



## AAC Publications

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### **Recon: Towers of Wind and Ice**

The Cordillera de Sarmiento of Southern Chile

**The word “remote” is no longer forbidding** to mountaineers. Jet travel is relatively cheap and easy, and can quickly get you to any corner of the world. But getting close is one thing. Real accessibility is another story entirely.

Planes land in Puerto Natales, just 60 kilometers east of the Cordillera de Sarmiento in far southern Chile, and a well-used shipping lane passes a few kilometers from its southern tip. From there, sensational views of ice-covered towers may be had—but only perhaps three percent of the time. During the vast majority of any given year, these mountains are shrouded in clouds.

In the Cordillera de Sarmiento, accessibility has much more to do with climate than the logistics of covering distance. Even at the toe of your chosen peak, the biggest challenge is likely to be the atrocious weather rather than mere technical difficulty. Jack Miller, the first climber to explore this range, wrote, “After we arrived at the mountains, our first task was to see them.”

Until the widespread availability of satellite photos, very few mountaineers had ever spotted these spectacular summits. Martin Conway saw them in 1902 from the deck of a steamer heading for Tierra del Fuego. H.W. “Bill” Tilman spied them in 1956 from his modest sloop, *Mischief*, sailing from England to Patagonia, where he would cross the Southern Patagonia Ice Cap.

In March 1973, when the indefatigable explorer Eric Shipton finally summited Mt. Burney, a volcano of 1,750 meters, on the third attempt, the Cordillera de Sarmiento was in clear view about 25 kilometers away. Marveling at the sight, he later wrote, “Northwards, across Union Channel, we looked up the narrow gorge of...[the] ‘Canal of the Mountains,’ flanked by the Cordillera Sarmiento, a splendid range of ice peaks as yet untouched.”

### **GEOGRAPHY**

West and south of the Torres del Paine, the massive glaciers and rugged peaks of the Southern Patagonian Ice Cap extend into the Cordillera de Sarmiento, a mountainous peninsula about 65 km long and 15 km wide. The range centers about the 52° South line of latitude, west of Puerto Natales.

The main summits of the range are La Dama Blanca (1,941m), followed to the south by Cerro Trono (1,879m, a.k.a. Mt. Throne) and Alas de Ángel (1,767m, a.k.a. Angel Wings). Three more summits rise over 1,700 meters, and two of these are still unclimbed, as well as many other beautiful mountains above 1,200 meters. Many of the peaks are ice-covered towers or sharp rock spires, flanked by vertical walls.

On the official maps of the Chilean IGM (Instituto Geográfico Militar), not a single feature of the Cordillera de Sarmiento has been given a name, in part due to the total lack of human presence in the area. Nevertheless, over the years, explorers and climbers have named these bold summits, lakes, glaciers, and rivers. That heritage is being rescued by the Uncharted project ([unchart.org](http://unchart.org)) through its maps and research, some of which is briefly presented here. [Editor’s note: Many of the peaks in the range originally were given English names, but the consensus now is that the Spanish names should be used. See “Map Note” on previous page.]

With nearly 2,000 meters of jagged relief, the cordillera has a profile somewhat similar to the French Alps, but its glaciation is much more extensive, sending large glacier snouts into tidewater. In recent geological times the ice was thousands of feet thicker, bulldozing the long north-south fjords, rounding out basins in the main massif, and shaving smooth the neighboring ranges.

From the nearby sub-Antarctic waters, the persistent west winds—the Furious Fifties— pick up moist, cold air and plaster the peaks with thick frost. This forms the infamous “cauliflower ice” (a.k.a. “refrigerator ice”), similar to the rime that forms on peaks bordering the Patagonian Ice Cap, farther north, but much denser and more persistent.

Nearly all ascents, to date, have been on snow and ice. The rock, part of the rare Rocas Verdes formation, originated at the end of the Gondwana super-continent, when Patagonia started to break up and an oceanic basin was formed between the volcanic arc and the continent. The basin filled with large extrusions of basalts, sandstones, shales, and cherts. Still at depth, the rock was metamorphosed and then uplifted to roughly its present position. To all appearances the rock that underpins Sarmiento is solid. To the climber’s hand, its gritty, olivaceous nature will provide real pleasure—if it is ever warm enough to climb without gloves.

## **EARLY HISTORY**

Discovery is a tricky word, given that the rugged lands surrounding these fjords were home of the Kawésqar or Yamana people for thousands of years. Sadly, their names and tales were erased by the relentless and deadly European colonization process.

The range was first recorded in written history by Juan Ladrillero in 1558, but his tales were quickly forgotten as 58 of his 60 men died during that expedition, and the rest, including Ladrillero, died soon afterward. Twenty years later, Pedro Sarmiento de Gamboa followed in Ladrillero’s wake and claimed for himself the discovery. Unfair as history often is, Sarmiento’s name now is given to the fabulous mountain range he generically called “cordillera nevada” (snowy range).

Little further exploration was done in these waters for 250 years. In the 1830s, however, as Robert Fitz Roy and his crew explored the southern end of South America in the H.M.S. Beagle, they discovered the fjord that gives access to the eastern flanks of Cordillera de Sarmiento. This they called the Canal of the Mountains (now most commonly known as the Fiordo de las Montañas), “bordered on each side by a steep range of mountains, broken here and there by deep ravines, which were filled with frozen snow, and surmounted by extensive glaciers, whence huge avalanches were continually falling.”

## **FIRST CLIMBS**

It would be nearly a century and a half before mountaineers ventured into this range. American Jack Miller first sighted the Sarmiento range from the summit of Gran Campo Nevado in the Skyring Sound area, southeast of the cordillera, in December 1974. His appetite whetted, Miller and Dan Asay assembled an inflatable boat, outboard motor, and foul-weather gear and left Puerto Natales in January 1976. Three days of sea travel got them into the Fiordo de las Montañas, and they set up camp on Peninsula Roca, just across from the huge, tidewater Bernal Glacier, to wait for a view of the range.

Aerial photos from the U.S. Air Force taken in 1944 had given them a general orientation to the landscape, but during their three weeks in the fjord they never sighted the spectacular summits. Nonetheless, they reconnoitered the full 58-kilometer length of the fjord. They climbed a prominent peak near the north end of the Peninsula Roca, where the gods applauded their effort with a horrendous electrical storm. On a day of quieter winds and lighter skies they crossed the fjord and followed the Bernal Glacier toward what they guessed (correctly) to be the highest group of

mountains. Snow and high winds returned as they reached one of three prominent peaks of bare rock. The names they gave to the peaks they climbed, Rayos y Truenos (Thunder and Lightning) and Tres Furias (Three Furies), adequately describe the experience (AAJ 1977).

The pair then went to the Paine massif to dry out, and to attempt a route on the southwest face of Cuerno Principal that Miller had tried back in the 1960s. This time, Asay and Miller succeeded, together with Richard Smithers from South Africa. Along with their elation in reaching this summit, they enjoyed the irony and additional pleasure of seeing the Cordillera Sarmiento under clear skies, some 90 kilometers to the south.

In late 1988, a quartet of well-known climbers, Yvon Chouinard, Jim Donini, Rick Ridgeway, and Doug Tompkins, hired a fishing boat to drop them at the south end of the Peninsula Roca, just to the east of the Cordillera de Sarmiento. Although they only glimpsed the mountains briefly during weeks of stormy weather, Chouinard and Donini managed to climb the highest rock spire of the Grupo La Paz (1,190m), and then all four portaged across the peninsula and paddled five days in severe conditions to return to Puerto Natales.

Fourteen years after his first visit, Miller, now a confirmed Patagonian junkie, was driving the highway near Puerto Natales and was startled to see a completely clear Cordillera de Sarmiento. With no thoughts other than this exceptional opportunity, he dropped everything and found a plane and pilot to fly him at summit level along both sides of the entire range. This flight revealed mountains beyond his wildest imagination. To Miller, it was like seeing the French Alps or the Coast Mountains of southeast Alaska for the first time. The grandeur of the resulting photographs was enough to convince the National Geographic Society to support an expedition to explore and map the little-known range.

On this 1992 expedition, Miller and five friends—Pete Garber, Rob Hart, Phillip Lloyd, Tyler van Arsdell, and Gordon Wiltsie—completed the single most thorough ground survey to date, exploring these mountains from both the Fiordo de las Montañas and the rarely visited Fiordo Taraba on the west side of the range (AAJ 1993). They climbed peaks in two of the main massifs, summiting and naming six mountains: Gremlin's Cap (now Gorro de Duende), Fickle Finger of Fate (Caprichoso), The South Face (Cara Sur, named for the peaks' prominent wall), Jaco (named after a legendary god of the area), Elephant Ears (Orejas de Elefante), and Taraba. In the process they created the first schematic map of the area.

The subsequent article in *National Geographic* magazine (April 1994) exposed the world to this range. And the expedition's failure to reach the main summit, La Dama Blanca, gave it sufficient notoriety to attract new expeditions—and new failures.

## **MODERN EXPEDITIONS**

In the summer 1994–'95, a British expedition led by David Hillebrandt, together with Keith Atkinson and Robin Earle, attempted La Dama Blanca. They were halted by persistent bad weather and an unexpected valley in their way. In spite of the tough conditions they reached the summit of Pico Anwa (Alpine Journal 1996).

Also in 1995, the first Chilean expedition ventured into these mountains, as Nicola's Boetsch, Christian Burachio, Alberto Gana, Giancarlo Giuglielmetti, Felipe Howard, and Pablo Osses accessed the area by kayak, traveling the full length of the Fiordo de las Montañas and eventually reaching the summit of Cerro Timonel (AAJ 1998).

At the end of 1997, Basque climbers climbed two peaks—Cerro Dos Picos and Cerro

Cuatro Agujas—next to Miller and Asay's Rayos y Truenos, at the north end of Peninsula Roca. Hillebrandt returned in January 1998, with Nick Banks, Chris Smith, and Nial Washington-Jones. They finally solved the riddle of accessing La Dama Blanca and reached a point 500 meters below the main

summit, despite rain every single day of the 28 the British were there. Later the same year they returned, hoping to finish the route, but again were rejected by the merciless weather.

In 1999, a second Chilean expedition visited the area, comprised of Manuel Bugueño, Patricia Cuevas, Rodrigo Flores, Mauricio Ortiz, and Juan Antonio Villarroel. In spite of awful weather, they managed to climb one of the bold spires of Cerro Cinco Amigos as well as Punta Barlovento.

La Dama Blanca was still virgin, and at the end of 1999 an expedition backed by the Spanish TV program "Al Filo de lo Imposible" took up the challenge. In the team was the Basque climber Inaki San Vicente, who had been part of the 1997 exploration. This new attempt failed, but just three weeks later San Vicente returned with Rafael Quesada for a second try. They finally reached the 1,941-meter summit of La Dama Blanca on February 8, 2000 (AAJ 2000).

That October the English climber Hillebrandt returned once again. Having missed his chance for the first ascent of La Dama Blanca, he decided to take on Alas de Angel (1,767m), a more technical challenge. He and his partners reached a point at 1,100 meters, but a 14-day storm prevented a second try (AAJ 2001).

Since the highest summit of the cordillera had been reached, interest in the whole range soon fell off, even though prettier and more challenging peaks remained unclimbed. Almost

12 years passed before a new expedition visited the area. Natalia Martinez (Argentina) and Camilo Rada (Chile), while working on the Uncharted research and mapping project, were seduced by the charm of this remote corner of Patagonia and the many mountains that were still unexplored. With a light style similar to that of Miller and Asay in 1976, they made the first ascents of Cerro Alas de Angel and Cerro Trono during the winter of 2012.

## **LOGISTICS AND WEATHER**

Getting to the Cordillera de Sarmiento by land is almost unthinkable and would require a major expedition by itself. However, the labyrinth of waterways on three sides of the range makes it accessible by boats—albeit ones that can withstand extremely rough seas. Puerto Natales, the gateway to Torres del Paine National Park, is also the seaport for the Cordillera de Sarmiento. During rare periods of calm weather, the 50 nautical miles can be traveled in four hours by a Zodiac inflatable or a bit longer by a fishing boat or private yacht. Kayaking will take several days, but portaging over strategic necks of land can shorten the distance to about 35 nautical miles. Indigenous boaters marked these shortcuts with rock paintings that are still found.

Once on land, the main foes remain water and moisture. Base camps must be positioned where they won't be submerged by heavy rain. Rubber boots are ideal approach footwear, and goggles are survival gear—spare goggles too. In the alpine, ice caves and igloos are good alternatives to tents, given the frequent gale-force winds, although warm summer rain can quickly ruin snowy shelters.

Some climbers prefer the winter months—May through August. Winds and storms are somewhat milder, on average, and there may be more days of clear sky. The trade-off is longer nights, but latter-day climbers have learned to move loads, establish high camps, and even climb during storms and in darkness. And winter can be a good ally by lowering the snow line within the wet forest and low-elevation alpine terrain.

Any expedition that waits for good weather to get out of the tent is almost certainly condemned to failure. Exploring, setting camps, and moving loads during foul weather is essential to success, requiring, in Shipton's words, "a certain amount of stoicism." Since many of the approaches will be "blind," due to storm and whiteouts, moving at night makes sense, putting the climbers in position to launch a summit push when a rare weather window opens. However, this tactic requires skillful use of

all navigational resources. Maps have vastly improved since the early 1990s, and the miracle of GPS-aided route-finding has expanded the boundaries of Patagonian exploration as much as cams did for traditional rock climbing.

## **CLIMBING POSSIBILITIES**

After the expeditions by National Geographic in 1992 and “Al filo de lo Imposible” in 2001, many people thought the Cordillera de Sarmiento was climbed out. But during their research on the climbing history of the range, Martinez and Rada have realized there is still a long list of unclimbed peaks. Most of these rise above 1,500 meters and have steep walls or spires in the last hundred to few hundred meters. These are almost always covered in thick rime ice. Some may be reached on skis from the snow line, but most ascents will involve at least a few pitches of serious ice or mixed climbing.

Long glacier valleys are carved deeply into these mountains, offering some steep walls with 1,300 meters or more in vertical gain, including the north face of Cerro Trono and the southwest face of La Dama Blanca. The south faces sometimes support icefalls of a couple of hundred meters, clinging to vertical faces of dark rock. Some of the sub-massifs have never been explored, and many of the valleys have never been trodden. Real exploration is still to be done.

## **PRESERVATION**

For centuries, isolation and a harsh climate kept the Cordillera de Sarmiento pristine. But in a world increasingly starved of natural resources, even in the remotest parts of Patagonia people will harvest old-growth dwarf cypress for fence posts or create salmon farms to grow the fish for North American and European tables. And though most climbers are scrupulous about keeping their camps clean, others have left heaps of trash or chopped down trees to build shelters.

The Reserva Nacional Alacalufes, created in 1969 and to date the largest Chilean national reserve, includes the Cordillera de Sarmiento. But the protection offered by this status is limited, and resources can be exploited if a sustainable management plan is presented to the government. Environmental enforcement is often deficient in Latin America, especially in remote areas like this. Climbers, therefore, carry significant responsibility, not only to leave no traces of their own time in these mountains, but also to keep an eye open for improper or illegal activities by other visitors, and, if necessary, inform the authorities.

## **About the Authors**

Camilo Rada, 34, is a Chilean living in Whistler, British Columbia, while earning his Ph.D. in glaciology. He has done numerous first ascents in Patagonia and Antarctica. Jack Miller, 75, is a geographer and environmentalist living near Ridgway, Colorado. He first visited Patagonia in 1964 and was the first person to explore and climb in many of the wildest ranges of the region.

## Images



Unclimbed south and east faces of Cerro Trono (1,879m), second-highest peak in the area. It was first climbed in 2012, from the west.



American explorer Jack Miller during the 1992 National Geographic expedition that put these mountains on the map.



Climbing the north side of Jaco in 1992. The highest peak to the north is unclimbed Peak 1,706m. In the distance: the Southern Patagonia Ice Cap.



Cerro Cinco Amigos (1,401m) and Peak 1,429m (right) from the north. Only one secondary spire in this group has been climbed.



Peaks above Glaciar Hermann (left to right): Cerro Trono, Cerro Tres Furias, Cerro Dama Blanca, and Peak 1,596m (unclimbed).



Unclimbed towers above Glaciar Zamudio.



Cerro Dama Blanca (1,941m), highest peak on the peninsula, and only climbed once.

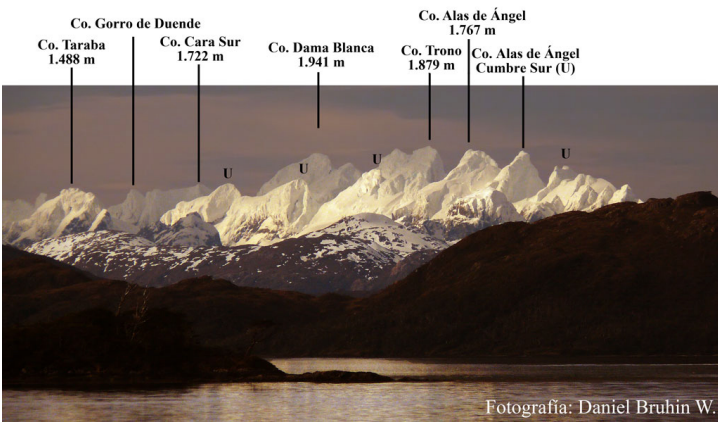


High camp at 1,200m below the south face of Cerro Trono.





Looking northeast from Canal Unión to Cordillera de Sarmiento. The highest peaks are (left to right) Dama Blanca, Trono, and Alas de Ángel (main and south peaks).



A view of the Cordillera with prominent peaks labeled.



Two unnamed peaks of the cordillera at 1345m(L) and 1350m(R).



Rough sea approaches yield to wet terrain at the base of glacial aprons.



The steepness of the cordillera abounds atop an unnamed 1596m peak.

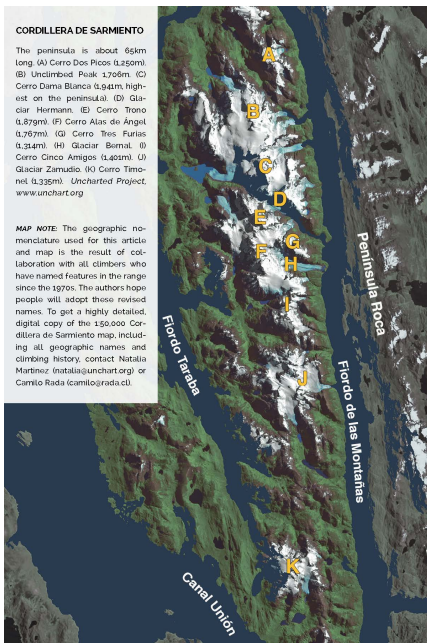


Rare clear skies give a glimpse of the unclimbed Angel Sur.

#### COROLLERA DE SARMIENTO

The peninsula is about 65km long. (A) Cerro Dos Picos (1,250m). (B) Unclimbed Peak 1,706m. (C) Cerro Dama Blanca (1,941m, highest on the peninsula). (D) Glaciar Hermann. (E) Cerro Trono (1,879m). (F) Cerro Alas de Ángel (1,767m). (G) Cerro Tres Furias (1,314m). (H) Glaciar Bernal. (I) Cerro Cinco Amigos (1,401m). (J) Glaciar Zamudio. (K) Cerro Timonel (1,335m). Uncharted Project, [www.unchart.org](http://www.unchart.org)

**MAP NOTE:** The geographic nomenclature used for this article and map is the result of collaboration with all climbers who have named features in the range since the 1970s. The authors hope people will adopt these revised names. To get a highly detailed, digital copy of the 1:50,000 Cordillera de Sarmiento map, including all geographic names and climbing history, contact Natalia Martinez ([natalia@unchart.org](mailto:natalia@unchart.org)) or Camilo Rada ([camilo@rada.cl](mailto:camilo@rada.cl))



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## Article Details

Author	Camilo Rada and Jack Miller
Publication	AAJ
Volume	56
Issue	88
Page	80
Copyright Date	2014
Article Type	Feature article