

Management Plan for Site of Special Scientific Interest No. 8

WESTERN SHORE OF ADMIRALTY BAY, KING GEORGE ISLAND, SOUTH SHETLAND ISLANDS

1. Description of Values to be Protected

The area was originally designated as a Site of Special Scientific Interest in Recommendation X-5 (1979, SSSI No. 8) after a proposal by Poland, because of its diverse avian and mammalian fauna and locally rich vegetation, providing a representative sample of maritime Antarctic ecosystem.

These grounds are still relevant. Research has now shown that the colonies of Adélie Penguin (*Pygoscelis adeliae*) and Gentoo Penguin (*Pygoscelis papua*) are the largest on the island. There are also breeding areas of other birds - Giant Petrel (*Macronectes giganteus*), Cape Pigeon (*Daption capense*), Wilson's Storm Petrel (*Oceanites oceanicus*), Black-bellied Storm Petrel (*Fregetta tropica*), Sheathbill (*Chionis alba*), McCormick's Skua (*Catharacta maccormicki*), Antarctic Skua (*Catharacta antarctica*), Dominican Gull (*Larus dominicanus*), and Antarctic Tern (*Sterna vittata*). Furthermore, there are numerous sites at which Elephant Seals (*Mirounga leonina*), Fur Seals (*Arctocephalus gazella*) and Weddell Seals (*Leptonychotes weddelli*) haul out or breed.

The values to be protected are those associated with the exceptional assemblage of animals and the long-term scientific studies on them that have been undertaken since 1976.

2. Aims and Objectives

Management of the Area aims to:

- protect all bird colonies and seal breeding areas against unnecessary and potentially damaging human activities, and
- undertake any essential management activities necessary to protect the scientific value of the site.
- protect long-term research

3. Management Activities

Ensure that the biologically¹ the Area is adequately monitored and that sign boards and boundary markers are serviced.

4. Period of Designation

The Area is designated for an indefinite period.

5. Maps

Map A shows the location of King George Island in Antarctica.

Map B shows the Western shore of Admiralty Bay, Site of Special Scientific Interest (SSSI) No. 8, in relation to King George Island.

Map C shows the Area in greater detail.

¹ Probable mistake should perhaps be: "Ensure that the biological values of the Area are adequately..."

6. Description of the Area

6(i) Geographical co-ordinates, boundary markers and natural features

The area consists of land on the western shore of Admiralty Bay (Map C). The westerly boundary extends from Patelnia (Telefon) Point (62°13'55"S, 58°28'45"W), NNW to The Tower (a distinctive peak above Tower Glacier, 366.9 m at 62°12'50"S, 58°29'00"W), then continuing in a straight line to encompass the base of Jardine Peak (62°10'05"S, 58°29'45"W). This line then runs NE to the sea (Admiralty Bay) where it bisects the coast immediately north of Rakusa Point (62°09'45"S, 58°27'25"W). Thereafter the Area is all the land which is bounded by the coastline south towards Demay Point (62°12'50"S, 58°25'15"W), then SW along the coast to Patelnia (Telefon) Point.

The western edge of the Area is adjacent to the Warsaw Icefield, with the north-western corner being ice-free in the vicinity of Jardine Peak. Outside of the northern boundary is a small area of ice-free land. Steep cliffs overlook a narrow beach and the waters of Ezcurra Inlet in the north-western section of the ice-free area; and in the north-eastern section there are occasional shallow beaches which extend to the sea, where H. Arctowski station is located, 400 m. outside of the Area. Three small glaciers, Ecology, Baranowski, and Tower, descend from the Warsaw Icefield onto these shores.

There are markers on the northern edge of the Area where the site has a boundary on land, immediately south of H. Arctowski station. The western boundary is not delineated by virtue of fact that it traverses a high (ca. 350 m) mobile icefield. The coastline defines the Area's eastern and southern stretches.

Twelve bird species regularly nest in the Area: Adélie Penguin (*Pygoscelis adeliae*) - 18838 nests in 1988/89 and 15151 nests in 1994/95; Chinstrap Penguin (*Pygoscelis antarctica*) - 3353 nests in 1988/89 and 2545 nests in 1994/95; Gentoo Penguin (*Pygoscelis papua*) - 2239 nests in 1988/89 and 2287 nests in 1994/95; Giant Petrel (*Macronectes giganteus*) - 315 nests in 1988/89 and 201 nests in 1994/95; Cape Pigeon (*Daption capense*) - 43 nests in 1988/89 and 290 nests in 1994/95; Wilson's Storm Petrel (*Oceanites oceanicus*); Black-bellied Storm Petrel (*Fregetta tropica*); Sheathbill (*Chionis alba*) - 9 nests in 1988/89 and 2 nests in 1994/95; McCormick's Skua (*Catharacta maccormicki*) - 38 nests (together with *C. antarctica*) in 1988/89 and 64 territories in 1994/95; Dominican Gull (*Larus dominicanus*) - 52 nests in 1988/89 and 46 nests in 1994/95; Antarctic Tern (*Sterna vittata*) - 188 nests in 1988/89 and 132 nests in 1994/95.

Moreover 4 alien bird species from South America have been observed, as stray visitors but which stayed in the Area only temporarily: Black-necked Swan (*Cygnus melanocoryphus*), South Georgia Pintail (*Anas georgica*), White-rumped Sandpiper (*Calidris fuscicollis*), Wilson's Phalarope (*Phalaropus tricolor*).

Continuing long-term ecological studies in this area are aimed principally at penguins and associated species.

Elephant Seals (*Mirounga leonina*), Fur Seals (*Arctocephalus gazella*) and Weddell Seals (*Leptonychotes weddelli*) haul out at numerous sites. Leopard Seals (*Hydrurga leptonyx*) and Crabeater Seals (*Lobodon carcinophagus*) are frequently seen on the ice floes during the winter. Breeding of Elephant Seals and Weddell Seals are observed in the Area.

The ice-free areas within the Area (20% of its surface) are formed by recent and raised pebble-cobble beaches, recent and sub-recent moraines, mountainous peninsula, rocky islets and spurs. The terrain is heavily shaped by glacial, nival and coastal marine processes.

The Area vegetation is typical of the Maritime Antarctic. Ice-free terrain (20% of its surface) is only partly occupied by plants and thus the landscape is of a semi-desert character. Dry areas and rocks are dominated by lichens. Locally, flowering plants such as *Deschampsia* and *Colobanthus* are important, these species occupying fairly large areas particularly in the vicinity of H. Arctowski station and constitute one of the largest areas covered by these

species in the Antarctic. In the immediate vicinity of H. Arctowski station, there is an alien grass, *Poa* sp. The vegetation from 0 to 60 m a.s.l. is dominated by *Bryophyta* and flowering plants, and above 60 m a.s.l. by lichens.

6(ii) *Restricted zones within the Area*

There are no prohibited zones within the Area, but access to bird breeding areas should be restricted during the breeding season (September to March) and damage to vegetation should be avoided by restricting access to the marked path.

6(iii) *Location of structures within the Area*

The following are the structures in the Area (Map C):

- P. J. Lenie field camp (United States of America); consisting of a small hut (for four persons), on the beach between Llano Point and Sphinx Hill which has been in use during the summer since 1977
- a caravan (belonging to Poland) functioning as a summer field laboratory for two persons, south of Demay Point.

6(iv) *Location of other Protected Areas within close proximity*

The Western shore of Admiralty Bay, SSSI No. 8, is a part of Antarctic Specially Managed Area (ASMA), Admiralty Bay, King George Island (South Shetland Islands).

SSSI No. 5, Fildes Peninsula and SSSI No. 33, Ardley Island, lie about 27 km west of western shore of Admiralty Bay. SSSI No. 13, Potter Peninsula, lies about 15 km to the west and SSSI No. 34, Lions Rump, lies about 20 km to the east.

7. Permit Conditions

Permits may be issued only by appropriate national authorities as designated under Annex V Article 7 of the Protocol on Environmental Protection to the Antarctic Treaty.

Conditions for issuing a permit for the Area are that:

- it is issued only for scientific study of the ecosystem, or for compelling scientific reasons that cannot be served elsewhere,
- the actions permitted will not jeopardize the natural ecological system or scientific values of the Area,
- any management activities are in support of the objectives of the Management Plan,
- the actions permitted are in accordance with this Management Plan,
- the permit, or a copy, must be carried within the Area,
- a report is supplied to the authority named in the Permit, and
- the Permit shall be valid for a stated period.

7(i) *Access to and movement within the Area*

The access to the Area is restricted to the northern end, near H. Arctowski station. Access from the sea is only permitted by inflatable boats. No access to the beach area between Llano Point and Sphinx Hill from the sea is permitted, except to resupply the P. J. Lenie field camp, or in an emergency. Access from the sea to areas further south is permitted but the visitors should at all times avoid disturbance to birds and seals or damage of vegetation.

Landing of helicopters within the Area is permitted only on the glaciers, except in an emergency. Helicopters are allowed to land at H. Arctowski station only, on a special designed helipad. No helicopter or fixed wing aircraft is permitted to fly over the Area below

250 m altitude above the highest point. All helicopters should maintain a distance of at least 500 m from the Area during take-off and landing at H. Arctowski station. To avoid flying over bird colonies, approach from and towards the sea, or over Warsaw Icefield, is recommended.

Pedestrian routes are designated (Map C) and marked within the Area. Persons on foot should at all time avoid disturbance to birds, seals and damage of vegetation.

Vehicles are prohibited in the Area.

7(ii) Activities which are or may be conducted within the Area; including restrictions on time and place

- Scientific research which cannot be conducted outside the Area, and which will not damage or interfere with any aspect of the Area's biological, geological, or aesthetic values.
- Essential management activities, including monitoring.

7(iii) Installation, modification or removal of structures

No further structures are to be erected in the Area, or scientific equipment installed, except for essential scientific or management activities, as specified in the Permit.

7(iv) Location of the field camps

Parties should not normally camp in the Area. Both P. J. Lenie field camp and the Polish caravan provide research accommodation, by agreement. The caravan can accommodate up to two persons.

7(v) Restrictions on materials and organisms which may be brought into the Area

No living animals or plant material shall be deliberately introduced into the Area.

Poultry product shall not be taken into the Area. Any chemical which may be introduced for compelling scientific purposes specified in the Permit, shall be removed from the Area at, or before, the conclusion of the activity for which the permit was granted.

Fuel, food and other materials are not to be stored in the Area except in support of activities for which the Permit has been granted. All such materials should be kept to a minimum, made secure against the elements and removed when no longer required.

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

Taking or harmful interference is prohibited, except in accordance with a Permit. When animal taking or harmful interference is involved this should be in accordance with the SCAR Code of Conduct for Use of Animal for Scientific Purpose in Antarctica, as a minimum standard.

7(vii) Collection and removal of anything not brought into the Area by the Permit holder

Material may be collected or removed from the Area only in accordance with a Permit. This includes rock specimens, whale bones, artefacts of the whaling industry, and any item belonging to or attached to any aspect of the historical uses of Admiralty Bay which are not specifically described herein.

Debris of human origin may be removed from the beaches of the Area. Exceptionally, dead specimens of fauna or flora may be removed for laboratory examination without a Permit.

7(viii) Disposal of waste

All waste shall be removed from the Area, with the exception that human waste should be deposited in the sea.

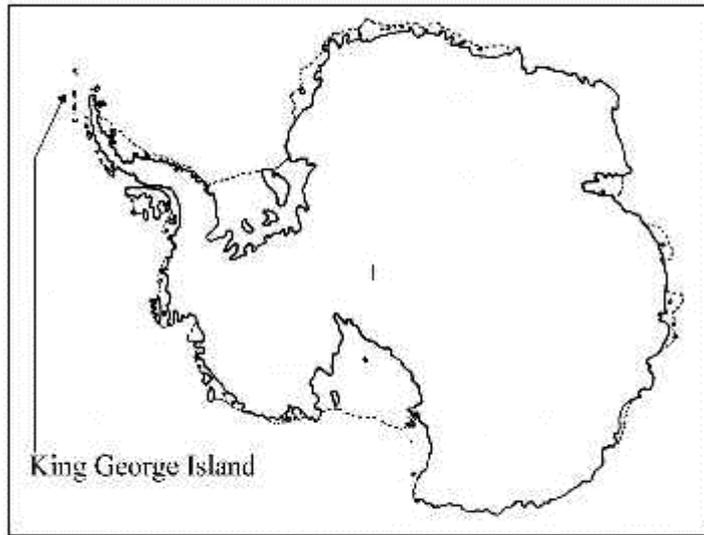
7(ix) Measures that may be necessary to ensure that the aims and objects of the Management Plan continue to be met

The Permit, or a copy, must be carried within the Area.

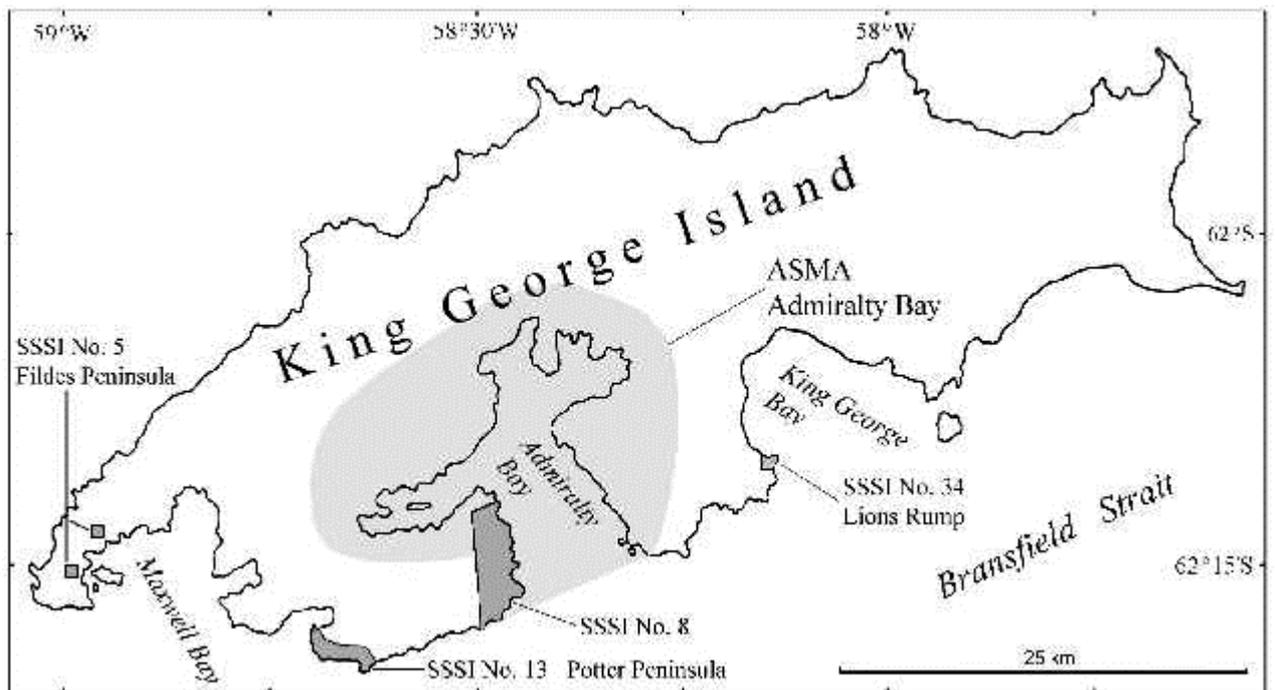
Permits may be granted to enter the Area to carry out biological monitoring and site inspection activities, which may involve the collection of small samples for analysis or audit, or to erect or maintain signposts, or other protective measures.

7(x) Requirements for reports

The principal Permit Holder for each issued Permit shall submit a report of activities conducted in the Area. The Visit Report form suggested by SCAR provides a suitable model. This report shall be submitted to the authority named in the Permit as soon as practicable, but no later than 6 months after the visit has taken place. Such reports should be stored indefinitely and made accessible to interested Parties, SCAR, CCAMLR and COMNAP if requested, to provide the documentation of human activities within the Area, which could be utilized for good management.



Map A. Location of King George Island.



Map B. Western shore of Admiralty Bay, SSI No. 8, in relation to Antarctic Specially Managed Area (ASMA) and other SSSI's on King George Island.



Map C. Western Shore of Admiralty Bay, SSSI No. 8.