



# Management Plan

## Site of Special Scientific Interest No 28 SOUTH BAY, DOUMER ISLAND, PALMER ARCHIPELAGO

### 1. Description of Site Physical features

Doumer Island lies at the south-west entrances to Neumayer Channel. It is separated from Wiencke Island by the Peltier Channel. South Bay lies on the south coast of Doumer Island. The site consists of a small area of coastal and subtidal benthos down to 45 m depth as follows:

Lat. 64°51'42"S to the North, between Long. 63°34'00"W and Long. 63°35'20"W, and to the South by a diagonal line that starts at a point 100 m north of the Refuge (Sub-base Yelcho) on the southern shore of South Bay and extends to Lat. 64°51'58"S and Long. 63°34'00"W Boundaries are shown on the attached map.

#### Biological Features

Four different kinds of bottom surface have been described: rocky with algae growth, from 0 to 30 m depth; predominantly rock, covered by algae, silt and large quantities of sponges, from 30 to 110 m depth; mixed bottoms with predominantly deposits of mud and few rock outcrops with sponges, from 100 to 150 m depth; soft bottoms of silt and mud, from 150 to 200 m depth, corresponding to the deepest depression, occur near the centre of the bay just outside the site. The benthic macrofauna richness increases with depth and is accentuated in bottoms with a steep slope. Ice scour exerts a strong influence on the patterns of distribution and the abundance of benthic fauna. Seals, in particular Weddell seals, *Leptonychotes weddellii*, visit the area to feed. Cetaceans, like killer whales, *Orcinus orca* and humpback whales, *Megaptera novaeangliae* enter the bay. Many Antarctic seabirds occur transiently in the site.

### 2. Reason for designation

The site is the subject of a long-term research programme on marine ecology and the purpose of designating it is to reduce, as far as is possible, the risk of accidental interference which might jeopardize these scientific investigations.

### 3. Outline of research

The research covers the study of the relationships of the marine organisms in the area. This was started by SCUBA diving in 1972. Since 1981 advanced experiments to elucidate community structure and functioning have been in progress and will continue in the future.

### 4. Date of expiry of designation

31 December 1997

### 5. Access points

None specified. The area is not affected by the passage of boats.

### 6. Pedestrian and vehicular routes

Not applicable

### 7. Other kinds of scientific investigation that would not cause harmful interference

Scientific research other than that disturbing benthic habitats and communities.

### 8. Scientific sampling

Collection of samples should be made only for compelling scientific purposes.

### 9. Other restraints

The dumping of wastes from ships or boats and bottom trawling should be avoided. Anchoring should be avoided except for compelling reasons.

