

= Xavier Mertz =

Xavier Mertz ( 6 October 1882 ? 8 January 1913 ) was a Swiss explorer , mountaineer and skier , from Basel . He took part in the Far Eastern Party , a 1912 ? 13 component of the Australasian Antarctic Expedition , which claimed his life . The Mertz Glacier is named after him .

The son of a textile machinery manufacturer , Mertz studied patent law at the University of Bern , and science at the University of Lausanne , specialising in glacier and mountain formations . While a student , Mertz became active as a skier , competing in national competitions , and as a mountaineer , climbing many of the highest peaks in the Alps . In early 1911 , Mertz was hired by geologist and explorer Douglas Mawson for his Australasian Antarctic Expedition . He was initially employed as a ski instructor , but in Antarctica Mertz instead joined Belgrave Edward Sutton Ninnis in the care of the expedition 's Greenland Huskies .

In the summer of 1912 ? 13 , Mertz and Ninnis were chosen by Mawson to accompany him on the Far Eastern Party , using the dogs to push rapidly from the expedition 's base in Adélie Land towards Victoria Land . After Ninnis and a sledge carrying most of the food disappeared down a crevasse , 311 miles ( 501 km ) from the hut , Mertz and Mawson headed back west , gradually using the dogs to supplement their remaining food stocks . About 100 miles ( 160 km ) from safety , Mertz died , leaving Mawson to carry on alone . The cause of Mertz 's death has never been firmly established ; the commonly purported theory is hypervitaminosis A ( an excessive intake of vitamin A ) from consuming the livers of the Huskies . Other theories suggest he may have died from a combination of malnutrition , a change in diet , cold exposure , and psychological stresses .

= = Early life = =

Xavier Mertz was born in Basel , the son of Emile Mertz , who owned a large engineering firm in the city . With the aim of working in the family business , which manufactured textile machinery , Mertz attended the University of Bern , where he studied patent law . While in Bern , he became active as a mountaineer and skier . Mertz competed in several national competitions ; in 1906 he was third in the Swiss cross @-@ country skiing championship , and second in the German championship . In 1908 , he won the Swiss ski jumping championship , with a distance of 31 metres ( 102 ft ) . As a mountaineer , he was particularly prolific in the Alps ; he climbed Mont Blanc ? the highest peak in the range ? and claimed several first ascents of other mountains . After he attained his degree of Doctor of Laws from the University of Bern , Mertz studied science at the University of Lausanne ; he specialised in glacier and mountain formations , for which he received his second doctorate .

= = Antarctic = =

In early 1911 , Mertz went to London to meet with the Australian geologist and explorer Douglas Mawson . Mawson , who had served as physicist during Ernest Shackleton 's 1908 ? 09 Nimrod Expedition , was planning his own Antarctic expedition . In his application letter , Mertz wrote that he hoped Mawson would be using skis , as " they have proved so good for the purpose & knowing that I am as good as any one on skis . " While Mawson was intending to recruit only British subjects ( chiefly Australians and New Zealanders ) , Mertz 's qualifications prompted him to make an exception , and hire the Swiss as a ski instructor . First , however , he was given responsibility for the expedition 's 49 Greenland Huskies , aboard the expedition ship SY Aurora , bound for Hobart .

On the Aurora , Mertz met Belgrave Edward Sutton Ninnis , a lieutenant in the Royal Fusiliers . Like Mertz , Ninnis was responsible for the expedition 's dogs ; Aurora 's captain , John King Davis , regarded the pair as " idlers " . " I wish we had some one on board who could look after [ the dogs ] , " he wrote in his diary , " it is a great shame that they should suffer from neglect . " On 2 December 1911 , after final preparations and loading were completed in Hobart , the Aurora sailed south ; she stopped briefly at Macquarie Island , where a wireless relay base was established , and reached the site of the expedition 's main base at Cape Denison in Adélie Land , on the Antarctic continent , in early January .

== = Adélie Land == =

Over the following winter , preparations were made for the summer sledging . Because the conditions ? constant , strong winds and an excessive slope by the hut ? prevented Mertz from conducting skiing lessons as regularly as intended , he focussed instead on helping Ninnis to care for the dogs . On days when the weather was good they drove the dogs around outside the hut , teaching them to run in teams ; when the winds returned the pair fitted and sewed harnesses for each dog , and prepared their sledging food . By this time Mertz and Ninnis developed a close friendship , as the expedition 's taxidermist Charles Laseron later wrote :

The two [ Mertz and Ninnis ] had joined the Expedition together in London , and had been associated longer and in a more intimate manner than any other members of the Expedition . During the winter months we had all been drawn together , but between Mertz and Ninnis there existed a very deep bond . Mertz , in his warm @-@ hearted impulsive way , had practically adopted Ninnis , and his affection was almost maternal . Ninnis , less demonstrative , reciprocated this to the full , and indeed it was hard to dissociate them in our thoughts . It was always ' Mertz and Ninnis ' or ' Ninnis and Mertz ' , a composite entity , each the complement of the other .

In August , the preparations extended to laying depots ; an early party established a depot 5 @. @ 5 miles ( 8 @. @ 9 km ) to the south of the main hut ? a grotto in the ice known as Aladdin 's Cave ? but returned without the dogs . Mertz and two others set off to rescue the dogs , but in heavy winds covered less than a mile in two hours , and returned to the hut . " If it depended only on me , " Mertz wrote in his diary , after four days ' more wind confined them to the hut , " we would be in our sleeping bags outside in the snow , and we would at least try to find the dogs . Mawson is definitely too cautious , and I wonder if he would show enough gumption during the sledging expedition . " The following day Mertz was part of a party of three that made it to Aladdin 's Cave to rescue the dogs ; when strong winds confined them to the depot for three days they spent the time expanding the cave .

In September , Mertz , Ninnis and Herbert Murphy formed a survey party , man @-@ hauling to the south @-@ east of Aladdin 's cave . In strong winds , they travelled just 12 @. @ 5 miles ( 20 @. @ 1 km ) in three days , before the temperature dropped to ? 34 ° C ( ? 29 ° F ) and the wind speed increased to 90 miles per hour ( 78 kn ) , confining them to the tent . When a gap in the wind allowed , they hurried back to the hut .

== = Death during the Far Eastern Party == =

On 27 October 1912 , Mawson outlined the summer sledging program . Mertz and Ninnis were assigned to Mawson 's own party , which would use the dogs to push quickly to the east of the expedition 's base in Commonwealth Bay , towards Victoria Land . The party departed Cape Denison on 10 November , heading first to Aladdin 's Cave , and from there south @-@ east towards a massive glacier encountered by Aurora on the outward journey . Mertz skied ahead , scouting and providing a lead for the dogs to chase ; Mawson and Ninnis manoeuvred the two dog teams behind . They reached the glacier on 19 November ; negotiating fields of crevasses , it was crossed in five days . The party made quick progress once on the plateau again , but they soon encountered another glacier , far larger than the first . Despite strong winds and poor light , Mertz , Mawson and Ninnis reached the far side on 30 November .

On 14 December , the party were more than 311 miles ( 501 km ) from the Cape Denison hut . As Mertz skied ahead , singing songs from his student days , Ninnis , the largest sledge and the strongest dog team were lost when they broke through the snow lid of a crevasse . Together with the death of their companion , Mawson and Mertz were now severely compromised ; on the remaining sledge they had just ten days ' worth of food , and no food for the dogs . They immediately turned back west , gradually using the six remaining dogs to supplement their food supply ; they ate all parts of the animals , including their livers . They initially made good progress , but as they cleared the largest glacier Mertz began to feel ill ; he had lost his waterproof overpants

on Ninnis ' sledge , and in the cold his wet clothes were unable to dry . On 30 December , a day Mawson recorded that the companion was " off colour " , Mertz wrote that he was " really tired [ and ] shall write no more . " Mertz ' s condition deteriorated over the following days ? Mawson recorded he was " generally in a very bad condition . Skin coming off legs , etc " ? and his illness severely slowed their progress . On 8 January , the pair about 100 miles ( 160 km ) from the hut , Mawson recorded :

He [ Mertz ] is very weak , becomes more and more delirious , rarely being able to speak coherently . He will eat or drink nothing . At 8 pm he raves & breaks a tent pole . Continues to rave & call ' Oh Veh , Oh Veh ' [ O weh ! , ' Oh dear ! ' ] for hours . I hold him down , then he becomes more peaceful & I put him quietly in the bag . He dies peacefully at about 2 am on morning of 8th .

Mawson buried Mertz in his sleeping bag under rough @-@ hewn blocks of snow , along with the remaining photographic plates and an explanatory note . Mawson staggered back into the Cape Denison hut a month later , missing the Aurora by a matter of hours ; she had waited for Mertz , Mawson and Ninnis for three weeks until ? concerned by the encroaching winter ice ? Davis had sailed her out of Commonwealth Bay and back to Australia .

= = Legacy = =

In November 1913 , a month before the Aurora returned for the final time , Mawson and the six men remaining at Cape Denison erected a memorial cross for Mertz and Ninnis on Azimuth Hill to the north @-@ west of the main hut . The cross , constructed from pieces of a broken radio mast , was accompanied by a plaque cut from wood from Mertz ' s bunk . The cross still stands , although the crossbar has required reattaching several times , and the plaque was replaced with a replica in 1986 . The first glacier the Far Eastern Party crossed on the outward journey ? previously unnamed ? was named by Mawson after Mertz , becoming the Mertz Glacier . At a speaking engagement upon his return to Australia , Mawson praised his dead comrades : " The survivors might have an opportunity of doing something more , but these men had done their all . " At another , Mawson said that " Dr. Mertz was a Swiss by birth , but he was a man every Englishman would have liked to have called an Englishman ... He was a man of great feelings , generous ? one of Nature ' s gentlemen . " A telegram was sent on behalf of the Australian people to Emile Mertz , condoling him on his " great loss , but congratulating you on your son ' s imperishable fame . "

The cause of Mertz ' s death is not certain ; at the time , it was believed Mertz may have died of colitis . A 1969 study by Sir John Cleland and R. V. Southcott of the University of Adelaide concluded that the symptoms Mawson described ? hair , skin and weight loss , depression , dysentery and persistent skin infections ? indicated the men had suffered hypervitaminosis A , an excessive intake of vitamin A. Vitamin A is found in unusually high quantities in the livers of Greenland Dogs , of which both Mertz and Mawson consumed large amounts ; indeed , as Mertz ' s condition deteriorated , Mawson may have given him more of the liver to eat , believing it to be more easily digested . This theory is the most widely accepted , but there have been other theories . Phillip Law , former director of Australian National Antarctic Research Expeditions ( ANARE ) , believed cold exposure could account for Mertz ' s symptoms . A 2005 article in The Medical Journal of Australia by Denise Carrington @-@ Smith , noting certain sources indicating that Mertz was essentially a vegetarian , suggested that general malnutrition and the sudden change to a predominantly meat diet could have triggered Mertz ' s illness . Carrington @-@ Smith adds a more hypothetical reason : " the psychological stresses related to the death of a close friend [ Ninnis ] and the deaths of the dogs he had cared for , as well as the need to kill and eat his remaining dogs " .