HISTORIC HUTS OF THE ANTARCTIC FROM THE HEROIC AGE

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Introduction

All Antarctic history is comparatively recent; even when the peri-Antarctic islands are included barely two centuries are involved. Because of this brief period, as well as the prevailing isolation of the region, historic remains are sparse, although most are generally well-recorded. The earliest sites are remains from the old sealing industry with relics of huts and evidence in caves, some occasionally used by men wintering voluntarily and otherwise. Early remains of a few scientific observatories, and even attempts at settlement, also exist on some islands, but very few involved anyone wintering.

Although sporadic landings on Antarctica have been made from 1821 it was not until 1899 that any habitation was constructed on the continent. The huts built still stand, giving Antarctica the exceptional attribute of being the only continent where the original human habitation may be seen. Of the twenty-two sites on the continent, and on the various peri-Antarctic islands, associated with the Heroic Age of Antarctic exploration only seven remain relatively intact. Four others have become roofless ruins and ten have either gone entirely or are now mere fragments. The table lists the huts and similar structures associated with the this period of Antarctic history, includes brief notes about their current circumstances, and indicates the organization which has become responsible for those remaining.

Survival of the huts

The surviving seven huts, and some of the ruins, have been preserved by much dedicated work by several organizations, notably the New Zealand Antarctic Heritage Trust which has become highly specialized in the necessary conservation work, legal protection, and continuing maintenance. Its publications record of the huts that 'once gone they are lost forever'. The Athy Shackleton Autumn School series of events is very timely for their consideration for it is now a century after the majority of the huts was established. Several of them are closely associated with Ireland and the Antarctic particularly because men including Ernest Shackleton, Tom Crean, Reginald Ford, and others have spent an Antarctic winter in several of them. As well as those listed refuge huts, castaway depots, and similar structures, which were built by whalers, sealers, and others during and prior to this period, are also on South Georgia, South Shetland Islands, South Orkney Islands, Prince Edward Islands, Iles Crozet, Iles Kerguelen, Macquarie Island, Campbell Island, and Auckland Islands.

When they were built the huts were neither intended, nor expected, to last for much longer than the duration of the expedition that established them. All were, of necessity, well constructed to withstand low temperatures, extreme winds (often blizzards), and much external abrasion notably from hard ice crystals. In general each hut was provisioned with adequate supplies so that, if it became necessary, there was sufficient for the expedition's complement to last an extra, unplanned, winter. Many of these supplies remain (some of the oldest preserved foods in existence), although unexpected winters sometimes caused the original intentions to be fulfilled (Nordenskjöld's Swedish expedition in 1903 and Shackleton's *Aurora* expedition in 1915 and 1916 are examples).

The current state of the historic huts is the product of several factors including: the strength of their original fabric, the location of many (a sheltered site, where practicable, was preferred), the generally frigid and dry climate (they may be said to be 'in the freezer'), the rarity of visitors most of whom are very well aware of the historical significance, and especially the work of the organizations responsible for them. The principles of the International Association of Antarctica Tour Operators (founded in 1991) include many related to preservation of the huts. The vast majority of visitors to the huts conform to these principles.

Natural losses and damage

Losses of the historic huts are mainly the works of nature. Some deployed on ice shelves were ineluctably lost when these calve and take them into the Southern Ocean ('Framheim' on the Ross Ice Shelf and Mawson's west base on the Shackleton Ice Shelf are examples.) Erosion of the surfaces of huts may be severe as strong winds abrade timber and other cladding with sharp ice crystals as well as sand and other particulate matter. In some cases nail heads which were hammered flush to a timber surface now stand as

much as 1 cm proud of it owing to abrasion of the wood (Borchgrevink's 1899 hut at Cape Adare and Mawson's, 1912-13 hut at Commonwealth Bay show examples of this). Although the cold generally helps with preservation when ice melts and refreezes the expansion and contraction during freeze-thaw activity may slowly cause structural damage. Fungal and bacterial decay is slow in Antarctic conditions – but these have had a century to accumulate their deleterious effects. Most huts are situated close to the sea; thus salt spray is another corrosive factor. Penguin guano contains a high concentration of uric acid crystals which cause, from both chemical and physical processes, corrosion (the Cape Adare huts are examples). A broken pane of glass, or any other aperture even as small as a nail hole, may admit fine wind-blown powder snow known as 'spindrift' to a hut. Although it enters sparsely it accumulates steadily and slowly consolidates eventually forming a solid block of ice within a hut. This may have some advantages as well as being a problem. It can provide structural strength as in Mawson's hut situated in 'the home of the blizzard'. Within such ice are artefacts ranging from wooden furniture to many small, often delicate, objects. Its removal usually requires much slow, careful delicate work, but what this reveals is often of great importance.

Human effects

The effects of man are also significant, both adverse and beneficial. From around the 1950s many huts were re-visited for the first time and souvenirs were often taken. These ranged from acquisition of museum specimens, adaption of items for use in more recent stations, minor souveniring, even to outright pillaging. Such factors are, by no means, confined to locations in polar regions. For many years the author, as Curator of the Scott Polar Research Institute, kept a 'no names no pack drill' box in which items from any historic hut could be placed for eventual return. It was possible to send some back directly otherwise the help of the New Zealand High Commission was appreciated for items from the Ross Dependency. Some souvenirs have reappeared, many years later, and even been consigned for sale by their owners or deceased estates. Auction houses, notably Christies, have acted, where appropriate, with probity to ensure items are returned to the hut from where they were originally acquired.

It is important that people are able to visit the huts to appreciate their history and endeavours of the men who inhabited them. This also is not without problems involving changes in temperature and humidity which are monitored by inconspicuous instruments. Other matters involve fire precautions, essential because most of the structures are wooden and all are very dry. In the Antarctic water is usually a solid and rarely available in quantity for an emergency.

Conservation

Conservation work is, as far as practicable, done to minimize any aspect of artificiality introduced to the huts. For instance where separation of bedding, furs, and other artefacts is desirable transparent Mylar film is put between them, when cut to size it is unobtrusive. Photographic records of items are kept but many also have markings and labels which, as far as practical, are placed in less visible locations. Where replacement boards are necessary much effort is made to have the renewed material as similar to the original as practicable. Where the contents of a tin can, or other container, have had to be removed owing to corrosion or similar problems an equal weight of inert material is introduced in its place. Some work is restorative rather than conservative, thus selected application of oxalic acid to remove rust from labels leaves them much clearer and easier to read; as well as enhancing their preservation.

Many of the huts are in the region covered by the Antarctic Treaty of 1959. These have all been declared as 'Historic Sites' under the provisions of the Treaty and most are covered by specific regulations (it is interesting to observe that none of huts outside the Treaty limits have, for different reasons, survived). For those which may be visited limits on the numbers of people within at any one time have been established which, as well as benefiting the huts and their contents, also enhance the experience for visitors (even though their time to appreciate them is often restricted by operational limits of the ships, as well as by conditions of ice and weather).

Expenditure

Of necessity, because of the high costs of logistics, preserving the historic huts is an expensive task. Thus raising of funds is important for those involved. By accident of geography the New Zealand Antarctic Heritage Trust has the largest responsibility. A related organization, the United Kingdom Antarctic Heritage Trust, has a much greater range of support and, as well as conserving huts with which it is directly involved, is able to send funds to New Zealand. Little expertise is needed from outside New Zealand because their

studies and practical experience have resulted in an excellent specialization in what is needed; indeed they are able to advise many other projects. Financial support from the Government of Ireland has been significant in the case of the historical huts of Ross Island

Private finance also makes important contributions. Most visitors to the huts are currently those travelling aboard tourist ships which call during the austral summer. In the Ross Sea region the remoteness and expense of visiting is substantial, thus generally fewer than 500 persons annually see the huts. As well as the advantages of spreading the knowledge and appreciation of the huts many of these visitors are generous patrons of the organizations maintaining the huts. Charity auctions are organized aboard most voyages with lots, usually relevant to the huts and expeditions, donated. It is sometimes surprising what prices are fetched in support of such good causes. A private sponsor recently made an exceptionally generous offer to match funds donated, thus doubling their value.

Alternatives

Questions have been raised about the validity of this work and suggestions of alternative ways of dealing with the historic huts have been raised. These include: protecting each one with a large dome or other structure, removal in entirety for display outside the Antarctic, taking no action and allowing nature to take its course and eventually destroy them, building hotel-style accommodation in the vicinity to develop tourism, and several other schemes. All things considered it is difficult to believe any of these have greater advantages than the continuous care and protection currently practised.

The Arctic also has examples of preservation, dereliction, and loss of huts. There is much to be learnt from such examples. In many cases historical buildings are entirely lost there, although many survive and a proportion is well-maintained (notably the hunters', trappers' and other huts in north-east Greenland). As well as museum replicas of parts of the historic huts complete accurate reproductions of some have been made. One Antarctic example is that of Mawson's hut replicated in detail in the grounds of a patron of the hut foundation in Berwick, Victoria, Australia.

Other huts

This note deals with the huts of the Heroic Age, but there are various others in the Antarctic which are considered to have heritage status. Some of these are now closer in date to the time of Amundsen, Mawson, Scott, Shackleton, and others than they are to the present. 'Base A' at Port Lockroy, built in 1944 by the Falkland Islands Dependencies Survey, the remaining International Geophysical Year and Commonwealth Trans-Antarctic Expedition hut at Scott Base built in 1955, and some of the earliest buildings, often from the 1940s and early 1950s at several other stations are examples. Time goes on and the historical significance will increase of those that are allowed to survive. The requirements of clearance of structures no longer used in Antarctic regions to maintain their remote and wilderness aspects is something controversial. It may be argued that on their removals traces of history for future generations are lost. A compromise where representative structures are kept is usually achieved, but not without a degree of controversy, as well as questions of how to cover the costs involved. The worst case of strict application of the policy would eventually make Antarctica the only continent with no archaeology.

Cape Adare

Ridley Beach on Cape Adare (71·28°S, 170·23°E) was the site of the earliest wintering on Antarctica by ten men of a British, multinational, expedition commanded by Carsten Borchgrevink in 1899. The hut and adjacent roofless store are situated on a large flat shingle spit amid an enormous Adélie Penguin rookery on a site that, although well north of the other Ross Dependency huts, is difficult to reach because of ice and weather. The structures are a Scandinavian design fitted together rather like a planed log cabin. This has proven very able to tolerate local conditions although its fabric, especially on the windward side, is much eroded. Inside, however, the supplies and some artefacts have not all survived well for the corrosive effects of penguin guano and salt have accumulated. The New Zealand Antarctic Hertiage Trust, and its predecessors, have worked on these huts – but the site is the last on the list to be refurbished in the current programmes.

Captain Scott's northern party of six men also built a hut at Cape Adare in 1911, about 25 m from Borchgrevink's huts. This was of a different structure which was largely intact up to the mid 1960s but subsequently has mostly collapsed and the remains are severely corroded. The only standing part is the porch

(which looks very much like an out-house for residents of Borchgrevink's hut). Any preservation work on its ruins is constrained by the vast numbers of penguins nesting in and around it. Winds and other weather, as well as penguins, continue to contribute to its slow dilapidation.

Ross Island huts

On Ross Island huts from the period remain at Hut Point (77·85°S, 166·63°E), Cape Evans (77·63°S, 166·40°E), and Cape Royds (77·55°S, 166·15°E), all are maintained by the Antarctic Heritage Trust (N.Z.). From the early days of 'Scott Base' voluntary hut caretakers, mainly members of the New Zealand Antarctic Association, looked after them and began the excavation of their interiors that had become largely ice-filled. This slow, careful, and difficult work revealed vast numbers of artefacts that demonstrated much of the history of the expeditions.

Hut Point, used first by Captain Scott's *Discovery* expedition (1901-04) and subsequently by every other Heroic Age expedition on Ross Island, is the most southerly and accessible being near the United States 'McMurdo' station and New Zealand's 'Scott Base'. It is distinct from the other historic huts in that it was never intended to provide accommodation and is lacking in any proper stove for cooking or heating, although an extemporary one was constructed from bricks. For many years its outer walls had been used by visitors to write their names and other observations. These were essentially graffiti that detracted from the appearance of the building. Three things remedied this: much application of sand-paper, administrative directives, and provision of a visitors' book.

Shackleton's hut at Cape Royds, where 15 men wintered in 1915, has been the first to be completed of a series of major projects by the Antarctic Heritage Trust. This was a difficult undertaking and not without a degree of controversy regarding how much and in what form work should be undertaken. Detailed plans were distributed and comments requested from a wide variety of interested parties before work began. Original materials, notably roofing fabric, required entire replacement and the renewed structures at first looked quite distinct from its familiar appearance. The Antarctic climate, however, is remedying this and after a few winters, wind effects will have restored much to its the original appearance. Removal of accumulated ice beneath the floor of the hut was a special problem as the crawl space is small. The efforts were surprisingly rewarded however when various stores and artefacts were found stowed there. The culmination was when, far at the back, a case was detected through the ice, the label indicated it held whisky but whether this was still so was not known. Such well-made cases were used for many purposes (they are good for geologists collections of rocks for instance). A characteristic smell was identified which gave a clue as excavation and melting out continued. Ultimately it was confirmed that the original contents were intact despite a broken bottle (the smell). Luck was even more bountiful as another full case was found behind the first, but these were merely early discoveries. In total three crates of whisky and two of brandy were excavated. MacKinlay's, the distillery that made it, is still in business although now owned by Whyte & Mackay. It is proposed that the whisky be examined and a 'Shackleton' variety be prepared to the style of a century ago.

Captain Scott's Cape Evans hut also has its special problems, notably the accumulation of drifts of snow and consolidated ice against the inland wall. This had become so large as to reach the roof and begin to exert pressure on the wall. Its removal involved arduous pick and shovel work until the lower parts were reached which contained artefacts. Then more careful, although no less arduous, excavation removed the remainder. The problem of how to stop drifts accumulating again remained, but it was solved by deploying a set of four vortex generators about 40 m inland from the hut. These are triangular inclined planes, about 2 m long on pedestals about 2 m high. They serve to direct the winds, bearing snow, passively over the hut from a distance, rather than blowing against it and dropping their load of snow against it. After two winters it appears they work, they look odd in the location, but solve a difficult problem of conservation. Ice had accumulated beneath the floor of this hut also, and crawl space was even smaller. Indeed there was so much ice that drainage was stopped and, in 2004, a couple of centimetres of water flooded the floor of the hut during a warm period of melt. This was a disaster; immediately work began by personnel from 'Scott Base' to re-established drainage. Now, after the floor and linoleum covering had been lifted, ice removed, and everything replaced, drainage has been provided unobtrusively. Similarly an impermeable membrane has been fitted inside the outer cladding on the snow-drift side. This does its work effectively and can not be seen by visitors.

South Orkney Islands

William Speirs Bruce, leader of the Scottish National Antarctic Expedition aboard Scotia (1902-04) was responsible for establishing the earliest continuous meteorological and geomagnetic station in the Antarctic when his expedition began observations at Laurie Island on the South Orkney Islands (60.74°S, 44.73°W) on 26 March 1903. After the winter a hut, 'Omond House' was built ashore to continue the observations while Scotia continued marine research, visited the Falkland Islands and reprovisioned in Buenos Aires. On 22 February 1904 the station was transferred to Argentina, through the British Legation, and it has continued operating to the present. Omond House proved too small for the accommodation and the observatory. After the second year a prefabricated building was erected there which later became known as 'Casa Moneta' after a meteorologist who spent four winters (1923, 1925, 1927, and 1929) and wrote a fascinating account of his time there. Casa Moneta was occupied annually, usually by five men, until a larger station was built in the early 1950s. Omond House is now a ruin, only the remains of the wooden floor and lower parts of the rubble walls remain at the southern corner of the modern station. It was built close to the beach and suffered during severe storms (once it was nearly washed away). Casa Moneta still stands in good state largely surrounded by the modern station. It has been well-maintained by the Argentine Navy which currently runs the station and has become a small museum exhibiting much of the station's century of continuous history. A magnetic observatory, which dates from the early decades of the station also remains, is still used for its original purpose.

Nordenskjöld's Swedish expedition

The Swedish Antarctic Expedition of 1901-03 led by Otto Nordenskjöld left three structures in Antarctica: a station on Snow Hill Island (64·47°S, 57·20°W), a large stone hut on Paulet Island (63·58°S, 55.78°W), and a small one at Hope Bay. The first was built as planned and is a five-roomed structure where six men wintered intentionally in 1902 and unintentionally in 1903. The expedition's ship, Antarctic commanded by Captain Carl Larsen, was beset and foundered in January 1903 leaving her compliment, of 20, stranded on Paulet Island. Earlier a party of 3 sent to inform the Snow Hill men of a plan to relieve them, also became stranded for the 1903 winter at Hope Bay. The men on Snow Hill Island were able to supplement their supplies with local wildlife but the two other groups, living in stone huts they built, had much greater difficulties. The Snow Hill hut was investigated by a party from the British 'Operation Tabarin' station at Hope Bay in 1945 who reported it in sound condition although with much snow inside. They recovered some bottles of liquor which were drunk at the 1947 meeting of the Antarctic Club in London and described as excellent. Argentina established a station on adjacent Seymour Island in 1962, and thus was able to make more frequent visits to the Swedish hut. A result is that many items from it are displayed in the Maritime Museum in Ushuaia, as well as aboard the ship Uruguay which rescued the expedition and in now moored in Buenos Aires, and elsewhere. The Instituto Antárctico Argentino has been responsible for repairs and maintenance of the hut which, being relatively easily accessible, has more visitors than those on Ross Island.

The walls of the two stone huts slowly collapsed over time. Hope Bay was visited by Lincoln Ellsworth's expedition in 1935 and by Operation Tabarin in 1944. The latter used a spar once supporting its canvas roof, as a flag pole on their first station; unfortunately this was burnt with the station in a fatal fire in November 1948. Argentina established a station at Hope Bay in 1950 after some altercation with a British party. The Argentines began restoration of the Swedish stone hut and collection of artefacts in the late 1970s and its walls are now reconstructed to about their original height. The Paulet Island stone hut has had little investigation because it is surrounded by a large Adélie penguin colony that is hastening its collapse. An attempt to exclude penguins from the immediate site by an Argentine expedition with private Swedish support in 2004 was not successful, and little investigation of what remains at the site has been made. When the three groups of the Swedish expedition were rescued by the Argentine naval ship *Uruguay* in 1903 a depot was left in the Paulet Island hut. Interestingly this, and much of the logistics of the relief expedition. Julian Irizar, appointed to command *Uruguay*, was the Argentine naval attaché in London at the time that explains how they met and prepared for the rescue voyage, and why the sites of the Swedish expedition's wintering were among those considered by Shackleton during the drift of the three boats after the sinking of *Endurance*.

Douglas Mawson's huts

Douglas Mawson's Australasian Antarctic Expedition of 1911-14 aboard *Aurora* originally intended to have a station on Macquarie Island and three stations on Antarctica: a central one with coastal subsidiaries to the east and west. No suitable location was found for the eastern one so it was combined with that built at

Commonwealth Bay. This site has some special problems; Mawson called it *The Home of the Blizzard* as it is perhaps the windiest station site on the entire Antarctic coast for katabatic winds may descend without interruption from the central polar plateau. When Mawson landed it was at one of the few deceptively tranquil times. Landing at any time may be difficult; neither small craft nor helicopters are safe in the strong winds and plans have to be made allowing for a probably prolonged time for landings of conservation staff and subsequent recovery from ashore. Originally much of the interior of the combined hut was filled with ice and spin-drift, the weights of which had caused some structure to collapse. Removal of these was problematic for they had come to provide structural strength and integrity to the hut. Careful survey and engineering was an early essential. Conservation work is very constrained by the weather but, with perseverance and persistence, much of the fabric of the hut has been consolidated and secured. It is now again largely weatherproof. Materials matching the original ones are used as far as practicable; even if they first appear new they are soon eroded and match those they replaced. Mawson's Hut Foundation, with much assistance from the Australian Antarctic Division, has conducted the work during a period of over a decade. It is a fascinating, but rarely visited site, and a difficult one for conservation work. The fates of Mawson's western hut and his one on Macquarie Island are described below.

Demolished huts

On South Georgia continuous meteorological records began on 17 January 1905, by a Norwegian whaling enterprise based in Buenos Aires, the Compañia Argentina de Pesca. In 1907 they moved to an observatory established on adjacent King Edward Point (54·28°S, 36·50°W). This was extended over the years but closed by 1969 and the observatory moved to a newer building. The original building remained until 1974 when it had become dilapidated and was demolished by the British Antarctic Survey. This was during a programme of reducing the expenditure on maintenance of the many buildings on King Edward Point which remained from the days of Falkland Islands Dependencies administration of the island when it had a total population of over a thousand during the whaling era. Likewise, and for similar reasons, Douglas Mawson's huts from the Australasian Antarctic Expedition of 1911-13 at Buckles Bay, on Macquarie Island (54·50°S, 158·95°E) were demolished after a new Australian station was built there in 1947.

Huts destroyed by nature

The historic huts which have completely gone by calving of ice shelves are 'Framheim' (originally 78·50°S, 164·33°W) built by Roald Amundsen on eastern side of the Ross Ice Shelf where nine men wintered in 1911, and that of Mawson's western party of eight, led by Frank Wild, on the Shackleton Ice Shelf (originally 66·17°S, 95·42°E). Ice shelves constantly advance and anything on their surfaces become buried progressively deeper by snow eventually consolidating into ice. Their forward sections eventually break off as enormous tabular icebergs taking anything on, or within, them out to sea were they eventually melt. Many more recent stations built on floating ice have suffered a similar fate.

Melting of ice was responsible for the loss of the ice cave on Inexpressible Island $(74.90^{\circ}S, 163.65^{\circ}E)$ where six men wintered in 1912 under very difficult conditions. New Zealand parties identified the site in the 1960s but the cave then appeared to have collapsed. Subsequently the small glacier in which it was built has receded greatly and no trace of the structure remains. The boulder beach in the vicinity still has several seal and other skeletons remaining from the winter party – and a plaque indicates the former position of the cave.

The fate of the hut from Captain Scott's northern party at Cape Adare is related above. The fates of Erik von Drygalski's German hut at Baie de l'Observatoire on Iles Kerguelen (49.41° S, 69.90° E) and the modified waterboat of Waterboat Point (64.82° S, 62.86° W) where two men wintered in 1921, are essentially the same; dilapidation by Antarctic weather reducing them even more than the northern party hut. Similarly the huts built ashore by Jean Charcot's French expeditions on Booth Island (65.08° S, 64.00° W) where *Français* wintered in 1904, and on Petermann Island (62.17° S, 64.17° W) where *Porquoi Pas?* wintered in 1909, both off the Antarctic Peninsula, are gone. It appears none of these huts lasted for much more than about a decade after they were closed and abandoned. At Waterboat Point only some of the timbers of the bottom of the boat survive.

Sir Ernest Shackleton's two boats, converted into a hut on Point Wild, Elephant Island $(61\cdot17^{\circ}S, 55\cdot23^{\circ}W)$, sheltered 22 men during the 1916 winter. They were on a low-lying shingle spit. In 1922, after Shackleton's sudden death in South Georgia, Frank Wild, who had assumed command of *Quest* came close to the site but saw no trace of the boats. It must be presumed that they were overwhelmed and washed away by

the sea. The spit certainly appears storm-tossed – and it was fortunate that the 1916 party did not suffer a similar fate. Perhaps the winter pack-ice which thwarted Shackleton's first three rescue attempts ameliorated the force of the sea.

Existing huts (7				
Location	Winter year (personnel)	Expedition (year) <i>vessel</i> (winter complement)	Winter leader	Maintained by
Cape Adare	1899 (10)	British Antarctic Expedition (1898-1900) Southern Cross	Carsten Borchgrevink	Antarctic Heritage Trust N.Z.
Hut Point, Ross Island	1902, 1903	British National Antarctic Expedition (1901-04) <i>Discovery</i> (45 in 1902, 37 in 1903)	Robert Scott ditto	Antarctic Heritage Trust N.Z.
	1916 (3)	Imperial Trans-Antarctic Expedition (1914-17) Aurora	Not designated	
Snow Hill Island	1902 (6), 1903 (6)	Swedish South Polar Expedition (1901-03) Antarctic	Otto Nordenskjöld ditto	Instituto Antártico Argentino
Laurie Island, South Orkney Islands (Casa Moneta)	1905 (5) – present	Oficina Meteorológica Argentina (1904-05) Uruguay	Otto Diebel and others annually	Instituto Antártico Argentino
Cape Royds, Ross Island	1908 (15)	British Antarctic Expedition (1907-09) Nimrod	Ernest Shackleton	Antarctic Heritage Trust N.Z.
Cape Evans, Ross Island	1911 (25) 1912 (13)	British Antarctic Expedition. (1910-13) Terra Nova	Robert Scott Edward Atkinson	Antarctic Heritage Trust N.Z.
	1915 (10) 1916 (4)	Imperial Trans-Antarctic Expedition (1914-17) Aurora	Æneas Mackintosh Not designated	
Commonwealth Bay	1912 (18) 1913 (7)	Australasian Antarctic Expedition (1911-14) Aurora	Douglas Mawson ditto	Mawson's Hut Foundation and Australian Antarctic Division
Ruins (roofless) (4)			
Paulet Island	1903 (20)	Swedish South Polar Expedition (1901-03) Antarctic	Carl Anton Larsen	Instituto Antártico Argentino
Hope Bay	1903 (3)	Swedish South Polar Expedition (1901-03) Antarctic	Gunnar Andersson	Instituto Antártico Argentino
Laurie Island, South Orkney Islands (Omond	1903	Scottish National Antarctic Expedition (1902-04) Scotia (33 in 1903)	William Bruce	Instituto Antártico Argentino
House)	1904 (5)	Oficina Meteorológica Argentina (1904-05) Scotia	Robert Mossman	
Cape Adare	1911 (6)	British Antarctic Expedition	Victor Campbell	Antarctic Heritage

HISTORIC HUTS IN THE ANTARCTIC FROM THE HEROIC AGE

(northern party)	(1910-13) Terra Nova	Trust N.Z.

Sites where hut	Reason for loss			
Iles Kerguelen	1902 (5)	German South Polar Expedition (1901-03) Gauss	Emil Werth	Dilapidation
Booth Island	1904	French Antarctic Expedition (1903-05) <i>Français</i> (20)	Jean Charcot	Dilapidation
King Edward Point, South Georgia	1907 (1) – 1955	Norwegian whalers (Grytviken transport vessels)	Erik Nordenhaag (meteorologist) and later ones	Demolition in 1974 by British Antarctic Survey
Petermann Island	1909	French Antarctic Expedition (1908-10) Porquoi Pas ? (30)	Jean Charcot	Dilapidation
Bay of Whale, Ross Ice Shelf	1911 (9)	Norwegian Antarctic Expedition (1910-12) <i>Fram</i>	Roald Amundsen	Calving of the ice shelf
Inexpressible Island	1912 (6)	British Antarctic Expedition (1910-13) Terra Nova	Victor Campbell	Ablation and melting
Shackleton lce Shelf	1912 (8)	Australasian Antarctic Expedition (1911-14) Aurora	Frank Wild	Calving of the ice shelf
Macquarie Island	1912 (5) 1913 (5) 1914 (3) 1915 (3)	Australasian Antarctic Expedition (1911-14) <i>Aurora</i> Commonwealth Meteorological Expedition (1914-16) <i>Endeavour</i>	George Ainsworth <i>ditto</i> Harold Power A. Tulloch	Demolition in 1948 by Australian National Antarctic Research Expedition
Point Wild, Elephant Island	1916 (22)	Imperial Trans-Antarctic Expedition (1914-16) boats from Endurance	Frank Wild	Overwhelmed by sea
Waterboat Point	1921 (2)	British Expedition to Graham Land (1920-22) Svend Foyn	Thomas Bagshawe	Dilapidation

Winter personnel numbers for huts are given where they were independent, or as complements of vessels where one wintered in the vicinity of a hut.