Images

One of Frank Stilwell’s geological sampling sites from the 1911-1913 Australian Antarctic Expedition at Commonwealth Bay, East Antarctica. The location is noted in Stilwell’s notes. The length of wood near the top of the image is the Absolute Magnetic Hut. Photo: Anne McConnell, 2007-2008.

Frank Leslie Stillwell - Lands End, Commonwealth Bay, East Antarctica, 1911-13, during the Australian Antarctic Expedition. Source: Stilwell’s diaries and notes, Item 40, Basser Library, Australian Academy of Science, Canberra, ACT.

History

By the mid-1800s most of the coastal regions of Antarctica were known, and exploratory interest in Antarctica had begun to wane. Political and scientific interest in Antarctica was revived in the late 1800s and early 1900s. This period of exploration, undertaken by various nations, and which engaged in a vast amount of scientific research as well as exploring previously unknown territory, including reaching the South Pole, is known as the 'Heroic Era of Antarctic exploration'.

The 1911-1913 Australasian Antarctic Expedition was an Heroic Era expedition, and it was Australia’s first expedition to Antarctica. The Expedition was the brainchild of, and led by, Sir Douglas Mawson who at the time was a relatively young geologist, although with prior experience in Antarctica as part of the 1907-1909 Nimrod Expedition led by Ernest Shackleton. The Expedition was conceived of primarily as a scientific expedition, and Mawson had a range of scientific objectives for the Expedition. The Australasian Antarctic Expedition undertook a wide range of scientific research, including astronomy, geophysics, geology, communications, meteorology, marine science (tidal measurement and sea ice), botany, zoology and microbiology, with several scientific activities being undertaken during any one day of the expedition. To achieve this, the expedition party at Commonwealth Bay included an astronomer, a geophysicist, a meteorologist, a bacteriologist, a biologist and two geologists; with only six of the expedition party of eighteen not being scientists or not having a direct scientific research role. The Australasian Antarctic Expedition is widely recognised as having made a major contribution to science at a range of levels, including many scientific firsts. It also marked Australia's entry, as a nation, into international exploration and scientific research.

Frank Leslie Stilwell was the second geologist of the Australasian Antarctic Expedition, but with attention generally focused on Douglas Mawson as the Expedition leader, Stilwell gets little recognition. Stilwell is likely however to have carried out as much, if not more, geological research than Mawson during the Expedition as he did not have the major Expedition obligations that Mawson did. Frank Stilwell was also a young geologist at the time of the Expedition, having only completed his B. Sc. the year the Expedition left for Antarctica, and...
he had no prior Antarctic experience. After returning to Australia Stilwell was awarded a D.Sc. from the University of Melbourne in 1916 for his Expedition report 'The metamorphic rocks of Adelie Land'. Stilwell then worked mainly in mining geology, including at Broken Hill in New South Wales, Bendigo in Victoria and later in Western Australia mapping the Kalgoorlie goldfields. Stilwell also became interested in the emerging field of mineragraphy in the early 1920s, which led to him being employed by CSIRO as a research petrologist. Stilwell was a recognised geologist. He was awarded the David Syme Research Prize by the University of Melbourne in 1919, an Australasian Institute of Mining and Metallurgy medal in 1948, and the Clarke Medal by the Royal Society of New South Wales in 1951.

Description of Place

The Frank Stilwell Geological Sampling Site is an element of the tangible scientific legacy of the 1911-1913 Australian Antarctic Expedition. The site is a confirmed Frank Stilwell geological sampling site, being shown to correlate with one of the sampling locations in Stilwell’s notes (held in the Basser Library, Canberra). The site is evident as a conchoidal negative flake scar (which indicates percussion at a point) with associated minor spalls directly below. It samples a lighter vein of rock in the complex of metamorphic rocks at Commonwealth Bay. The Site is c.300m northwest of the Main Huts and adjacent to the Absolute Magnetic Hut.

Significance

Sites such as the Stilwell Geological Sampling Site provide additional physical evidence that relates to the primary purpose of the historic Australasian Antarctic Expedition, hence they contribute to and enhance the cultural heritage significance of the Mawsons Huts Historic Site. As well as helping better understand the historical scientific work that was undertaken by the Expedition, this new and different science related site evidence assists in realising a physical heritage that is more complete, more authentic, and that better reflects the history of the site and the scientific purpose of the Australasian Antarctic Expedition.

This sampling site is extremely rare evidence of the geological work of the Australasian Antarctic Expedition, as it is one of only two confirmed Australian Antarctic Expedition geological research sites, and one of the few identified to date in Antarctica more generally. It is also significant for its associations with Frank Leslie Stilwell, a recognised Australian geologist and early Australian Antarctic scientific researcher.

Current Listing

The Mawsons Huts Historic Site, which includes the Stilwell Geological Sampling Site, is listed on Australia’s National Heritage List (2005), and is inscribed on the Antarctic Treaty List of Historic Sites & Monuments (1972). Small scientific features such as the Stilwell Geological Sampling Site however are not specifically recognised in these listings (and were largely ignored and unknown until 2007).

Further Reading


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