



Management Plan

For Antarctic Specially Protected Area No. 158 HUT POINT, ROSS ISLAND

(including Historic Site and Monument No. 18, the historic *Discovery* hut of Captain Robert Falcon Scott)

Introduction

The Area is situated approximately ~500 m west of McMurdo Station (US) at the southern extremity of Hut Point, Hut Point Peninsula, Ross Island. The Area was originally designated for the significant historic values of the hut built by the British National Antarctic (*Discovery*) Expedition of 1901-04 led by Captain Robert Falcon Scott, which was listed as Historic Site and Monument (HSM) No. 18 in Recommendation VII-9 (1972). The Area comprises the *Discovery* hut structure and associated artefacts located at 77° 50' 44.7"S, 166° 38' 30.3"E. The Area was designated as Specially Protected Area No. 28 through Measure 1 (1998) and renamed and renumbered as Antarctic Specially Protected Area (ASPA) No. 158 by Decision 1 (2002). Revisions to the Management Plan were adopted through Measure 2 (2005), Measure 10 (2010), and Measure 13 (2015).

1. Description of values to be protected

The hut was built in February 1902 by the British National Antarctic (*Discovery*) Expedition of 1901-04, led by Captain Robert Falcon Scott, and has come to be known as '*Discovery* hut' (Map 1). The British Antarctic (*Terra Nova*) Expedition 1910-13, also led by Captain Scott, later used it as a valuable advance staging point for journeys on the 'Barrier' (the Ross Ice Shelf). The hut was also used by Sir Ernest Shackleton during the 1907-09 British Antarctic (*Nimrod*) Expedition and later by his stranded Ross Sea party during the Imperial Trans-Antarctic Expedition of 1914-17. The building was prefabricated in Australia to an 'outback' design with verandas on three sides. Any artefacts on the verandas are included within the protected area.

The Hut Point site is one of the principal sites of early human activity in Antarctica. It is an important symbol of the Heroic Age of Antarctic exploration and, as such, has considerable historical significance. Some of the earliest advances in the study of earth sciences, meteorology, and flora and fauna in Antarctica are associated with the *Discovery* Expedition based at this site. The history of these activities and the contribution they have made to the understanding and awareness of Antarctica give this Area significant scientific, aesthetic and historic value.

Hut Point is situated in Environment S – McMurdo South Victoria Land geologic based on the Environmental Domains Analysis for Antarctica (Resolution 3 (2008)) and in Region 9 – South Victoria Land based on the Antarctic Conservation Biogeographic Regions (Resolution 6 (2012)).

2. Aims and objectives

The aim of the Management Plan is to provide protection for the Area and its features so that its values can be preserved. The objectives of the Management Plan are to:

- avoid degradation of, or substantial risk to, the values of the Area;
- maintain the historic values of the Area through planned conservation work which may include:
 - a) an annual 'on-site' maintenance programme;
 - b) a programme of monitoring the condition of artefacts and structures, and the factors that affect them;
 - c) a programme of site, building and artefact conservation which may occur on or off site;
 - d) mapping and otherwise recording the disposition of historic items in the hut environs; and
 - e) recording other relevant historic data.
- minimise human disturbance to the Area, its features and artefacts whilst allowing for managed access to *Discovery* hut; and
- allow visits for management purposes in support of the aims of the Management Plan.



3. Management Activities

The following management activities shall be undertaken to protect the values of the Area:

- Notices showing the location of the Area (stating the special restrictions that apply) shall be displayed prominently, and a copy of this management plan shall be kept available, at all permanent scientific stations located on Ross Island;
- Copies of this management plan shall be made available to the principal permit holder of all groups visiting the Area;
- National Antarctic Programmes shall take steps to ensure the boundaries of the Area and the restrictions that apply within are marked on relevant maps and nautical / aeronautical charts;
- National Antarctic Programmes operating in close proximity to the Area shall take steps to educate station and programme personnel about the site values and the need to observe the special protection that applies;
- Personnel (national program staff, field expeditions, tourist expedition leaders) accessing the Area shall be specifically instructed by their national programme, tour operator or appropriate national authority to observe the provisions and contents of the Management Plan, including on the location, boundaries and restrictions applying to access to the Area;
- Signs marking the location of the Area with clear statements of entry restrictions should, as appropriate, be installed near to the Area and at nearby facilities to raise awareness of the site's protected status;
- Markers or signs erected near the Area or in nearby facilities should be secured and maintained in good condition, and removed when no longer required;
- A regular programme of conservation work shall be undertaken on *Discovery* hut and associated artefacts within the Area;
- Systematic monitoring shall be carried out to assess the impacts of visits and the results, and any related management recommendations on limits to the number of visitors allowed at any given time or in any given season, shall be included in reviews of this Management Plan;
- Interested National Antarctic Programmes and relevant groups and organisations should consult together and coordinate to ensure:
 - a) skills and resources, particularly those related to conservation techniques, are developed and deployed to assist with protection of the historic values of the Area;
 - b) the defined limits on visitor numbers are not exceeded; and
 - c) the above management activities are implemented.

4. Period of designation

Designated for an indefinite period.

5. Maps

Map 1: ASPA No.158, *Discovery* Hut, Hut Point, Ross Island.

Main map – location of Hut Point at the southern extremity of Hut Point Peninsula, McMurdo Station (US) and Scott Base (NZ), HSM No. 20 Scott's Cross on Observation Hill, and nearby protected areas.

Projection: Lambert Conformal Conic; Standard parallels: 1st 77° 45' S, 2nd 77° □□' S; Central Meridian: 166° 45' E; Latitude of origin: 78° 00' S; Spheroid: WGS84; Horizontal datum: McMurdo Sound Geodetic Control Network.

Data sources: The base map and contours are derived from a digital orthophotograph using aerial imagery acquired by USGS/ DoSLI Nov 1993 prepared at 1:2500 and 1:10,000 scales with a positional accuracy of ~ ±1 m (horizontal) and ~ ±2 m (vertical), and an on-ground pixel resolution of 0.25 m and 1.0 m respectively. Buildings: RPSC survey (Feb 2009). Other features derived from USAP (Feb 2009) and ERA (Nov 2009) field surveys. Approximate permanent ice extent digitised from Quickbird orthophoto image acquired 15 Oct 2005 (Imagery ©2005 Digital Globe). Contour interval: Main map – 20 m; Inset 3 – 2 m.

Inset 1: Ross Island in the Ross Sea.

Inset 2: McMurdo Station (US) and Scott Base (NZ) on Ross Island.

Inset 3: *Discovery* Hut (HSM No. 18) at the southern extremity of Hut Point and location of HSM No. 19 Vince's Cross.



6. Description of the Area

6(i) Geographical coordinates, boundary markers and natural features

Overview

Hut Point is a small ice-free area protruding south west from Hut Point Peninsula and situated ~500 m to the west of McMurdo Station (US). The designated Area consists solely of the structure of *Discovery* hut (and its associated on-site artefacts) (77° 50' 44.7" S, 166° 38' 30.3" E) which is situated near the southwestern extremity of Hut Point.

Boundaries

The boundary of the Area is the curtilage (i.e. footprint) of the building, including the verandas.

Human activities

A regular and multi-year programme of conservation has been carried out on *Discovery* hut by New Zealand since the 1950s. The New Zealand based non-governmental organisation Antarctic Heritage Trust has undertaken conservation of *Discovery* hut and associated artefacts for over 30 years in coordination with national Antarctic programmes operating in the region.

National programme personnel from nearby McMurdo Station (US) and Scott Base (NZ) and tourist groups regularly visit *Discovery* hut and the nearby vicinity. Numbers of visitors may fluctuate depending on a range of factors, including sea ice and weather conditions, available logistics, and the number of tour operators in any given year.

6(ii) Access to the Area

Access to Hut Point may be made on foot, by vehicle or by small boat. Access to the Area is usually made on the road from McMurdo Station (Map 1). The road terminates approximately 50 m northeast of *Discovery* hut, where large concrete blocks have been placed to prevent vehicle access beyond that point. *Discovery* hut may only be accessed on foot, or by suitable access provision for disabled persons as may be necessary. The specific conditions for access by pedestrians, vehicles, small boats, and aircraft are set out in Section 7(ii) below.

6(iii) Location of structures within and adjacent to the Area

The designated Area consists solely of the structure of the historic *Discovery* hut and its associated on-site artefacts (HSM No. 18). HSM No. 19, a cross erected in February 1904 by the British National Antarctic Expedition of 1901-04, in memory of George T. Vince (a member of the expedition who died in the vicinity) is situated approximately 75 metres west of the hut. HSM No. 20, a cross erected in January 1913 by the British Antarctic Expedition of 1910-13, in memory of Captain Robert F. Scott's party which perished on the return journey from the South Pole in March 1912, is located on Observation Hill approximately 1.4 km southeast of the Area (Map 1).

Temporary support facilities are occasionally installed near *Discovery* hut to facilitate conservation work.

The nearest permanent scientific stations to the Area are McMurdo (US) and Scott Base (NZ), which are located ~500 m and ~3 km east of the Area respectively (Map 1).

6(iv) Location of other protected areas in the vicinity

- ASPA No. 122 Arrival Heights lies 1.4 km north of Hut Point on Hut Point Peninsula (Map 1).
- ASPA No. 121 Cape Royds and ASPA No. 157 Backdoor Bay, Cape Royds, are located ~34 km north of Hut Point (Map 1, Inset 2).
- ASPA No. 155 Cape Evans, is ~24 km to the north of Hut Point (Map 1, Inset 2).

6(v) Special zones within the Area

There are no special zones within the Area.

7. Terms and conditions for entry permits

7(i) General permit conditions

Entry into the Area is prohibited except in accordance with a permit issued by an appropriate national authority. A permit may be issued by a national authority to cover a number of visits in a season. Conditions for issuing a permit for entry to the Area are that:

- The activities are related to conservation, research and/or monitoring purposes, or for reasons essential to the management of the Area, or are activities related to educational, outreach or recreational activities, including tourism, provided they do not conflict with the objectives of this Management Plan;
 - The activities permitted are in accordance with this Management Plan;
 - The activities permitted will give due consideration via the environmental impact assessment process to the continued protection of the historic values of the Area;
 - The permit shall be issued for a finite period; and
 - The permit, or a copy, shall be carried by the principal permit holder, or their designated representative, when visiting the Area.
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7(ii) Access to and movement within or over the Area

Access to Hut Point shall be on foot, by vehicle or by small boat. There are no particular routes designated for access to Hut Point, although access is usually along the road from McMurdo Station (US) (Map 1, Inset 3). Access to Hut Point during vessel resupply operations in Winter Quarters Bay shall be coordinated with McMurdo Station management.

Foot access and movement within the Area

- 1) *Discovery* hut shall only be accessed on foot, or by suitable access provision for disabled persons as may be necessary (Map 1, Inset 3).
- 2) Movement within *Discovery* hut shall be in accordance with the Code of Conduct in Section 7(iii).

Vehicle access

- 1) Vehicles approaching the Area by road from McMurdo Station (US) or Scott Base (NZ) shall not proceed beyond the large concrete blocks placed at the terminus of the road ~50 m northeast of *Discovery* hut, unless authorised by permit for essential maintenance, conservation or management purposes of the Area or HSM No. 19 (Map 1, Inset 3).

Small boat access

- 1) Access by small boat (when there is open water) may be made to McMurdo Station, Winter Quarters Bay, or to the coastline in McMurdo Sound ~100 m northwest of the Area at approximately 77° 50' 42"S, 166° 38' 23"E (Map 1, Inset 3).

Aircraft access and overflight

Aircraft shall operate within the Area according to strict observance of the following conditions:

- 1) Helicopter landings within 100 m of the Area are prohibited. Helicopter landings result in rotor wash, which can cause damage to *Discovery* hut;
- 2) Helicopter overflight of the Area should be avoided to the maximum extent practicable;
- 3) Overflight below 2,000 ft (610 m) and landings within the Area by Remotely Piloted Aircraft Systems (RPAS) are prohibited except in accordance with a permit issued by an appropriate national authority. RPAS use near or over the Area should follow the Environmental Guidelines for Operation of Remotely Piloted Aircraft Systems (RPAS) in Antarctica (Resolution 4 (2018)).

Limits to the number of people allowed within the Area

Control of the number of people and movement within the Area, both at any given time and cumulatively over time, is necessary to minimise damage and deterioration precipitated by:

- a) physical foot traffic of visitors across the vulnerable features of the Area and from crowding inside *Discovery* hut in particular; and
 - b) measurable changes in ambient conditions (i.e. temperature and humidity) inside *Discovery* hut.
- The maximum number within the hut at any time (including guides) shall be: **8 people**.
 - The annual maximum number of visitors shall be: **2,000 people**.
 - The observed effects of monitored visitor levels suggest that significant adverse impacts could be caused by exceeding the maximums specified above.
 - These limits have been set based on the best advice available from conservation advisory agencies (which include conservators, archaeologists, historians, museologists and other heritage protection professionals). These limits shall be reconsidered at each management plan review, when the limit may be adjusted based on monitored impacts at the site.
 - All educational, outreach and/or recreational visits, including tourism, must be supervised by a trained guide nominated by the operator (refer Section 7(x)). Adequate supervision of visits to the Area is necessary to prevent damage caused by crowding and by actions inconsistent with the Code of Conduct in Section 7(iii).



7(iii) Activities that may be conducted within the Area

- Visits for conservation or management purposes;
- Educational, outreach and/or recreational visits, including tourism;
- Scientific activity that does not detract from or damage the values of the Area.

Visitors should adhere to the following Code of Conduct for site visits, except where conservation, research, monitoring or management activities specified in the permit require otherwise:

Code of Conduct

- Smoking or the use of any naked flames in the Area, and particularly in or around *Discovery* hut, is strictly prohibited, as fire is a major risk;
- Hazardous materials, such as asbestos, chemicals, mould, etc., are present on site. Avoid handling anything within the protected area and huts.
- Thoroughly clean grit, dirt, guano, ice and snow from boots using the brushes provided before entering *Discovery* hut to reduce floor abrasion. Larger groups are recommended to lay the tarpaulin provided outside to keep footwear and personal items clean whilst waiting to enter the building;
- Remove any clothing made wet by sea water, and any sea ice crystals from boots, as salt particles accelerate corrosion of metal objects;
- Do not touch, move or sit on any items or furniture in the huts – handling artefacts causes damage;
- As many areas are cramped and artefacts can be accidentally bumped, do not take bags or wear packs inside, do not use 'selfie' sticks for photos, and avoid tripods or monopods when the maximum number of visitors (8) are in the hut at one time;
- Only use tripods or monopods with flat bottomed rubber bases as opposed to those with metal spikes which can damage the hut floor;
- When moving around the site, take great care not to tread on any artefacts, which may be difficult to see; and
- Visits should be recorded in the visitor book provided. This allows data on times and numbers of visitors to be correlated with temperature and humidity data automatically logged inside the hut.

7(iv) Installation, modification or removal of structures/equipment

- The existing structure shall not be altered, or scientific equipment installed, except when authorised by permit for conservation, educational or scientific purposes that do not detract from or damage the values of the Area as specified in Section 1.
- Historic items shall not be removed from the Area, unless specified in a permit issued in accordance with the provisions of Section 7(viii).

7(v) Location of field camps

- *Discovery* hut shall not be used for living purposes.

7(vi) Restrictions on materials and organisms that may be brought into the Area

In addition to the requirements of the Protocol on Environmental Protection to the Antarctic Treaty, the following are restrictions on materials and organisms that may be brought into the Area:

- Deliberate introduction of animals, plant material, micro-organisms or soils into the Area is prohibited;
- Visitors shall take precautions to prevent the accidental introduction of animals, plant material, micro-organisms and soils by ensuring that their equipment brought into the Area is clean. To the maximum extent practicable, footwear and other equipment used or brought into the area (including carry-bags for equipment) shall be thoroughly cleaned before entering the Area;
- Food shall not be consumed within the Area;
- Fuel, food, chemicals, and other materials shall not be introduced or stored within the Area, unless specifically authorised by permit for essential purposes connected with the conservation of the historic structures or the associated relics, and shall be stored and handled in a way that minimises the risk of their accidental introduction into the environment;
- All materials introduced shall be for a stated period only and shall be removed by the end of that stated period; and
- If release occurs which is likely to compromise the values of the Area, removal is encouraged only where the impact of removal is not likely to be greater than that of leaving the material in situ.



7(vii) Taking or harmful interference with, native flora and fauna

There are no native flora or fauna within the designated Area.

7(viii) Collection of anything not imported by the permit holder

- 1) Material may be collected and removed from the Area for conservation or scientific reasons consistent with the objectives of this Management Plan only in accordance with a permit issued by an appropriate national authority.
- 2) Materials that pose a threat to the historic values of the Area, environment or human health may be removed from the Area for disposal in accordance with a Permit where they meet one or more of the following criteria:
 - i. the artefact presents a threat to the historic values, environment, wildlife or human health and safety;
 - ii. it is in such poor condition that it is not reasonably possible to conserve it;
 - iii. it does not contribute in any significant way to our understanding of the hut, its occupants, other artefacts, or the history of Antarctica;
 - iv. it does not contribute to, or it detracts from, the visual qualities of the site or the hut; and/or
 - v. it is not a unique or rare item;

and where such action is:

- vi. undertaken by parties with appropriate heritage conservation expertise; and
 - vii. part of an overall plan for conservation work at the site.
- 3) National authorities should ensure that any removal of artefacts and assessment against the above criteria is carried out by personnel with appropriate heritage conservation expertise.
- 4) Artefacts judged to be of high historic value, which cannot be conserved on site with currently available techniques, may be removed in accordance with a Permit for storage in a controlled environment until such time as they can safely be returned to the Area, which should be the preferred outcome unless there is a high risk that return would be likely to damage or destroy the integrity of the artefact(s).

7(ix) Disposal of waste

All human waste, grey water and other waste generated by work parties or visitors shall be removed from the Area.

7(x) Measures that may be necessary to continue to meet the aims of the Management Plan

- Information on the requirements of this Management Plan shall be provided to all visitors.
- The Code of Conduct set out in Section 7(iii) shall be followed by all visitors, except where conservation, research, monitoring or management purposes require otherwise.
- Operators facilitating educational, outreach and recreational visits (including tourism) to the Area shall, prior to commencement of the summer season, nominate people with a working knowledge of both the site and this Management Plan to act as guides during visits and provide training appropriate to ensure they are capable of fulfilling their roles.
- All educational, outreach and recreational visits, including tourism, shall be supervised by a nominated guide, who is responsible for briefing visitors on the Code of Conduct and the requirements of this Management Plan and for ensuring their full compliance. The guide(s) shall actively monitor visitor activity within the Area, and in particular within *Discovery* hut, and take corrective actions against any potential or actual breaches of the Management Plan and Code of Conduct.

7(xi) Requirements for reports

- The principal permit holder for each visit to the Area shall submit a report to the appropriate national authority after the visit has been completed in accordance with national procedures and permit conditions.
- Such reports should include, as appropriate, the information identified in the visit report form contained in the Guide to the Preparation of Management Plans for Antarctic Specially Protected Areas (Resolution 2 (2011)). The national authority should also forward a copy of the visit report and confirmation of site visitor numbers to the Party that proposed the Management Plan, to assist in managing the Area and reviewing the Management Plan.
- Any removal of materials in accordance with Section 7(viii) shall be detailed in the report, including the reason for removal and the current location of the items or the date of disposal. Any return of such items to the site shall also be reported to the appropriate national authority.
- Parties should, wherever possible, deposit originals or copies of such original visit reports in a publicly accessible archive to maintain a record of usage, for the purpose of any review of the Management Plan and in organising the scientific use of the Area.
- The appropriate authority should be notified of any activities / measures undertaken, and / or of any materials released and not removed, that were not included in the authorised permit.



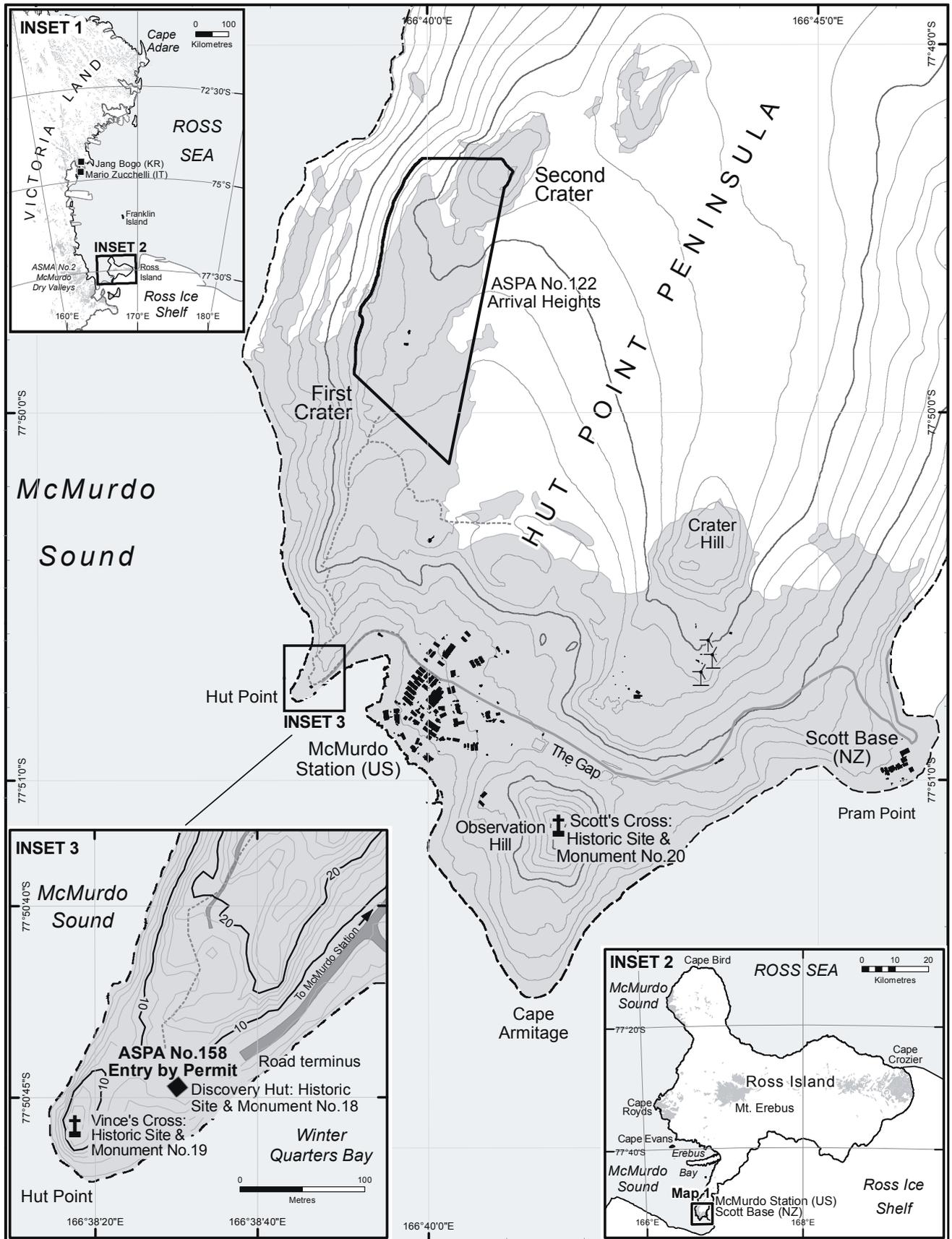
8. Supporting documentation

Antarctic Heritage Trust 2018. *Antarctic historic huts of the Ross Sea region*. NZ Antarctic Heritage Trust, Christchurch.

Antarctic Treaty Parties. Guidelines for handling of pre-1958 historic remains whose existence or present location is not known. Resolution 5 (2001).

Antarctic Treaty Parties. Guidelines for the designation and protection of Historic Sites and Monuments. Resolution 3 (2009).

Antarctic Treaty Parties. Guidelines for the assessment and management of heritage in Antarctica. Resolution 2 (2018).



Map 1: ASPA No. 158 - Discovery Hut, Hut Point, Ross Island



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Antarctica New Zealand
Environmental Research & Assessment



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|------------------------|--------------------|-------------------------|
| Ocean | Index contour | Buildings |
| Permanent ice (2005) | Contour | Memorial cross |
| Ice free ground (2005) | Main road | Wind turbine |
| Estimated coastline | Recreational trail | Protected area boundary |

Projection: Lambert Conformal Conic
Spheroid and horizontal datum: WGS84
Contour interval: main map - 20 m; Inset 3 - 2 m.
Data sources: Buildings: RPSC survey (Feb 09);
Features: USAP (Feb 09) & ERA (Nov 09) field surveys;
Permanent ice extent: Digitised from Quickbird
orthophoto (15 Oct 05) (Imagery © 2005 Digital Globe).