each day was the evening meal—1,800 calories of freeze-dried meat and mashed potatoes with butter, cooked and devoured by flashlight in the winter darkness (top). During the day we chewed my favorite snack (bottom), dried reindeer heart made by the Sami people of Norway. Over and over we checked our satellite photos (left) to discuss the route ahead. One night Thomas woke me and asked, "Do I have something in my eye?" He said his eyelids felt like sandpaper. I quickly realized he had snow blindness and applied soothing eyedrops. We later learned that an ozone hole had passed over us that day, exposing us to increased ultraviolet rays.

BØRGE OUSLAND (LEFT)



BØRGE OUSLAND (ABOVE)

The crevasse opened up beneath me like a trapdoor in the snow.

My sled harness checked my fall, however, and I quickly climbed out. We'd already gotten through a difficult stretch before Falla Reichert Pass, where we rigged a rope system to move our sleds across a snow bridge over a crevasse (above). Thomas guided the sled as I pulled it across.

Now all we needed to do was lower our gear over cliffs of ice.

On a rare calm day we looked east into Argentina from the summit ridge of a 7,700-foot peak (above). Six weeks into our journey, we still had more than a hundred miles to go, beginning with a risky 2,000-foot rappel. After we buried bags filled with snow as anchors, Thomas went over the edge. Then I lowered the first sled, which got stuck on the cliff. Thomas had to climb back up to free it. The second sled went smoothly, and I followed (right). When we reached the bottom nine hours later, we gave each other a bear hug.

Near the end we lucked into a few blissfully clear hours of smooth sailing.

We used small sails to help pull the kayak sleds (left). Once we were off the ice, it took us another week to drag the sleds over rocks (below), raft them down rapids, and paddle them across a fjord before we finally hauled them onto the beach at Puerto Natales and straight into our hotel parking lot (bottom). Prepare well and stick to the plan—that had been our mantra. Fifty-four days after we left Tortel, we walked into the hotel bar still in our rafting gear. "Two pisco sours," I told the bartender, who didn't bat an eye. In Patagonia, we'd learned, nearly anything is possible. □

KEEP ON TREKKING Check out a day's menu of megacalorie foods consumed by the Patagonian explorers at **nationalgeographic.com/magazine/0408**.

SERGIO R. NUÑEZ (BOTTOM)