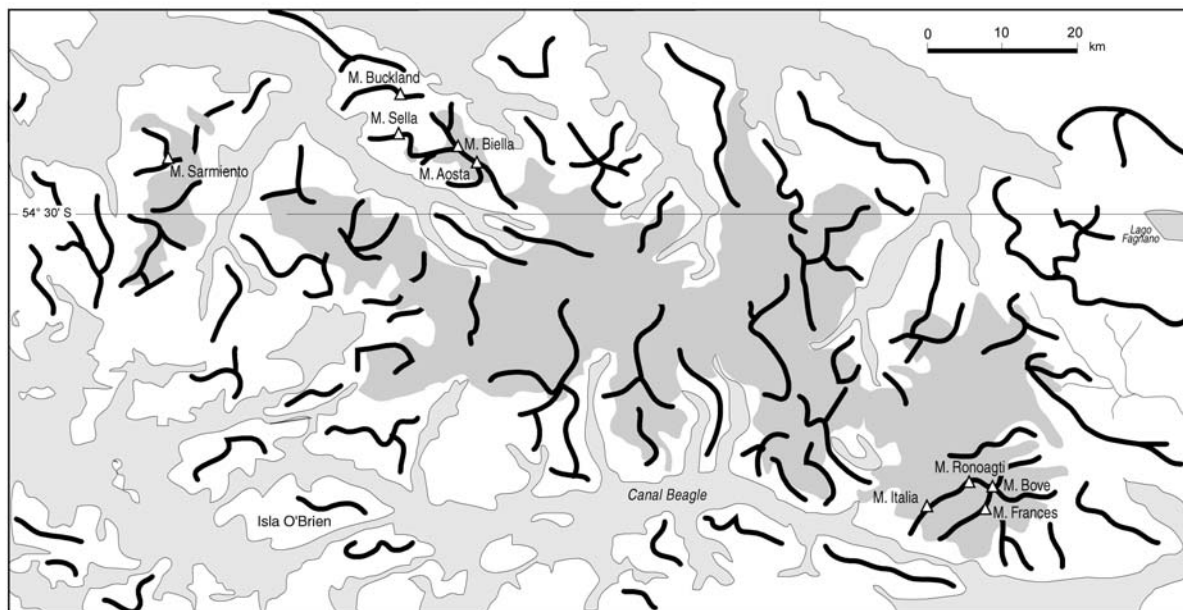


TIERRA DEL FUEGO

Map showing Tierra Del Fuego



The numerous channels between the islands of this archipelago at the southern extremity of South America subdivide the region into three distinct sections - Isla Grande, the principal land mass, delimited to the north by Magellan's Strait and to the south by the Beagle Channel; the islands to the south of the Beagle Channel; and the islands, notably Santa In,s, lying west of Magellan's Strait and north of the Magdalena-Cockburn Channels.

The principal mountain masses are situated in the south-west part of Isla Grande and from west to east are - Sarmiento; Buckland and Cordòn Sella; Cordòn Navarro; Cordillera Darwin; Monte Olivia; and Cordòn Alvear, north-east of Ushuaia. Battered perennially by icy winds and touched by cold Antarctic currents the mountains of Tierra del Fuego are heavily glaciated. These glaciers fall in places to sea-level, particularly in the Cordillera Darwin where deep fiords penetrate the heart of the mountain massifs. Charles Darwin recorded his astonishment when he first saw a range of only 1000 metres in height 'with every valley filled with streams of ice descending to the sea-coast. Great masses of ice frequently fall from these icy cliffs, and the crash reverberates like the broadside of a man of war through the lonely channels'. Over the years a few hydrographers climbed small coastal hills and recorded information about high mountain ranges and important summits lying near the coasts. Other explorers occasionally journeyed up the fiords and attempted to penetrate the interior of the cordillera. However the difficulties they encountered in the virgin forests, and still more in the crossing of the glaciers, soon forced them to abandon their plans. Exploration of the principal mountain areas did not commence until this century and much of the credit for what is known belongs to Padre Alberto De Agostini.

Alberto De Agostini was born in Italy in November 1883. In 1909 he was ordained into the Salesian Order and in 1910 left to work as a missionary in southern Argentina. His secondary career as an explorer began almost immediately, in the Martial Mountains of Tierra del Fuego. In the course of his various visits to Tierra del Fuego he studied its geology, geography, glaciology, population and

climate, as well as making climbing expeditions and preparing the first scientific map of the region. In middle life he turned his attention to the exploration of the Patagonian ice-caps and peaks, but returned to Tierra del Fuego in 1956-7, organizing his last expedition to conquer the still unclimbed Sarmiento and Monte Italia. Then, in spite of his love for the lands to which he had devoted most of his life, he decided to return to Turin, where he died on Christmas Day, 1960. He was held in the highest esteem by the governments of Argentina and Chile, who honoured him with decorations, about which he never spoke.

Apart from his pre-occupation with Sarmiento (see below), De Agostini accomplished numerous climbs and explorations. In March 1910 he reached the highest point (c.1400m) of the Martial Mountains north of Ushuaia. A month later he was reconnoitring and photographing peaks of the Buckland massif. In the period January-March 1911 he set out from Ushuaia for the headwaters of the Lapataia and Yendegaia rivers and made a good many ascents in the Sierra Valdivieso, located between the two rivers and Lago Fagnano. The same summer he camped in Bahia Yendegaia and managed to explore in the region of Monte Bov, and the Stoppani Glacier. In 1912 he visited the remote Argentine Isla de los Estados, making several ascents in the vicinity of Bahia Cook. He also explored the northern slopes of the Cordillera Darwin, from Bahia Ainsworth and Parry Fiord, attempted Monte Italia in the Bov, group; and in the Ushuaia area climbed Monte Olivia and explored the Sierra Alvear. Thus he was the first to photograph and survey most of the mountain areas of Tierra del Fuego, and in most cases was the first human being to set foot on them.

De Agostini's ascent of Monte Olivia was quite an achievement. It had been attempted in 1902 by the Bridges brothers and was generally considered to be unclimbable. Towards the end of February De Agostini and his guides, Abele and Agostino Pession, marched from Admiralty Fiord to Ushuaia in six days, a distance of about 130 kilometres, mostly through virgin forest. On the last day of February the three set out from the little town, bearing with them an Argentine flag for the summit, and set up camp above the tree-line to the south-east of the peak. Next morning they climbed over mixed terrain to the top of a fairly difficult snow and ice field at the base of the final rock pyramid. From here they progressed via a series of difficult chimneys and narrow terraces, until they were able to traverse to the airy north ridge, along which they advanced amid piles of loose rock and yawning gaps. Reaching the forepeak they let themselves down into a gap and were soon on the true summit of Olivia: the time was eleven a.m. Through mist they had glimpses of the surrounding countryside, including the great ice dome of Monte Cornu at the eastern end of the Valdivia Range. The descent was accomplished without incident and next day they returned to Ushuaia to an enthusiastic reception.

In January-March 1937 a mixed climbing-scientific expedition made up of two German alpinists, Stefan Zuck and Hans Teufel, with two Argentines, Dr.R. Jakob and Dr. Gustav Fester, operated in the Paine region and in Tierra del Fuego. During the first part of February, Zuck and Teufel made first ascents of three snow peaks (Serka, Miguel and Luisa) in the Peninsula Brecknock of Tierra del Fuego, starting from a camp in Bahja Jupiter on Fiord Negri west of Sarmiento. Next they moved base camp to Bahia Yendegaia on the Beagle Channel, at the eastern end of the Cordillera Darwin. From there they climbed four minor peaks and Monte General Ponce. Finally, on 24 March, they climbed the icy peak of Monte Italia, via the great Italia glacier, determining its height at 2350 metres. Meanwhile, further east, all four (or possibly only Jakob and Fester) had made the first ascent of the highest peak, Cerro Piedrabuena, in the Cordòn Alvear, from the valley of the Rio Tierra Mayor. The rocky horn of the neighbouring peak, Cerro Cotorra, had been climbed by Fester in 1933.

Sarmiento

The most famous mountain in Tierra del Fuego is Sarmiento which with its distinctive triangular shape is visible for many miles. It had been a well-known landmark since the sixteenth century but it was approached for the first time in May 1881 when Domenico Lovisato, geologist to the Italo-Argentine expedition led by Lt. Giacomo Bov., climbed a buttress to the south in order to obtain a better view of the peak. The first serious mountaineering attempt was made in 1898 by Sir Martin Conway with his Italian guide Maquignaz. Conway landed at night on the shores of the Magdalena Channel to the north-west of the peak, and after battling through the forest, over moraines, rocks and grassy slopes, eventually reached the crest of a spur which appeared to lead in the right direction. Arriving at the highest point of the ridge (1120m, now known as Monte Conway) he discovered that it was merely an outlier of Sarmiento, separated from the main peak by a deep glacier trench. This obstacle plus the sudden onset of bad weather forced him to abandon his one and only chance of climbing the mountain.

The next attempt was made by De Agostini, with the naturalist G.B. De Gasperi and two guides from the Valtournanche. On 24 January 1913 they landed at roughly the same spot as Conway had done. The party endured two weeks of bad weather, during which they reconnoitred the base of the mountain. On 6 February De Agostini's party sailed off to get a look at the ranges to the east, thereby discovering the two great fiords now called Agostini and Admiral Martinez. This discovery also proved Sarmiento to be a large isolated massif, surrounded on three sides by the sea. During all their time in the area they saw the summit of Sarmiento only twice.

January 1915 found De Agostini, with the guides G. Guglieminetti and E. Piana, once more encamped to the west of Sarmiento, exploring the approaches and waiting for a break in the weather. Finally they set off at two o'clock in the morning of 22 January, reaching the top of Monte Conway in good time. Descending to the glacier they aimed for the spur descending northwards from the west peak of Sarmiento, hampered by deep, soft snow and mist. Surmounting the steep lower slopes, they had reached a height of 1400 metres when the mist cleared. The view of Sarmiento was magnificent but hardly encouraging. Two further mighty steps in the ridge led to a great crevasse at the base of the west peak. The snow had softened in the brilliant sunshine, enormous cornices hung threateningly, and ice-glazed rocks made every movement hazardous. Nevertheless De Agostini decided to persevere and by nine o'clock they found themselves on a great snow dome at the top of the second step, at a height of 1875 metres. Ice blocks were breaking off from the summit in quick succession and they could see all too clearly the dangerous nature of the route. Reluctantly they began to retrace their steps.

No more attempts to climb Sarmiento were made until 1956 when the indomitable De Agostini, now aged seventy-three, assembled a strong team of Italian climbers to make a fresh assault. After waiting for the weather to improve, the climbers reached a vast ice plateau (c.1850m) at the foot of the north face and bivouaced in an ice ravine. The only possible route was the wall leading to the col between the two summits; from there the west peak looked feasible. Repulsed by dangerous conditions and deteriorating weather they returned to base camp. Ten days later Carlo Mauri and Clemente Maffei made the ascent of the east peak via the south ridge. The still virgin west peak was the goal of three more Italian expeditions in 1969, 1971 and 1972. The first and second attempts were frustrated by the weather but the 1972 expedition reached the col between the peaks from the north, finally being defeated by caulliflower snow only forty metres from the top. Four Italians finally reached the very top of the West Peak on 8 December 1986.

Cordillera Darwin

Apart from the climbs by Fester, Teufel and Zuck, and the ascent of Sarmiento already described, there was no further climbing in Tierra del Fuego until 1962. In this year Eric Shipton paid his first visit to the Cordillera Darwin, accompanied by three Chilean mountaineers, Eduardo Garcia, Cedomir Marangunic and Francisco Vivanco. They landed in Bahia Brookes to the north of the range and quickly established a fine base camp above the forest line. From there they moved up to an advanced base on the vast expanse of the upper Marinelli Glacier in the very heart of the range, which is equivalent in area to the Mont Blanc, Pennine and Oberland ranges of the Alps combined. The party accomplished the ascent of the highest peak, now known as Monte Shipton, and its two neighbours; crossed the range to the Beagle Channel; and finally climbed a fine spire above Parry Fiord, which they named Cerro Yagan. The next year Shipton turned his attention to the eastern end of the range and made the first ascents of Bov, and Franc,s, this time with fellow-countryman John Earle and two South American climbers, Peter Bruchhausen and Claudio Cortes. In these expeditions Shipton demonstrated how a small party could exist comfortably for periods of several weeks in the ice-fields while waiting for the brief spells of fine weather in which to explore and reach the summits.

In 1966 American Jack Miller and friends made first ascents in the Cordòn Navarro, Cordillera Darwin and on Isla Santa In,s. After climbing in the Cordòn Navarro, they cruised further up Agostini Fiord and entered Hyatt Sound in order to penetrate the north-western sector of the Cordillera Darwin. After five days camp was established above the ice-fall. From here fine afternoons enabled the party to survey a large area and climb six summits, including Cerro Ona, one of the highest unclimbed peaks in Tierra del Fuego. Then they retraced their voyage, meeting up with an Italian group attempting Monte Buckland, and a mainly scientific Japanese group who had climbed three peaks in the Cordòn Navarro from the south. After a brief spell in Punta Arenas they set off in their boat for the little known Isla Santa In,s, where they carried out more explorations.

In December 1970 a party of six New Zealanders and one Australian landed in the southern arm of Parry Fiord, in the same sector of the Darwin range as Eric Shipton's 1962 expedition, and established an advanced climbing base (snow cave) on the Darwin Glacier. Reconnaissances were carried out in heavy mist and frequent snowfall until a spell of fine weather set in. After one exhausting attempt the group climbed Cerro Darwin on the main divide via the north ridge. Then the party split up, some to carry out scientific work, others to reconnoitre the unclimbed and formidable Monte Roncagli. On 19 January 1971 four members set off on a fortnight's trip to attempt this and other unclimbed peaks in the eastern Cordillera Darwin. After ferrying loads, Cerro Janus on the main divide was climbed, on ice, above the Roncagli Glacier. Camp was shifted again towards Roncagli, which was still some fifteen kilometres to the east. Before they could reach the west ridge bad weather forced a total retreat. Altogether the group climbed six new peaks in this important region.

In 1979 John Earle returned to Tierra del Fuego to follow up the exploration he had done with Eric Shipton in the Cordillera Darwin, where from the summit of Bov, they had seen unexplored glaciers and mountains to the north. From Yendegaia Earle and his companions travelled up the valley to the Stoppani Glacier which they followed for five kilometres before turning west to reach an unknown glacier where base camp was set up. Then they made for a high col to the west which they hoped would lead them to Roncagli and the glaciers of the interior of the cordillera. However the opposite side of the col turned out to be a sheer drop of over 300 metres of rotten ice and loose rock, while the north-west and west side of Roncagli was shown to be a sheer face of rotten rock plastered with snow. Next they tried to break out to the north, over a ridge, only to find another precipitous drop of several

hundred metres to another glacier. Several smallish peaks were climbed by various members of the party during the course of the expedition. Roncagli, the most important unclimbed peak in Tierra del Fuego, was finally ascended in 1990 by the fifth British party to attempt the peak.

Peak List

(Groups listed from west to east).

Isla Santa Inés

'Backbone' c.1396m: highest on island: 1-1966.

Wharton 1327m: 1-1966.

Region of Sarmiento

Sarmiento (East Peak) 2184m: 1-1956 via S. ridge.

Sarmiento (West Peak) 2184m: 1-1986.

Schiaparelli 1585m: 6 km N.E. of Sarmiento:

Conway 1120m: 3 km N. of Sarmiento: 1-1898.

Serka, Miguel, Luisa (3 unnamed peaks in Peninsular Brecknock) c.1000-1500m: 1-1937.

Cordòn Navarro

Ahnikin c.1860m: second highest in range: 1-1966 from the N.

Pico Escondido 1830m: probably the Japanese P.c.1860m: 1-1966.

P.c.1840m: at western end: 1-1966.

P.c.1840m: 1-1966.

Buckland Group

Buckland 1800m: extremely difficult peak: 1-1966.

Sella 1400m: imposing tower E. of Bahia Incanto: 1-1913.

Aosta 2040m: a majestic peak covered with snow and ice: First viewed, photographed and named in April 1910 by De Agostini.

Biella 1700m: twinned with Aosta:

Cordillera Darwin

Monte Shipton (Darwin I) c.2470m: 1-1962.

Darwin 2438m: 1-1970.

Luna (Darwin II) c.2350m: 1-1962.

Cresta Blanca (Darwin III) c.2300m: 1-1962.

Ona c.2280m: above Hyatt Fiord at W. end of range: 1-1966.

Pico Janus c.2260m: E. of Cerro Darwin: 1-1971.

U/n (NE. of Darwin) c.2200m: 1-1970.

Ano Nuevo c.2200m: E. of Bahja Parry: 1-1971.

Cerro Yagan 2100m: appears to be the highest snow peak in the dividing range between Bahia Parry and Bahja Brookes: 1-1962.

Saboya (Luigi di Savoia) c.1830m: thought to be the prominent tower close to the northern arm of the head of Bahja Parry:

Giordano 2042m: between heads of Serrano & Hyatt fiords: May have been climbed in 1978 by Scottish party.

General Ponce 2040m: E. end of Bov, group: 1-1937.

P.c.1982m: N.E. of Cerro Darwin: 1-1970.

Filo Helado c.1826m: 1-1966.
Cerro Vela c.1783m: 1-1966.
P.c.1770m: at head of *Bahja Parry*: 1-1971.
Diente del Tiburçn c.1746m: 1-1966.
Cerro Casi 1661m: 1-1966.
Pico Tridente c.1677m: on peninsula between arms of *Bahia Parry*: 1-1971.
Peaks above Bahia Brookes (north side of range): See *AAJ/21* (1977): 235.
7 peaks above ice basin NE of head of Seno Hyatt c.1220-1830m: See *AAJ/22* (1979): 257.
Italia 2350m: 1-1937.
Belvedere 1270m: on left bank of *Italia* glacier: 1-1915.
Pico Ohi 2000m: 1-1988 via S. ridge from *Armada de Chile* glacier.
Pico Pais de Galles 1585m: east of *Stoppani* glacier: 1-1990 via S.W. ridge.
Pico Ans 1585m: 1-1988 from north.
Cerro Còndor 1402m: 1-1988.
Roncagli 2300m: 1-1990 via N.W. ridge to N. summit.
Bov, 2300m: 1-1963 via S. face, W. ridge: E. face-1990.
Frances 2150m: 1-1963.
Gemini c.1707m: 1-1979.
Caledonia c.1400m: 1-1979.
Pico Sentinel c.1400m: 1-1979.
Cerro Piràmide (*Guanaco?*) 1450m: between *Yendegaia* & *Lapataia* bays: 1-1915 by *De Agostini*.
First complete traverse of *Cord.Darwin*, N.to S.: See *AAJ*, 27 (1985):243.

Region of Ushuaia

(*Martial Range, Cordòn Alvear, Sierra Sorondo, Valdivia Range*)
Martial 1400m: highest point in that range: 1-1910.
Monte Olivia 1270m: 1-1913 via E. face, N. ridge: W. face-1948.
San Martin 1220m?: 1-1969.
Peaks at head of Valle Lapataia: *AAJ* 1978
Monte Cornu
Piedrabuena 1650m: highest in *Cordòn Alvear*: 1-1937.
Cotorra 1510m: rocky horn next to *Piedrabuena*: 1-1933.
Alvear c.1376m: 1-1971.
P.c.1370m: 8 km W. of *Alvear*: 1-1971.
Carbajal 1270m: 1-1914 by *De Agostini* during traverse of range.
P.c.1040m: near *Ushuaia*: Southernmost peak climbed by the *Spanish Pan-American Alaska-Tierra del Fuego Expedition* in 1967.
Hoste Island: south of *Beagle Channel*: See *AAJ*, 34 (1992): 181.

Isla de los Estados (most easterly tip of Argentina)

Minor peaks (*Richardson, Forster, Genova, Buenos Aires, Roma, Buckland, Fitton*) climbed by members of the 1881-83 *Bov*, expedition. *Bahia Cook* area visited by *De Agostini* in 1912.

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