Antarctic Specially Protected Area No. 120 (Specially Protected Area No. 24)
Pointe-Geologie Archipelago

1. Description Of Values To Be Protected

Four islands and the breeding site of Emperor penguins are proposed for a new Specially Protected Area on the ground that it provides a representative sample of aesthetic, biological and geological values of terrestrial Antarctic ecosystems. One mammal specie, Weddell seal (*Leptonychotes weddeili*) and various bird species are nesting here: Emperor penguin (*Aptenodytes forsteri*); South Polar skua (*Catharacta maccormicki*); Adelie penguin (*pygoscelis adeliae*); Wilson's storm petrel (*Oceanites oceanicus*); Southern giant petrel (*Macronectes giganteus*); Snow petrel (*Pagodroma nivea*); Capy petrel (*Daption capensis*).

Well-marked hills display asymetrical transverse profiles with gently dipping northern slopes compared to the steeper southern ones. The terrain is affected by numerous cracks and fractures leading to very rough surfaces. The basement rocks mainly consist of sillimanite, cordierite and garnet-rich gneisses which are intruded by abundant dikes of pink anatexites. The lowest parts of the islands are covered by morainic boulders (from a few centimeters to more than a meter across).

Long-term research and monitoring programmes have been continuing a long time already (since 1952 or 1964 according to the species). A data base implemented in 1981 is directed by C.E.B.C. (Centre d'Etudes biologiques de Chize).

The Emperor penguins breeding colony is a site of Special Scientific Interest which could further be included in the Convention on Conservation of Antarctic Marine Living Resources Environmental Monitoring Programme (CCAMLR/CEMP) in order to achieve the Convention's requirements.

2. Aims And Objectives

Management of Point-Geologie area aims to:

- prevent unnecessary disturbance on the area face to the growing flux of cruising tourist ship.
- permit research of a compelling scientific nature which cannot be served elsewhere.
- avoid major change to the structure and composition of flora and fauna and the association of different species of vertebrates harboured in the area, which therefore constitutes one of the most representative for both faunistic and scientific interest on Adelie coast.
- permit research on ethological, ecological, physiological and biochemical programmer in progress especially those related to demographic monitoring and impact assessment of surrounding human activities comprising tourism. Physiology and biochemistry programmes relating to fasting mechanisms and thermogenesis of emperor penguins could be pursued in compliance with permit provisions.
- permit research in geology with a particular attention to the programmation of visits, especially when thermomechanical means for sampling are required.

3. Management Activities

The Plan is kept under review to ensure that the values of the area are wholly protected. Any direct management action to the area would be subject to an environmental impact assessment before being undertaken.

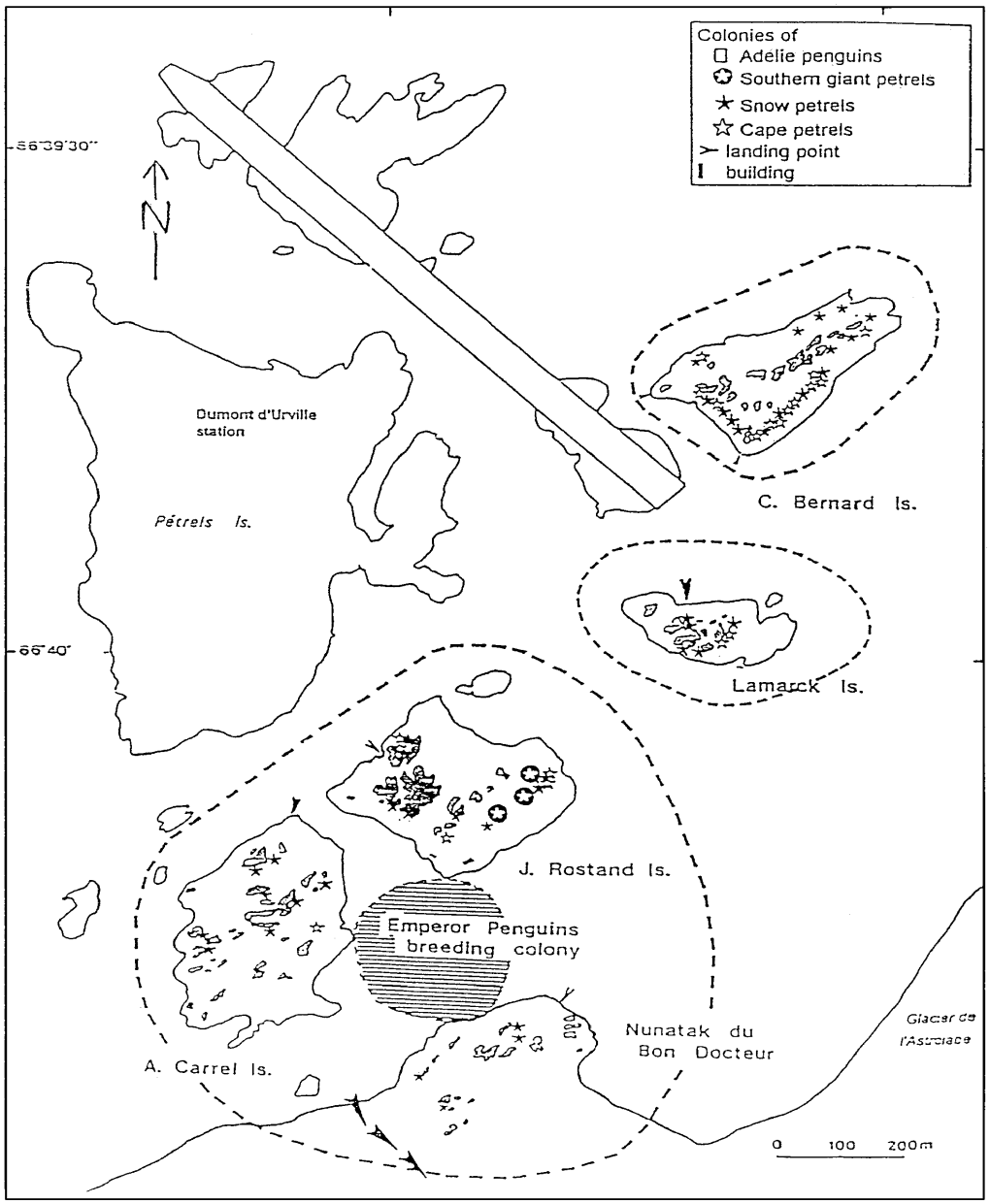
Inspection visit are restricted to essential management purposes.

4. Period Of Designation

The Area is designated for an indefinite period.

5. Maps

Map A shows with dotted lines location of each island and other zones of the area inside Pointe-Geologie Archipelago.



ASPA 120
Map A*

6. Description Of The Area
i) Geographical coordinates, boundary markers and natural features

Jean ROSTAND. Alexis CARREL. LAMARCK and Claude BERNARD Islands. Bon Docteur Nunatak and Emperor penguins breeding colony are situated in the heart of Pointe-Geologie Archipelago, coastal area of Adelie Land (140° to 140°02'E; 66°39'30" to 66°40'30"S).

The area consists of the southernmost exposure of the Pointe-Geologie Archipelago, between the Petrels Island and the Western edge of the Astrolable glacier. It is a very large ice free ground within Adelie Land.

As a whole, the surface of the outcropping rocks does not exceed 2 square kilometers. The highest points are distributed along NE-SW ridges (C1. Bernard Island: 47.6m; J.B. Lamarck Island: 22.2m; J. Rostand Island: 36.39m; Carrel Island: 28.24m and Nunatak: 28.50m). During the summer, only the southern flanks of the islands are still covered by compressed snow caps. There are no boundary markers since natural features delimit the wholly protected islands. However, makers could further be set up in Nunatak. No tracks or roads exist in the area.

Table 1. Annual breeding area of seabirds in the Specially Protected Area (SPA). The population breeding within the SPA is given compared to the Pointe Geologie (PG) population (from Thomas 1986).

Islands	Emperor penguin	Adelie penguin	South polar skua	Snow petrel	Cape petrel	Wilson's storm petrel	Southern giant petrel
Claude Bernard	-	3421	5	153	192	178	-
Lamarck	-	1007	1	38	15	45	-
Jean Rostand	-	4793	3	53	18	35	11
Alexis Carrel	-	4075	6	25	-	72	-
Nunatak	-	1961	1	11	-	41	-
Emperor Penguin Breeding Colony	3119	-	-	-	-	-	-
Total	3119	15257	16	280	225	371	11
%SPA/A	100	71	67	36	68	31	79

Table 2. Presence of birds on breeding colonies.

	Emperor penguin	Adelie penguin	South polar skua	Snow petrel	Cape petrel	Wilson's storm petrel	Southern giant petrel
First arrival	March	October	October	September	October	November	July
First laying	May	November	November	November	November	December	October
Last departure	January	March	March	March	March	March	April

Table 3. Sensibility to human disturbance and status of the Pointe Geologie populations.

	Emperor penguin	Adelie penguin	South polar skua	Snow petrel	Cape petrel	Wilson's storm petrel	Southern giant petrel
Sensibility to human disturbance	High	Medium	Low	Medium	High	High	High
Status 1952-1984	Decreasing	Increasing	Stable	?	?	?	Decreasing
Status 1984-1993	Stable	Increasing	Stable	Stable	Stable	?	stable

ii) Identification of restricted or prohibited zones

Access to every part of the area is prohibited unless authorized by a permit.

Location of breeding colonies is shown on the map. The birds are present in colonies from October to March, except Emperor penguins, which breed in winter (Table 2). Their sensibility to human disturbance varies depending on the species (Table 3). The implantation of the Dumont d'Urville station has resulted in a drastic decrease of the populations of Emperor penguins and Southern giant petrels in Pointe-Geologie Archipelago. For the last ten years the breeding areas of these birds have been protected and populations are now consecutively stable (Table 3).

No one, except permit holders, is allowed to approach or to disturb the Emperor penguin colony in any manner when eggs are incubating from mid-July, to mid-December when the chicks fledge. The particularly sensitive Emperor penguins are equally protected beyond the definite limits of their breeding area since the colony is not always located in the same place.

The southeastern part of Jean Rostand Island is designated as a Restricted Zone in order to preserve the remaining breeding colony of Southern giant petrels. All access to

the Restricted Zone is prohibited during the breeding period from August to February. The access is restricted to one ornithologist permit holder in order to monitor the population three times each year. The boundary of the Restricted Zone is defined by a 20 meters-width buffer zone around the colony and is marked on the soil. The prohibition of access to the Restricted Zone shall be for an indefinite period, but shall be subject to reevaluation each time the Management Plan is reviewed.

iii) Location of structures in the Area

Prevost hut and a shelter are located on Rostand Island. There are no other buildings anywhere else in the Area.

iv) Location in or near the area of other "Antarctic Specially Protected Areas " or "Antarctic Specially Managed Areas"

The region nearby is being considered for an "Antarctic Specially Managed Area" (ASMA) including Dumont d'Urville station and other surrounding areas of activities.

7. Conditions Under Which Permits May Be Granted

i) Access to and movement within the Area

No helicopters, nor terrestrial vehicles are authorised within the Area. No overflights over the Area, either by helicopters or other aeroplanes are authorized.

Access to the area is therefore only permitted by foot or by zodiacs (in summer).

However, very rare departures of terrestrial vehicles from Nunatak are allowed. Only when sea ice conditions hinder from proceeding otherwise and with special attention to the presence of birds in the area.

Access to and movement within the area shall, in any case, be limited in order to avoid unnecessary disturbance to birds, especially by crossing their pathways and to ensure that breeding areas or their access are not damaged or endangered.

ii) Activities which are or may be conducted within the Area, including restrictions on time anyplace

- compelling scientific activities which cannot be conducted elsewhere and for necessary management activities with regard to the special provisions relating to Emperor penguins and the Restricted Zone of Southern Giant Petrels (see 6.ii).
- visitors granted entry in the Area by a permit shall ensure that no disturbances will occur from their visits to monitoring programmer.

iii) Installation, modification or removal of structures

No structures are to be erected in the area or scientific equipment installed except for essential scientific or management activities as specified in the permit.

iv) The location of field camps

Only safety tents should be erected with the intent of causing the least damage or disturbance to fauna.

v) Restriction on materials and organisms which may be brought into the Area

- no living animals or plant materials shall be deliberately introduced into the Area

- no poultry products, including food products containing uncooked dried eggs should be taken into the Area
- no chemicals shall be brought into the Area, except chemicals which may be introduced for a compelling scientific purpose as specified in the permit. Any chemical introduced 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 deposited in the area, unless required for essential purposes connected with the activity for which the permit has been granted. Such materials introduced are to the removed when no longer required. Permanent depots are not permitted.

vi) The taking of or harmful interference with flora and fauna

Taking of or harmful interference with native flora and fauna is prohibited, except in accordance with a permit. Where animal taking or harmful interference is involved, this should be in accordance with the SCAR Code of Conduct for the Use of Animals for Scientific Purposes in Antarctica, as a minimum standard.

vii) The collection or removal of anything not brought into the Area by the permit holder

Collection or removal of anything not brought into the Area by a permit holder is prohibited unless specified in,the permit for scientific or management purposes. However, debris of man-made origin may be removed from the area and dead or pathological specimens of fauna or flora may be removed for laboratory examination.

viii) The disposal of waste

All non-human wastes shall be removed from the Area.

ix) Measures that may be necessary to ensure that the aims and objectives of the Management Plan can continue to be met

Permits may be granted to enter the Area to carry out monitoring, other scientific programrnes and sites inspection activities, which may involve the collection of small amounts of biological materials and animals.

Permits shall specify the maximum number of persons allowed entry at one time.

Visits to the Area should be kept to the minimum necessary to achieve the scientific and management objectives.

x) Requirements for reports of visits to the Area

Parties should ensure that the principal holder of each permit issued submit to the appropriate authority a report describing the activities undertaken. Such reports should include, as appropriate, the information identified in the Visit Report form suggested by SCAR. Parties should maintain a record of such activities and, in the Annual Exchange of Information, should provide summary descriptions of activities conducted by persons subject to their jurisdiction, in sufficient detail to allow evaluation of the effectiveness of the management plan. Parties should, wherever possible, deposit originals or copies of such original reports in a publicly accessible archive to maintain a record of usage, to be used both in any review of the management plan and in organising the scientific use of the Area.