



## Norwegian Historic Sites and Remains in Antarctica

#### **Priorities and management options**

Birgit Njåstad (ed.)



**RAPPORT** 157

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The Norwegian Polar Institute is Norway's main institution for mapping, scientific research and environmental monitoring in the Arctic and the Antarctic. The Institute acts as an advisory agency on environmental management and administration of the polar regions and is Norway's executive environmental authority in Antarctica. The Institute is a directorate under the auspices of the Ministry of Climate and Environment.

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Whalers Bay, Deception Island, Antarctica. Photo: Birgit Njåstad, NPI

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## 1. Background

Relatively few people have visited the Antarctic continent since it was discovered in 1820, and there are very few visible signs of the earliest human activity. Norwegians were among the earliest people carrying out activities in Antarctica, and among the few historical sites and remains here, we therefore find several with obvious connections to Norway and Norwegian activities.

Stortingsmelding 16 (2004–2005) *Leve med kulturminner* ("White Paper") emphasizes that Norwegian historic heritage policies for the Antarctic shall make sure that important historic sites and remains related to Norwegian activities in Antarctica shall be preserved. Furthermore, it is stressed that an active Norwegian participation in the international cooperation to maintain such remains will strengthen Norway's position in the international Antarctic cooperation. To follow up these objectives, the White Paper gives instructions to prepare a list of Norwegian historic sites and remains that may be of interest for an international preservation cooperation, and a professionally justified shortlist of prioritized remains and sites shall be prepared, that shows where it is applicable to implement measures of conservation.

In 2015 the Norwegian Government, through the White Paper Stortingsmelding 32 (2014–2015) *Norske interesser og politikk i Antarktis,* repeated the intention that "Norwegian safety and conservation measures are to be carried out according to a prioritized list, in line with the political intentions given in St.meld. nr. 16 (2004–2005) *Leve med kulturminner*".

Based on these guidelines the Ministry of Climate and Environment asked the Norwegian Polar Institute and the Norwegian Directorate for Cultural Heritage jointly – in dialogue with the Ministry – to start the process of preparing a list of Norwegian historic sites and remains in Antarctica, and to give an assessment of possible measures attached to these. This document presents the result of the process.

The treaty cooperation defines the International Geophysical Year (IGY), which took place in 1957/58, as an end point for assessing an object or a locality's conservation value (Resolution 5 (2001)). This list over prioritized Norwegian historic sites and remains is based on the same definition, hence it limits the assessment to pre-1958 sites and remains.

## 2. Objective

The objective in this document is to give an overview of important Norwegian heritage in Antarctica. The objective is also to prioritize the sites and remains in the context of national and international management processes, and to point out possible conservation measures.

## 3. General information on Antarctic Heritage

The presence of human beings has a short history in Antarctica. The Antarctic continent was first observed in 1820, and since then, human activities have – relatively spoken – been very limited. Because of this, traces from the early activities are extremely visible.

The Antarctic Treaty Parties fully recognized the historic sites, structures and objects in Antarctica as part of humankind's heritage already at the first Antarctic Treaty Consultative Meeting (ATCM) in 1961.

The Protocol on Environmental Protection to the Antarctic Treaty makes the List of Historic Sites and Monuments (HSM) the key mechanism for the protection of heritage sites and remains in Antarctica. The Environment Protocol states that the HSMs must be protected from damage, removal or destruction. These guidelines have further been included in the Norwegian national implementation regulations, *Forskrift om miljøvern og sikkerhet i Antarktis*, § 35.

As of today, the list includes a total of 90 HSMs in the Antarctic. These are categorized into four main categories (Buildings, Monuments, Other remains and Sites), which may be divided into several subcategories (Table 1). The present (2022) HSM collection consists of a relatively high part of memorial objects that have been erected fairly recently to commemorate a special historic person or event (62%). Old buildings (huts, station elements etc.) constitute 31% of the HSMs.

28 **Buildings Building: station** 12 **Building: hut** 10 **Building: other** 6 **Monuments** 56 Monument/commemorative: plaque 12 3 Monument/commemorative: bust 7 Commemorative item: cross

Tabell 1: The Antarctic Treaty List of Historic Sites and Monuments (Adopted 2021). <u>https://ats.aq aq /devphBackEnd/api/export/hsm?lang=e</u>

Monument/commemorative: other	8
Other remains	17
Other remains: expedition cairn	8
Other remains: lighthouse	1
Other remains: tent	1
Other remains: shipwreck	2
Other remains: other	5
Sites	15
Sites	15

## 4. General Information on the Management and Maintenance of Norwegian Antarctic Heritage

Norway has a fairly inactive relation to the management of Norwegian heritage in Antarctica but has generally been involved in the overall discussions concerning heritage and management of heritage. The approach is as follows:

- Norway contributes actively (and has had leading positions) in the overall and principal discussions related to management of Antarctic heritage.
- Norway has actively worked towards securing that Norwegian sites and remains of special importance have obtained international protection by being included in the Antarctic Treaty HSM list.
- Norway has contributed to protection measures (financially and expertise) and information measures (financially and expertise) for some selected, especially visible sites and remains (including Borchgrevink's hut and Whalers Bay).
- Norway has in cooperation with other interested parties prepared a plan for conservation of some exposed sites and remains (including Whalers Bay).
- Norway is willing to be involved in discussions and dialogues with other interested parties regarding possible measures on selected locations.

In general, Norway has chosen an approach where «natural decline» is the leading principle for the management of the historic sites and remains in Antarctica – which means to allow that they decay with time.

### 5. Historical Features and Representative Sites and Remains

Antarctic heritage affiliated with Norway can basically be categorized as related to i) exploration expeditions ii) whaling and resource utilization and iii) scientific expeditions. Nearly all the sites and remains are connected to more than one of these categories. There are also other dimensions, including territorial assertion and international collaboration.

#### **Exploration expeditions**

These expeditions mainly took place from the early 1800s to the early 1900s when several expeditions were sent to explore new land in the south. The aim was often uniquely the discovery of new land, which included a dimension of territorial assertion, but exploitation of possible resources was also present. It is among these expeditions that we find famous names like Amundsen, Bellingshausen, Shackleton and Scott. Norwegians took part in many of the expeditions during this period, and Norwegians are often at the top of the list of those who achieved exceptional milestones. This includes the first people to set their foot on the Antarctic continent (Bull/Kristensen), the first to overwinter on the continent (Borchgrevink) and the first to reach the South Pole (Amundsen).

#### Whaling and resource exploitation

This period was initiated in the South Sea already at the end of the 16th century, and it continued into modern times. The ones assumed to be the very first to overwinter in Antarctica were sealers who were mistakenly left behind on the South Shetland Islands in 1820-21. The Jason expedition in 1892 started a period with long-lasting Norwegian whaling in the Antarctic. At first, one put trust in sealing, but it was soon clear that the whale was the most valuable resource. Large-scale whaling was an almost wholly Norwegian activity the first years. Through the search for new hunting grounds, whaling was a driving force for exploration and discoveries in the Antarctic.

#### Scientific expeditions

Many of the early exploration expeditions included elements of science and scientific investigation. However, it took until 1949, with the Norwegian-British-Swedish Antarctic Expedition to Dronning Maud Land (the Maudheim Expedition), to make science the main motivation for expeditions to Antarctica. During the mid-1950s, the scientific exploration of Antarctica took a new, big leap forward, encouraged by international cooperation through the International Geophysical Year 1957/58 (IGY) – an effort which was the onset of the Antarctic Treaty and the current regime for the management of Antarctica. Norway was heavily involved in the Maudheim Expedition, and during the IGY Norway took part with a scientific expedition that lasted for three years and established Norway Station on Fimbulisen on the coast of Dronning Maud Land. Scientific activities in Antarctica are increasing, and there are now around 70 permanent research stations on the continent.

# 6. Prioritized Norwegian sites and remains and an assessment of management measures

#### 6.1. Definitions

#### **Priority ranking**

The sites and relics in this assessment have been given the rankings high, medium or low priority based on a total assessment including national/international importance, the Antarctic Treaty HSM criteria of and a general protection value.

#### **HMS criteria**

The ATCM has, through Resolution 3 (2009), adopted a set of criteria which indicate whether a Historic Site and Monument (HSM) has a "recognised historic value". These criteria are listed below. Further guidance regarding the criteria can be found in *Guidelines for the assessment and management of Heritage in Antarctica*, adopted by the treaty parties under Resolution 2 (2018), and revised under Resolution 1 (2022).

"Recognised historic value" has an object or a locality which is associated with:

- 1. A particular event of importance in the history of science or exploration of Antarctica,
- 2. A particular association with a person who played an important role in the history of science or exploration in Antarctica,
- 3. A particular association with a notable feat of endurance or achievement,
- 4. Representative of, or forms part of, some wide-ranging activity that has been important in the development and knowledge of Antarctica,
- 5. Particular technical, historical, cultural or architectural value in its materials, design or method of construction,
- 6. Potential, through study, to reveal information or has the potential to educate people about significant human activities in Antarctica,
- 7. Symbolic or commemorative value for people of many nations.

Tables 3–21 show in bold typeface which criteria the respective sites and remains fulfil, while other potential criteria are set in grey.

#### Categories

For this work, we have chosen six different categories to describe what the heritages and remains are associated with. It may belong to more than one category.

• **Exploration:** The site/remains has an obvious connection with an exploration expedition (see Chapter 5),

- *Whaling:* The site/remains has an obvious connection with whale hunting activities (see Chapter 5),
- *Heroic:* The site/remains has an obvious connection with an achievement that required great endurance and strength,
- **Territorial:** The site/remains has an obvious connection with the Norwegian history of annexation,
- *Scientific:* The site/remains has an obvious connection with scientific explorations and discoveries,
- **Grave memorial:** The site/remains is a commemorative object which has been erected near a grave.

#### Protection value

A description/assessment of the site's/remains' protection value is given in this document, based on national and international norms. The Norwegian Directorate for Cultural Heritage's criteria for protection are used as the basis for the values below, with the addition of "intrinsic value" and "territorial value", which have also been defined as useful for this assessment:

- **Source and knowledge value:** The historic sites and relics have a special value as sources for knowledge about, and understanding, the past. This may apply to their origin, their use and significance, and to people's lives, beliefs and general social relations, and the interaction between man and nature.
- **Experiential value:** These values are connected to the public or different groups' experiences and may hence be said to have a more personal significance than the knowledge values. Many of the Experiential values are related to how the sites and remains have an impact on us as individuals and as a group.
- **Territorial value:** Norwegian politics are based on maintaining sovereignty claims in Antarctica, while also contributing constructively to international collaboration. Some of the Norwegian historic sites and remains may have a value as elements in making Norway's historic presence in Antarctica visible. These are emphasized in this overview.
- *Intrinsic value:* The heritage site or remains have intrinsic value, regardless of whether any of the other values listed above applies.

#### National or international value

An assessment of the heritage value in an historic context is given is this document. It is indicated whether the value mainly is of value for Norway and Norwegians (national), or if the event the site/remains is associated with has a more overall interest, and hence is of a broader international value.

#### 6.2. Measures

An assessment of which category for measures is relevant has been made for each of the sites and relics in this presentation of Norwegian heritage in Antarctica. There are roughly three categories of measures: physical, formal and communication.

#### **Physical measures**

Physical measures may vary between no action and natural decay to extensive restauration work.

#### **Formal measures**

Formal measures may be preparing a simple measures plan or a comprehensive management plan, and/or a formal listing like *Historic Site and Monument* (HSM) in the Treaty system. Furthermore, *Antarctic Specially Protected Area* (ASPA), *Antarctic Specially Managed Area* (ASMA) and visitors' guidelines are tools that may be used. For a closer description of these, see *Guidelines for the assessment and management of Heritage in Antarctica*<sup>1</sup>.

#### **Communication measures**

Instead of, or in addition to, physical and formal measures, it will be relevant to put effort into reaching a larger audience with information about the historic sites and remains, and to communicate with them. As only a limited number of people get a chance to visit Antarctica, it is evident that Antarctic heritage is not and will not be available to the broad public. Even though it is important to protect the sites and remains for their intrinsic value, the value may be increased by making sure more people learn about them and get an understanding of their history.

#### 6.3. List of prioritized historic Norwegian sites and remains in Antarctica

We have identified 19 known historic sites and remains with obvious Norwegian connection in Antarctica. Eleven of these are on the formal HSM list under the Antarctic Treaty system. Four of the objects are regarded as no longer in physical exitance. The 19 sites and remains cover all the four main categories of historic sites and monuments that have been defined in the formal list under the Antarctic Treaty system (see Chapter 3): buildings (21%), monuments (10%), sites (16%) and other remains (53%). The numbers in each category vary substantially from the total distribution in the formal HSM list.

Geographically speaking, the Norwegian historic sites and remains are scattered over large parts of Antarctica (Fig. 1), which is visible evidence of how extensive and encompassing Norwegian activity in Antarctica has been.

	Historic site or remains	Location	Туре	HSM
HIG	SH PRIORITY			
1.	Borchgrevink's Huts	Kapp Adare 71° 17' 59.9999" S, 170° 12' 0" E	Building: hut	22
2.	Nicolai Hanson's Grave	Kapp Adare 71° 16' 59.9987" S, 170° 13' 0" E	Monument/commemorative	23

Table 2: Total overview of sites and remains with Norwegian connection in Antarctica, divided into level of priority.

<sup>1</sup> https://documents.ats.aq/recatt/att734\_e.pdf

3.	Amundsen's Cairn	Mt. Betty <sup>2</sup> , Queen Maud Range 85° 10' 59.9988" S, 163° 45' 0" W	Other remains: expedition cairn	24
4.	Stone Hut on Paulet Island	Paulet Island 63° 34' 28.9992" S, 55° 47' 6" W	Sites	41
5.	Whaling Station in Whalers Bay	Deception Island 62° 58' 59.9988" S, 60° 37' 59.9988" W	Sites	71
6.	Amundsen's Tent	Sørpolen 90° 0' 0'' S, 1° 0' 0'' E	Other remains: tent	80
7.	Cairns from the Maudheim Expedition	Dronning Maud Land, incl.  Bleset in Kirwanveggen  73° 38' 30" S, 3° 58' 00" W  Pyramiden 72° 17' 00" S, 3° 49' 00" W  Sukkertoppen 71° 25' 00" S, 13° 26' 00" E	Other remains: expedition cairn	
8.	Borge Bay Whaling Station	Signy Island 60° 42′ 29″ S, 45° 35′ 42″ W	Sites	
9.	Warehouse and Sign on Peter I Øy	Framnæsodden, Peter 1 Øy 68° 50' 18.0" S, 90° 43' 30.0" W	Other remains: other	
10.	Framheim	Whalers Bay on Ross Ice Shelf 78° 30' 00.0" S, 164° 20' 00.0" W	Building: hut	
11.	Maudheim	Quarisen, Dronning Maud Land 71° 15' 00.0" S	Building: station	
12.	Norway Station	Fimbulisen, Dronning Maud Land 70° 30' S, 20° 32' W	Building: station	

<sup>2</sup> See page 19

13.	The Whaling and Expedition Ship <i>Antarctic</i>	Location unknown. Sank about 40 km from Paulet Island 63° 34' 28.9992" S, 55° 47' 6" W	Other remains: shipwreck	
MED	DIUM PRIORITY			
14.	Message Post from Expedition with Bull and Kristensen	Sven Foyn Island 71° 55' 59.9988" S, 171° 5' 0" E	Other remains: other	65
15.	Prestrud's Cairn	Scott Nunataks on Edvard VII Peninsula 77° 10' 59.9988" S, 154° 32' 0" W	Other remains: expedition cairn	66
16.	Mikkelsen's Cairn	Vestfold Hills 68° 22' 0.0012" S, 78° 24' 0" E	Other remains: expedition cairn	72
17.	C. A. Larsen's Multi- expedition Cairn	Marambio Station 64° 14' 13.0595" S, 56° 35' 7.5" W	Other remains: expedition cairn	94
18.	Wreck of the whaling ship Guvernøren	Enterprise Island 64° 32' 29" S, 61° 59' 32" W	Other remains: shipwreck	
LOW	/ PRIORITY			
19.	Plaque associated with the disembarkation of Amundsen and others (from the <i>Belgica</i> Expedition)	Brabant Island 64° 1' 59.9987" S, 62° 34' 0" W	Monument/commemorative: plaque	45

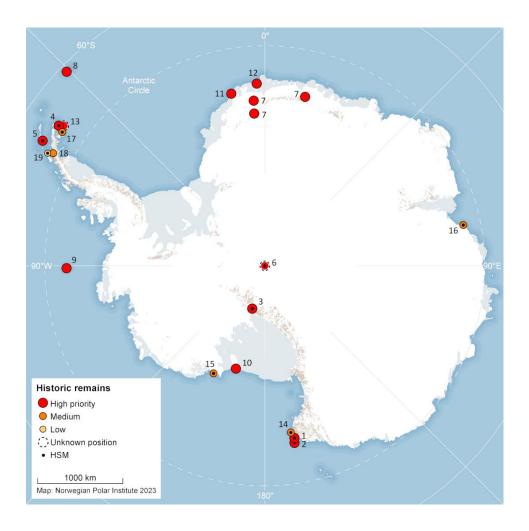


Figure 1: Map showing the location of Norwegian historic sites and remains in Antarctica.

#### 6.4. High-priority Norwegian sites and remains in Antarctica

#### 6.4.1. Borchgrevink's huts

Table 3: Borchgrevink's huts have high priority. The table describes the rationale for this assessment, such as the site/remains' category, international (I) or national value (N), HSM criteria (fulfilled criteria are set in bold, other possible criteria in grey), protection value and measures. See Chapter 6.1 for further information about the categories I/N, HSM criteria and protection value, and Chapter 6.2 for further information on measures.

Site or remains	Category	I/N	HSM criteria	Protection value	Measures
Borchgrevink's huts at Kapp Adare	Primarily: Exploration Secondary: Scientific, heroic and territorial	I	1, 2, 5, 6	<ul> <li>Source and knowledge</li> <li>Experiential</li> <li>Intrinsic</li> </ul> Note: Strømmen Trevare gives an extra dimension to these values.	Physical:Ordinary maintenance/ rehabilitationNote: Measures are limited to certain buildings.Implementation of measures must be done through international collaboration, primarily with NZHAT.Communication: The value of, and interest in, the site and remains make them well suited for communication and outreach.

**Short description:** Borchgrevink's huts are listed as HSM 22 on the Antarctic Treaty Parties' formal list of Historic Sites and Monuments in Antarctica with the following description:

Three huts and associated historic remains at Cape Adare. Two were built in February 1899 during the British Antarctic (Southern Cross) Expedition, 1898-1900, led by Carsten E. Borchgrevink. The third was built in February 1911 by Robert F. Scott's Northern Party, led by Victor L.A. Campbell. Scott's Northern Party hut has largely collapsed with only the porch standing in 2002. Site incorporated within ASPA 159.

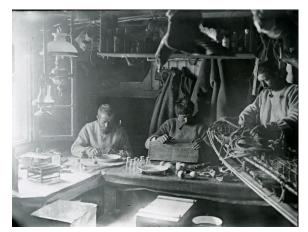
**Norwegian connection:** The expedition was led by a Norwegian. The huts were pre-manufactured by <u>Strømmen trevarefabrikk</u> in Norway.

**Status:** The huts are in remarkably good shape, but still at risk. Much of the original inventory and equipment is in place, but a larger collection of objects is temporarily kept in New Zealand. There is a preservation plan for the huts and the collection of over 1000 objects. The management is administrated by New Zealand Antarctic Heritage Trust (<u>NZAHT</u>) and given logistics support by New

Zealand's Antarctic programme. The Norwegian Government has earlier contributed to this work with financial support and expertise.



Men on the roof of the Camp Ridley hut at Cape Adare during the Antarctic Expedition 1898–1900. Photo: C. Borchgrevink, Norwegian Polar Institute's Photo Archives



Colbeck, Evans og Fougner in the hut at Camp Ridley, doing scientific work and practical tasks. Photo: C. Borchgrevink, Norwegian Polar Institute's Photo Archives



Camp Ridley, the station where the Antarctic Expedition 1898–1900 overwintered. Photo: C. Borchgrevink, Norwegian Polar Institute's Photo Archives.



Camp Ridley in winter, outside the entrance of the hut housing the members of the expedition. Photo: C. Borchgrevink, Norwegian Polar Institute's Photo Archives

#### 6.4.2. Nicolai Hanson's Grave

Table 4: Nicolai Hanson's grave has high priority. The table describes the rationale for this assessment, such as the site/remains' category, international (I) or national value (N), HSM criteria (fulfilled criteria are set in bold, other possible criteria in grey), protection value and measures. See Chapter 6.1 for further information about the categories I/N, HSM criteria and protection value, and Chapter 6.2 for further information on measures.

Site or remains	Category	I/N	HSM criteria	Protection value	Measures
Nicolai Hanson's grave at Cape Adare	Primarily: Grave memorial Secondary: Scientific and heroic	Ν	<b>1,</b> 2, 3, 7	<ul> <li>Grave memorial</li> <li>Intrinsic</li> <li>Source and knowledge</li> </ul>	Physical: Maintenance to prevent decay Note: "Maintenance" here may comprise raising the cross if it falls over, replacing displaced rocks etc.

**Short description:** Nicolai Hanson's grave is listed as HSM 23 on the Antarctic Treaty Parties' formal List of Historic Sites and Memorials in Antarctica with the following description:

Grave at Cape Adare of Norwegian biologist Nicolai Hanson, a member of the British Antarctic (Southern Cross) Expedition, 1898-1900, led by Carsten E. Borchgrevink. A large boulder marks the head of the grave with the grave itself outlined in white quartz stones. A cross and plaque are attached to the boulder.

**Norwegian connection:** Grave of a Norwegian member of an expedition and the first Norwegian grave in Antarctica.

**Status:** The grave was mended during a visit from members of «the Northern Party» from Scott's British Antarctic Expedition 1910-13. It has been left untouched ever since, except for the cross, which was «repaired» in 1982, and the addition of a brass plaque. The site is difficult to access and rarely visited. The grave is in surprisingly good condition.



Members of the Southern Cross Expedition at Nicolai Hanson's grave. Source: C.E. Borchgrevink ("First on the Antarctic Continent", 1901).



Nicolai Hanson's grave (1870–1899) at Cape Adare. Source: Louis Bernacchi ("To the South Polar Regions", 1901).

#### 6.4.3. Amundsen's Cairn

Table 5: Amundsen's Cairn has high priority. The table describes the rationale for this assessment, such as the site/remains' category, international (I) or national value (N), HSM criteria (fulfilled criteria are set in bold, other possible criteria in grey), protection value and measures. See Chapter 6.1 for further information about the categories I/N, HSM criteria and protection value, and Chapter 6.2 for further information on measures.

Site or remains	Category	I/N	HSM criteria	Protection value	Measures
Amundsen's cairn in Queen Maud Range	Primarily: Exploration Secondary: Heroic, territorial and scientific	Ν	1, <b>2, 3</b> , 7	<ul> <li>Experiential</li> <li>Symbolic</li> <li>Territorial</li> <li>Intrinsic</li> <li>Source and knowledge</li> </ul>	<ul> <li><u>Physical</u>:</li> <li>Maintenance to prevent decay</li> <li><i>Note</i>: «Maintenance» here may comprise replacing displaced rocks etc.</li> <li><u>Formal</u>:</li> <li>That the Antarctic Treaty Parties consider updating the co-ordinates and the description of HSM 24 should be proposed in the near future.</li> </ul>

**Short description:** Amundsen's cairn is listed as HSM 23 on the Antarctic Treaty Parties' formal List of Historic Sites and Memorials in Antarctica with the following description:

Rock cairn, known as 'Amundsen's cairn', on Mount Betty, Queen Maud Range erected by Roald Amundsen on 6 January 1912, on his way back to Framheim from the South Pole.

**The Norwegian connection:** A cairn erected during Roald Amundsen's expedition to the South Pole in 1911.

**Status:** Astrid Furholt, who found the cairn during a South Pole expedition in 2018–19, established that Amundsen's cairn is not situated on what is marked on the map as Mount Betty, but on a small peak below. The cairn and the objects inside are in good condition. A plaque, put up by a previous expedition (at the wrong location), has been placed inside the cairn along with the other objects.



Amundsen's cairn. Photo: Astrid Furholt

#### 6.4.4. Stone Hut on Paulet Island

Table 6: The stone hut on Paulet Island has high priority. The table describes the rationale for this assessment, such as the site/remains' category, international (I) or national value (N), HSM criteria (fulfilled criteria are set in bold, other possible criteria in grey), protection value and measures. See Chapter 6.1 for further information about the categories I/N, HSM criteria and protection value, and Chapter 6.2 for further information on measures.

Site or remains	Category	I/N	HSM criteria	Protection value	Measures
Stone hut on Paulet Island	Primary: Exploration Secondary: Heroic, scientific, territorial and grave memorial	Ι	1, <b>2</b> , 3, 6, 7	<ul> <li>Source and knowledge</li> <li>Intrinsic</li> <li>Experiential</li> <li>Grave memorial</li> </ul>	<u>Fysisk:</u> <b>Maintenance to prevent decay</b> <i>Note:</i> Implementation of measures must be done through international collaboration, primarily with the Argentine Antarctic Program.
					<u>Communication:</u> The value of, and interest in, the hut makes it well suited for communication and outreach.

**Short description:** The stone hut is listed as HSM 23 on the Antarctic Treaty Parties' formal List of Historic Sites and Memorials in Antarctica with the following description:

Stone hut on Paulet Island built in February 1903 by survivors of the wrecked vessel Antarctic under Captain Carl A. Larsen, members of the Swedish South Polar Expedition led by Otto Nordenskjöld, together with a grave of a member of the expedition and the rock cairn built by the survivors of the wreck at the highest point of

the island to draw the attention of rescue expeditions.

**The Norwegian connection**: Hut erected by the crew of a ship (mostly Norwegians) under the command of a Norwegian captain. A Norwegian crew member, Ole Christian Wennersgaard, died during the overwintering and is buried in this area.

**Status**: The hut has partly collapsed; parts of the walls are still standing. The cairn is in good condition, while the cross for the grave is missing. Argentina is relatively active and have plans for preservation measures for this site.



Remains of a stone hut from 1903 on Paulet Island. Photo: Paula Casela, Dirección Nacional del Antártico

#### 6.4.5. Whaling Station at Whalers Bay

Table 4: The Whaling station at Whalers Bay has high priority. The table describes the rationale for this assessment, such as the site/remains' category, international (I) or national value (N), HSM criteria (fulfilled criteria are set in bold, other possible criteria in grey), protection value and measures. See Chapter 6.1 for further information about the categories I/N, HSM criteria and protection value, and Chapter 6.2 for further information on measures.

Site or remains	Category	I/N	HSM criteria	Protection value	Measures
Whaling station at Whalers Bay on Deception Island	Primarily: Whaling and grave memorial <u>Secondary:</u> Heroic and territorial	Ι	2, 4, <b>5,</b> 6	<ul> <li>Source and knowledge</li> <li>Experiential</li> <li>Intrinsic</li> <li>Grave memorial</li> </ul>	Physical:Maintenance to prevent decayNote: Possible implementation of measures must be done through international collaboration, primarily with the British and Chilean Antarctic programmes.Communication: The value of, and interest in, the site and remains make them well suited for communication and outreach.

**Short description:** The Whaling station in Whalers Bay is listed as HSM 23 on the Antarctic Treaty Parties' formal List of Historic Sites and Memorials in Antarctica with the following description:

Whalers Bay, Deception Island, South Shetland Islands. The site comprises all pre-1970 remains on the shore of Whalers Bay, including those from the early whaling period (1906-12) initiated by Captain Adolfus Andresen of the Sociedad Ballenera de Magallanes, Chile; the remains of the Norwegian Hektor Whaling Station established in 1912 and all artefacts associated with its operation until 1931; the site of a cemetery with 35 burials and a memorial to ten men lost at sea; and the remains from the period of British scientific and mapping activity (1944-1969). The site also acknowledges and commemorates the historic value of other events that occurred there, from which nothing remains.

**The Norwegian connection**: Adolfus Andresen, who started whaling from Whalers Bay, was originally Norwegian. Hektor Whaling Station was run by the whaling company <u>AS Hektor</u> in Tønsberg.

**Status**: Whalers Bay is one of the most visited places in Antarctica with around 20 000 disembarkations per season. The buildings are gradually deteriorating with time, and nowadays the place has more the look of a ruin than an old "station". The decay has led to the area i) being regarded as less and less aesthetic and ii) facing increasingly larger challenges connected with health and safety issues. Whalers

Bay is part of Deception Island *Antarctic Specially Managed Area* (ASMA No. 4), and a preservation strategy for Whalers Bay is included in the management plan. The main principle of the plan is natural decay, but certain measures to preserve sites and remains may be considered.



Biscoe House in Whalers Bay on Deception Island. Photo: Ann Kristin Balto, Norwegian Polar Institute, 2016.



The timber magistrate house in Whalers Bay was built by Norwegians. Photo: Ann Kristin Balto, Norwegian Polar Institute, 2016.



The aircraft hangar in Whalers Bay. Photo: Ann Kristin Balto, Norwegian Polar Institute, 2016.



Tourists on Deception Island, with the whaling station's oil tank in the background. Photo: Bjørn F. Johansen, Norwegian Polar Institute, 2005.

#### 6.4.6. Amundsen's Tent

Table 6: Amundsen's tent has high priority. The table describes the rationale for this assessment, such as the site/remains' category, international (I) or national value (N), HSM criteria (fulfilled criteria are set in bold, other possible criteria in grey), protection value and measures. See Chapter 6.1 for further information about the categories I/N, HSM criteria and protection value, and Chapter 6.2 for further information on measures.

Site or remains	Category	I/N	HSM criteria	Protection value	Measures
Amundsen's tent at the South Pole	<u>Primarily</u> : Exploration	I	1, 2, 3, 7	• Symbolic	<u>Physical:</u> Natural decay
	<u>Secondary</u> : Heroic, territorial and scientific				<u>Communication:</u> The value of, and interest in, Amundsen's tent makes it well suited for communi- cation and outreach.

**Short description:** The Whaling Station in Whalers Bay is listed as HSM 23 on the Antarctic Treaty Parties' formal List of Historic Sites and Memorials in Antarctica with the following description:

Amundsen's Tent. The tent was erected at 90° by the Norwegian group of explorers led by Roald Amundsen on their arrival at the South Pole on 14 December 1911. The tent is currently buried underneath the snow and ice in the vicinity of the South Pole.

**The Norwegian connection:** Tent erected in connection with Amundsen's expedition to the South Pole in 1911.

Status: The tent is buried underneath snow and ice near the South Pole. Its exact location is unknown.



Robert Scott's South Pole Expedition 1910–1912: Scott and his men in front of Roald Amundsen's tent on the South Pole, 18<sup>th</sup> January 1912. Norwegian Polar Institute's Photo Archives.



R. Amundsen, H. Hanssen, S. Hassel and O. Wisting on the South Pole, 14<sup>th</sup> December 1911. Photo: O. Bjaaland. Norwegian Polar Institute's Photo Archives.

#### 6.4.7. Cairns from the Maudheim Expedition

Table 7: The cairns from the Maudheim Expedition have high priority. The table describes the rationale for this assessment, such as the site/remains' category, international (I) or national value (N), HSM criteria (fulfilled criteria are set in bold, other possible criteria in grey), protection value and measures. See Chapter 6.1 for further information about the categories I/N, HSM criteria and protection value, and Chapter 6.2 for further information on measures.

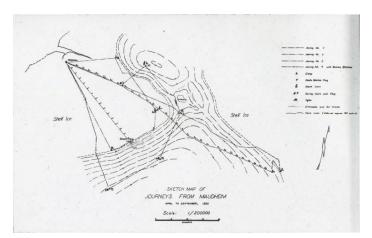
Site or remains	Category	I/N	HSM criteria	Protection value	Measures
Cairns from the Maudheim expedition	<u>Primarily</u> : Scientific, territorial and heroic	Ν	1, 2, 4	<ul> <li>Intrinsic</li> <li>Territorial</li> <li>Source and knowledge</li> <li>Experiential</li> </ul>	<ul> <li><u>Physical</u>:</li> <li>Maintenance to prevent decay</li> <li><i>Note</i>: "Maintenance" here may comprise replace displaced rocks etc.</li> <li><u>Formal</u>:</li> <li>HSM listing of a network of cairns may be considered, provided the cairns are found and and given coordinates.</li> </ul>

**Short description**: The Maudheim Expedition was a Norwegian-British-Swedish expedition to Antarctica led by John Giæver from 1949 to 1952. The expedition was the first truly international scientific expedition to Antarctica. Large parts of Western Dronning Maud Land were mapped.

The expedition members erected cairns on strategic locations in the areas they were exploring for mapping purposes. Photo documentation from such a cairn at Bleset in Kirwanveggen (73° 38' 30" S; 3° 58' 00" W) exists, but such cairns are also supposed to be located – among other places – at Pyramiden (72° 17' 00" S; 3° 49' 00" W) and Sukkertoppen (71° 25' 00" S; 13° 26' 00" E).

**The Norwegian connection:** Cairns erected during the Norwegian-led, first international scientific expedition to Antarctica.

**Status:** The status of these cairns is unknown, as is the number of cairns. A thorough review of literature may possibly shed some light on the matter.





Sketch map of journeys from Maudheim from April to September 1950, made by E.F. Roots. Norwegian Polar Institute's Photo Archives.

N. Roer on a peak in Gburekfjella during the Maudheim Expedition. Norwegian Polar Institute's Photo Archives.





Mt. Sukkertoppen photographed by N. Roer during the Maudheim Expedition in 1951. Norwegian Polar Institute's Photo Archives.

Aircraft near Pyramiden in 1951. Norwegian Polar Institute's Photo Archives.

#### 6.4.8. Borge Bay Whaling Station

Table 8: The Borge Bay Whaling Station has high priority. The table describes the rationale for this assessment, such as the site/remains' category, international (I) or national value (N), HSM criteria (fulfilled criteria are set in bold, other possible criteria in grey), protection value and measures. See Chapter 6.1 for further information about the categories I/N, HSM criteria and protection value, and Chapter 6.2 for further information on measures.

Site or remains	Category	I/N	HSM criteria	Protection value	Measures
Borge Bay whaling station on Signy Island	<u>Primarily</u> : Whaling and grave memorial	Ν	1, 3, 4, 6	<ul> <li>Intrinsic</li> <li>Source and knowledge</li> <li>Experiential</li> <li>Grave memorial</li> </ul>	<u>Physical</u> : <b>Maintenance to prevent decay</b> <i>Note</i> : "Maintenance" here may concern the grave memorials, if there is a need/wish for it. Implementation of measures must be made through international collaboration, primarily UK Antarctic Heritage Trust (UKAHT) and the British Antarctic Programme.
					<u>Communication:</u> The value of, and interest in, the site and remains make them well suited for communication and outreach.

**Short description:** Whaling station established in 1921 by Tønsberg Hvalfangeri; only the remains are left. Burial site with five Norwegian graves 1914–26. Located in Factory Cove, Borge Bay on Signy Island.

**The Norwegian connection:** Whaling station run by a Norwegian company.

**Status:** The station has almost vanished after a British scientific station was built and run at its location (Signy). Some artefacts from the whaling station are on display at Signy. The condition of the graves and burial ground is deteriorating year by year. The graves have been destroyed by elephant seals in the area, some of the crosses have been knocked over and some of the wood they are made of has sustained significant damage.



Burial ground for Norwegian whalers at Borge Bay, Signy Island. 1948.

#### 6.4.9. Warehouse and Sign on Peter I Øy

Table 9: The warehouse and sign on Peter I Øy have high priority. The table describes the rationale for this assessment, such as the site/remains' category, international (I) or national value (N), HSM criteria (fulfilled criteria are set in bold, other possible criteria in grey), protection value and measures. See Chapter 6.1 for further information about the categories I/N, HSM criteria and protection value, and Chapter 6.2 for further information on measures.

Site or remains	Category	I/N	HSM criteria	Protection value	Measures
Warehouse and sign at Framnæsodden, Peter I Øy	<u>Primarily</u> : Exploration	Ν	1, 3, 4, 7	<ul><li>Symbolic</li><li>Territorial</li></ul>	<u>Fysisk:</u> Natural decay
	Secondary: Territorial				<u>Communication:</u> The value of, and interest in, the site makes it well suited for communication and outreach.

**Short description:** A warehouse and a sign were erected at Framnæsodden (68° 47' S, 90° 42' W) in February 1929 during the second Norvegia Expedition lead by captain Nils Larsen. The sign had the inscription "Norvegiaekspedisjonen 2/2 1929". The warehouse had vanished when the Brattegg Expedition visited the island in 1948; only a rest of bolted wire could be seen, but a new warehouse was erected by members of this expedition.

**The Norwegian connection:** The Norvegia and Brattegg Expeditions were Norwegian, with Norwegian members only, and the site and remains are connected with Norway's annexation of the island.

**Status:** These objects are probably completely gone. The remains were listed as an HSM but it was decided to remove them in 2003 (*Measure 3 (2003)*) as there were no longer any traces of them.



The first embarkation on Peter I Øy was done by members of the Norvegia Expedition on 2nd Februar 1929. Norwegian Polar Institute's Photo Archives.



The Norwegian flag was heist after the embarkation on Framnesodden, 2nd February 1929. Norwegian Polar Institute's Photo Archives.

#### 6.4.10. Framheim

Table 5: Framheim has high priority. The table describes the rationale for this assessment, such as the site/remains' category, international (I) or national value (N), HSM criteria (fulfilled criteria are set in bold, other possible criteria in grey), protection value and measures. See Chapter 6.1 for further information about the categories I/N, HSM criteria and protection value, and Chapter 6.2 for further information on measures.

Site or remains	Category	I/N	HSM criteria	Protection value	Measures
Framheim in Whalers Bay on Ross Ice Shelf	<u>Primarily</u> : Exploration <u>Secondary</u> : Territoriall	Ν	<b>2, 3</b> , 7	<ul> <li>Symbolic</li> <li>Intrinsic</li> <li>Source and knowledge</li> </ul>	<u>Physical:</u> Natural decay <u>Communication:</u> The value of, and interest in, Framheim makes it well suited for communication and outreach.

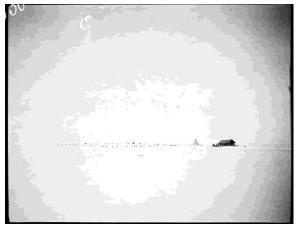
**Short description:** Framheim was Roald Amundsen's base i Antarctica which he used as the starting point for his journey to the South Pole during the Fram Expedition 1910–1913. The hut was erected in a natural ice bay on Ross Ice Shelf, known as Whalers Bay. It was built and erected by carpenter and expedition member Jørgen Stubberud outside Amundsen's home in Norway, and it was then dismanteled before being shipped to Antarctica.

The Norwegian connection: Erected in connection with a wholly Norwegian expedition.

**Status:** There are no remains of Framheim at Whalers Bay. The part of the ice shelf where Amundsen erected Framheim, broke off in year 2000 and drifted out towards the open ocean.



Inside Framheim at Whalers Bay in 1911. National Library of Norway.



Framheim with all the dogs in the vicinity of Whalers Bay in 1911. National Library of Norway.

#### 6.4.11. Maudheim

Table 11: Maudheim has high priority. The table describes the rationale for this assessment, such as the site/remains' category, international (I) or national value (N), HSM criteria (fulfilled criteria are set in bold, other possible criteria in grey), protection value and measures. See Chapter 6.1 for further information about the categories I/N, HSM criteria and protection value, and Chapter 6.2 for further information on measures.

Site or remains	Category	I/N	HSM criteria	Protection value	Measures
Maudheim on Quarisen ice shelf, Dronning Maud Land	<u>Primarily</u> : Exploration <u>Secondary</u> : Territorial	I	<b>1, 4</b> , 7	<ul><li>Symbolic</li><li>Intrinsic</li><li>Territorial</li></ul>	Physical: Natural decay Communication: The value of, and interest in, Framheim makes it well suited for communication and outreach.

**Short description:** Maudheim was the name of the station which was established in connection with the Norwegian-British-Swedish Expedition in 1949-52, the first international scientific expedition to Antarctica. The station consisted of two "residential buildings", warehouse, radio facilities with antenna and some meteorological installations. It was situated on the ice shelf Quarisen, in western Dronning Maud Land.

**The Norwegian connection:** The station was erected in connection with the Norwegian-led, first international research expedition to Antarctica.

**Status:** When Maudheim was visited by a Norwegian Antarctic expedition eight years later, it was completely covered with ice. Only two metres of the ten-metre-high tower protruded above the ice.



The Rawin Hut is being built during the Maudheim Expedition. Photo: V. Schytt, 1950. Norwegian Polar Institute's Photo Archives.

Map of Maudheim by N. Roer, Norwegian Polar Institute's Photo Archives.

npolar.no



Maudheim under construction. Photo: V. Schytt, 1950. Norwegian Polar Institute's Photo Archives.



Overview of Maudheim Station. Norwegian Polar Institute's Photo Archives.



Balloon launch at Maudheim. Photo: N. Roer, Norwegian Polar Institute

#### 6.4.12. Norway Station

Table 12: Norway Station has high priority. The table describes the rationale for this assessment, such as the site/remains' category, international (I) or national value (N), HSM criteria (fulfilled criteria are set in bold, other possible criteria in grey), protection value and measures. See Chapter 6.1 for further information about the categories I/N, HSM criteria and protection value, and Chapter 6.2 for further information on measures.

Site or remains	Category	I/N	HSM criteria	Protection value	Measures
Norway Station on Fimbulisen ice shelf, Dronning Maud	<u>Primarily</u> : Exploration	Ν	1, 4, 7	<ul><li>Symbolic</li><li>Territorial</li></ul>	<u>Physical:</u> Natural decay
Land	<u>Secondary</u> : Territorial				<u>Communication:</u> The value of, and interest in, Norway Station makes it well suited for communication and outreach.

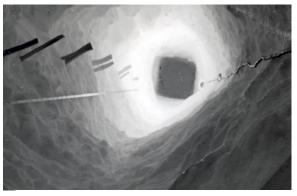
**Short description:** Norway Station was the main base for the Norwegian Antarctic Expedition during The International Geophysical Year 1956–60. The station was situated on the ice shelf Fimbulisen, and it consisted of three buildings which were connected through a 60 m long corridor constructed of crates for provisions and equipment. The buildings were made to withstand the weight of the snow which little by little buried the station. Towards the end of the expedition the members had to climb a 6.5m tall ladder to get out. In addition to the three main buildings, several huts were built, an instrument building, cages, antenna masts and a dog kennel.

The Norwegian connection: Erected in connection with a wholly Norwegian expedition.

**Status:** In 1959, South Africa took it over, using as a station. For several years after they had established their own station in the early 1960ies, they used it as an emergency/intermediate station. It is no longer accessible. It was considerably changed during the time it was used by the South Africans.



Work in progress near Norway Station. Norwegian Polar Institute's Photo Archives.



Shaft leading down to Norway Station. Photo: S. Helle, Norwegian Polar Institute.



Interior from the station. Photo: S. Helle, Norsk Polarinstitutt.



Preparing a dogsled. Photo: S. Helle, Norwegian Polar Institute.

#### 6.4.13. The Whaling and Expedition Ship Antarctic

Table 13: The whaling and expedition ship *Antarctic* has high priority. The table describes the rationale for this assessment, such as the site/remains' category, international (I) or national value (N), HSM criteria (fulfilled criteria are set in bold, other possible criteria in grey), protection value and measures. See Chapter 6.1 for further information about the categories I/N, HSM criteria and protection value, and Chapter 6.2 for further information on measures.

Site or remains	Category	I/N	HSM criteria	Protection value	Measures
Whaling and expedition ship Antarctic	Primary: Exploration Secondary:	I	1, 2, 3, 6, 7	<ul><li>Source and knowledge</li><li>Intrinsic</li></ul>	<u>Fysisk:</u> Natural decay
	Heroic and scientific				Communication: The value of, and interest in, the remains make them well suited for communication and outreach. <i>Note:</i> Implementation of measures must be done through inter- national collaboration, primarily the Argentine and Swedish Antarctic Programmes.

**Short description:** The DS *Antarctic* was a polar steamship that took part in two expeditions to Antarctica. She was built at Holmen in Drammen in 1871 as a screw frigate. Under the name *Cap Nor* she was used for sealing in the Arctic from 1872. In 1893 the ship was rebuilt to take part in a whaling expedition to Antarctica and was renamed *Antarctic*. The expedition became historic as a group of eight men managed to get ashore at Cape Adare, the first documented disembarkation on the Antarctic continent. The Swedish geologist Otto Nordenskjöld bought the ship in 1901 to use her as an expedition ship at yet another Antarctic expedition. After having brought the Swedish Antarctic Expedition to the Antarctic Peninsula, the *Antarctic* overwintered at the Falkland Islands. As the expedition was about to return after the winter, the ship sprang a leak and ran aground on 12<sup>th</sup> February 1903. The crew managed to salvage some provisions and equipment, and they continued the hard, long way to Paulet Island where they erected a stone hut for protection. In November 1903, after a strenuous overwintering, the expedition members were saved by a vessel from the Argentine navy looking for the missing expedition. Carl Anton Larsen was captain of the ship during this expedition, re. HSM 41.

**The Norwegian connection:** The ship was built in Norway. It was used by a Norwegian-led, whaling expedition funded by Foyn, under the command of Kristensen, then by a Swedish-led, exploration

expedition (during the Swedish-Norwegian union period) under the command of the Norwegian C.A. Larsen.

**Status:** Status og exact localization unknown. The area around the shipwreck site is well known to interested wreck divers. Experiences drawn from finding the *Endurance* in 2022 may encourage further searches for historical ships.



The ship Antarctic in the drift ice in 1902. Photo: Otto Nordenskjöld. Source: H.R. Mill, "The Siege of the South Pole", Alston Rivers Ltd, London 1905.

#### 6.5. Medium-priority Norwegian sites and remains in Antarctica

#### 6.5.1: Message Post from Expedition with Bull and Kristensen

Table 14: The Message Post from an expedition with Bull and Kristensen has high priority. The table describes the rationale for this assessment, such as the site/remains' category, international (I) or national value (N), HSM criteria (fulfilled criteria are set in bold, other possible criteria in grey), protection value and measures. See Chapter 6.1 for further information about the categories I/N, HSM criteria and protection value, and Chapter 6.2 for further information on measures.

Site or remains	Category	I/N	HSM criteria	Protection value	Measures
Message Post from expedition with Bull and Kristensen	Primarily: Whaling and exploration	Ν	<b>1</b> , 3, 4, 7	<ul><li>Symbolic</li><li>Intrinsic</li></ul>	<u>Physical</u> : Natural decay
	Secondary: Heroic and territorial				

**Short description:** The message post is listed as HSM 23 on the Antarctic Treaty Parties' formal List of Historic Sites and Memorials in Antarctica with the following description:

Message post, Svend Foyn Island, Possession Islands. A pole with a box attached was placed on the island on 16 January 1895 during the whaling expedition of Henryk Bull and Captain Leonard Kristensen of the ship Antarctic. It was examined and found intact by the British Antarctic Expedition of 1898-1900 and then sighted from the beach by the USS Edisto in 1956 and USCGC Glacier in 1965.

**The Norwegian connection:** Erected in connection with a Norwegian whaling expedition.

**Status:** The last confirmed observation was in 1965 (*USS Glacier*). The present condition is unknown. Should it still exist, contrary to expectation, it will be a monument from one of the very first expeditions to Antarctica.



Foyn Island (71° 56' S) in the archipelago Possession Islands. Photo: H.J. Bull. Source: H.J. Bull, "Sydover. Expeditionen til Sydishavet 1893-1895", Det norske Aktieforlag, Kristiania 1898.

#### 6.5.2: Prestrud's Cairn

Table 15: Prestrud's Cairn has high priority. The table describes the rationale for this assessment, such as the site/remains' category, international (I) or national value (N), HSM criteria (fulfilled criteria are set in bold, other possible criteria in grey), protection value and measures. See Chapter 6.1 for further information about the categories I/N, HSM criteria and protection value, and Chapter 6.2 for further information on measures.

Site or remains	Category	I/N	HSM criteria	Protection value	Measures
Prestrud's cairn in Scott Nunataks on King Edvard VII Peninsula	<u>Primarily</u> : Exploration <u>Secondary</u> : Scientific, heroic and og territorial	Ν	<b>1</b> , 7	<ul> <li>Intrinsic</li> <li>Source and knowledge</li> <li>Experiential</li> </ul>	<u>Physical</u> : Natural decay

**Short description:** Prestrud's Cairn is listed as HSM 23 on the Antarctic Treaty Parties' formal List of Historic Sites and Memorials in Antarctica with the following description:

Prestrud's Cairn, Scott Nunataks, Alexandra Mountains, Edward VII Peninsula. The small rock cairn was erected at the foot of the main bluff on the north side of the nunataks by Lieutenant K. Prestrud on 3 December 1911 during the Norwegian Antarctic Expedition of 1910-1912.

The Norwegian connection: Erected in connection with a wholly Norwegian expedition.

**Status:** The last confirmed observation was in 1987 (NZ Science Party, Chris Adams). The present condition is unknown.



Kristian Prestrud on top of Scott Nunataks in King Edward VII Land in December 1911. National Library of Norway.

#### 6.5.3. Mikkelsen's Cairn

Table 16: Mikkelsen's Cairn has medium priority. The table describes the rationale for this assessment, such as the site/remains' category, international (I) or national value (N), HSM criteria (fulfilled criteria are set in bold, other possible criteria in grey), protection value and measures. See Chapter 6.1 for further information about the categories I/N, HSM criteria and protection value, and Chapter 6.2 for further information on measures.

Site or remains	Category	I/N	HSM criteria	Protection value	Measures
Mikkelsen's Cairn in Vestfold Hills	<u>Primarily</u> : Whaling <u>Secondary</u> : Heroic	Ν	1, 2, 7	<ul> <li>Intrinsic</li> <li>Experiential</li> <li>Territorial</li> </ul> <i>Merk</i> : The intrinsic value of this object is particularly connected with women's history.	<u>Fysisk:</u> <b>Maintenance to prevent</b> <b>decay</b> Note: "Maintenance" here may comprise raising the flagpole if it falls over, replacing displaced rocks etc.

**Short description:** Mikkelsen's Cairn is listed as HSM 23 on the Antarctic Treaty Parties' formal List of Historic Sites and Memorials in Antarctica with the following description:

Mikkelsen Cairn, Tryne Islands, Vestfold Hills. A rock cairn and a wooden mast erected by the landing party led by Captain Klarius Mikkelsen of the Norwegian whaling ship Thorshavn and including Caroline Mikkelsen, Captain Mikkelsen's wife, the first woman to set foot on East Antarctica. The cairn was discovered by Australian National Antarctic Research Expedition field parties in 1957 and again in 1995.

**The Norwegian connection:** Erected in connection with a Norwegian whaling expedition.

**Status:** The cairn and the wooden mast are intact. There is a container on the site, which was left after the disembarkation in 1935. It contains a piece of rope and a piece of bark from the flagpole which is assumed to date back to the original event.



Caroline Mikkelsen, the first woman in Antarctica (20th February 1935), raises the Norwegian flag on top of the cairn at Ingrid Christensen Land. Norwegian Polar Institute's Photo Archives.

#### 6.5.4. C.A. Larsen's Multi-expedition Cairn

Table17: The C.A. Larsen's Multi-expedition Cairn has medium priority. The table describes the rationale for this assessment, such as the site/remains' category, international (I) or national value (N), HSM criteria (fulfilled criteria are set in bold, other possible criteria in grey), protection value and measures. See Chapter 6.1 for further information about the categories I/N, HSM criteria and protection value, and Chapter 6.2 for further information on measures.

Site or remains	Category	I/N	HSM criteria	Protection value	Measures
C. A. Larsen's Multi- Expedition Cairn	Primarily: Exploration and whaling	I	1, <b>2,</b> 4, <b>7</b>	<ul><li>Intrinsic</li><li>Experiential</li></ul>	Physical: Natural decay Note: Implementation of measures must be done through international collaboration, primarily with the Argentine Antarctic Programme. <u>Communication:</u>
					The value of, and interest in, the cairn makes it well suited for communication and outreach.

**Short description:** The cairn is listed as HSM 23 on the Antarctic Treaty Parties' formal List of Historic Sites and Memorials in Antarctica with the following description:

The site consists of a rock cairn installed in 1892 by Norwegian Capt. Carl Anton Larsen during the first land-exploration of the area around the current location of Argentina's Marambio Station, where the first Antarctic fossil discoveries were made. The cairn used to have an attached wooden pole (2m high and 5cm diameter) of which nothing remains.

**The Norwegian connection:** Erected in connection with a Norwegian expedition.

**Status:** The cairn is in good condition, but the pole which used to be in its centre is gone.



C. A. Larsen's Multi-expedition Cairn photographed in 2016. Photo: Pablo Fontana Instituto Antárctico Argentino.

#### 6.4.5. Guvernøren

Table 18: *Guvernøren* has medium priority. The table describes the rationale for this assessment, such as the site/remains' category, international (I) or national value (N), HSM criteria (fulfilled criteria are set in bold, other possible criteria in grey), protection value and measures. See Chapter 6.1 for further information about the categories I/N, HSM criteria and protection value, and Chapter 6.2 for further information on measures.

Site or remains	Category	I/N	HSM criteria	Protection value	Measures
The wreck of the whaling ship <i>Guvernøren,</i> Enterprise Island	<u>Primarily</u> : Whaling	N	1, 4, 5	<ul> <li>Source and knowledge</li> <li>Experiential</li> <li>Intrinsic</li> </ul>	<u>Physical:</u> <b>Maintenance to prevent decay</b> <i>Merk</i> : Implementation of measures must be done through international collaboration. <u>Formal:</u> Including this location in ATCM
					Site Visitor Guidelines may be considered. <u>Communication:</u> The value of, and interest in, the remains make them well suited for communication and outreach.

**Short description:** The Norwegian whaling ship *Guvernøren*, with her 5.459 gross tonnage, was regarded as state of the art-technology in 1913. But during a celebration on board on 27th January 1915 the ship went up in flames. Hoping to rescue both human lives and whale products, the captain ran the ship aground. The whole crew of 85 was rescued, but 16 615 barrels of whale oil were lost. The wreck is situated in what is now known as Gouvernøren Harbour, a small harbour at the east side of Enterprise Island and at the north-east side of Nansen Island in Wilhelmina Bay.

The Norwegian connection: The ship was Norwegian and run by a Norwegian company.

**Status:** The wreck is in fairly good condition, and the visible structure seems to be intact, but decaying. There are remains from the whaling period scattered around the smaller islands in the area, including two sets of wooden waterboats located in different places, one oil tank made of metal, sleds and a mooring pole. Tourist sailboats are regularly moored to the wreck.



The wreck of *Guvernøren*. Photo: M. More (Source: <u>https://skipshistorie.net/Sandefjord/SFJ004HaldorVirik/Tekster/SFJ00419130200000%20GUVERNOREN.htm</u>, 15<sup>th</sup> Aug. 2023)

#### 6.6. Low-priority Norwegian sites and remains in Antarctica

#### 6.6.1: Plaque on Brabant Island Associated with the Disembarkation of Amundsen and Others

Table 19: The plaque on Brabant Island has low priority. The table describes the rationale for this assessment, such as the site/remains' category, international (I) or national value (N), HSM criteria (fulfilled criteria are set in bold, other possible criteria in grey), protection value and measures. See Chapter 6.1 for further information about the categories I/N, HSM criteria and protection value, and Chapter 6.2 for further information on measures.

Site or remains	Category	I/N	HSM criteria	Protection value	Measures
Plaque on Brabant Island associated with the dis- embarkation of Amundsen and others	<u>Primarily</u> : Exploration <u>Secondary</u> : Heroic, scientific, territorial	I	1, <b>2, 7</b>	• Symbolic	<u>Physical:</u> Natural decay

**Short description:** The plaque is listed as HSM 23 on the Antarctic Treaty Parties' formal List of Historic Sites and Memorials in Antarctica with the following description:

Plaque on Brabant Island, on Metchnikoff Point, mounted at a height of 70 m on the crest of the moraine separating this point from the glacier and bearing the following inscription: This monument was built by François de Gerlache and other members of the Joint Services Expedition 1983-85 to commemorate the first landing on Brabant Island by the Belgian Antarctic Expedition, 1897-99: Adrien de Gerlache (Belgium) leader, Roald Amundsen (Norway), Henryk Arctowski (Poland), Frederick Cook (USA) and Emile Danco (Belgium) camped nearby from 30 January to 6 February 1898.

**The Norwegian connection:** An expedition (the *Belgica* Expedition) where the Norwegian Roald Amundsen took part.

**Status:** In excellent overall condition. The most recent inspection took place 3rd March 2019. The plaque was in good condition and maintenance measures were not necessary.



Plaque commemorating Adrien de Gerlache's expedition (1897–1899). Source: List and status of Historic Sites and Monuments (<u>https://www.</u> <u>ats.aq/e/protected.html</u>, 16<sup>th</sup> Aug. 2023). *ATS 2023*.

## 7. Action plan

This document describing prioritized Norwegian historic sites and remains in Antarctica is not in itself an action plan. However, it gives a basis for assessing whether and how measures should be carried out when potential challenges related to the management of, and measures related to, one or more of these objects is processed.

A systematic follow-up of all the highest prioritized objects will need a further process for priorities and an implementation strategy/plan.

#### 7.1. Passive management

For most of the sites and remains in this listing, "natural decay" is the chosen management strategy, often combined with communication measures. We suggest the following as basis for further action:

- Documentation of the heritage site or remains' status should be done when the occasion arises, e.g. when new observations are made during random visits.
- Be restrictive when engaging in private or international initiatives related to these sites and remains and communicate the Norwegian management strategy of "natural decay" in a distinct manner.
- Events (jubilees etc.) are to be used as platforms for developing communication measures focusing on the site or remains.

#### 7.2. Active management

For one of the objects, the chosen management strategy is "ordinary maintenance/rehabilitation", and for a few on this list, "maintenance to prevent decay" has been chosen, mostly in combination with communication measures. The overview specifies what this means for the individual site or remains. We suggest the following as basis for further action:

- Simple measures, such as replacing rocks etc, may be carried out when the opportunity arises, and someone is planning to visit these heritage sites and remains anyway.
- As for the sites and remains where a more extensive, active effort is needed, (like Borchgrevink's huts and Whalers Bay), separate professionally based implementation strategies should be prepared in collaboration with those we share the management authority with, and/or those who have activity and are present in the area.
- Be attentive when possible international initiatives regarding these sites and remains are taken and assess how Norway in a constructive manner can contribute to priority and/or implementation strategies.
- Events (jubilees etc.) are to be used as platforms for developing communication measures focusing on the site or remains.

#### 7.3. Formal measures

For some of the sites and remains, a need for possible formal measures has been suggested. For those with the highest ranking on the list, the process to follow this up should be started soon.

#### 7.4. Responsibility and financing

- Measures connected with active management (exceeding simple maintenance to prevent natural decay)
  - These measures will be costly, and special, designated project funding must be made available, re. reconciled implementation strategy and/or as contributions to international initiatives.
  - No funding has been designated for this purpose as of today, and measures will need special project funding.
  - The Norwegian Polar Institute, with professional support from the Norwegian Directorate for Norwegian Heritage, is responsible for preparing implementation strategies for the high ranked historic sites and remains which are in need of active measures.
- Measures connected with passive management (Communication measures)
  - The Norwegian Polar Institute and the Norwegian Directorate for Cultural Heritage jointly prepare and implement communication projects.
  - $\circ~$  It is a prerequisite for implementing larger communication measures that there is access to external project funding.
- Formal measures
  - The Norwegian Polar Institute, with professional support from the Norwegian Directorate for Cultural Heritage, is responsible for preparing draft propositions to the Antarctic Treaty Consultative Meetings (ATCM).