

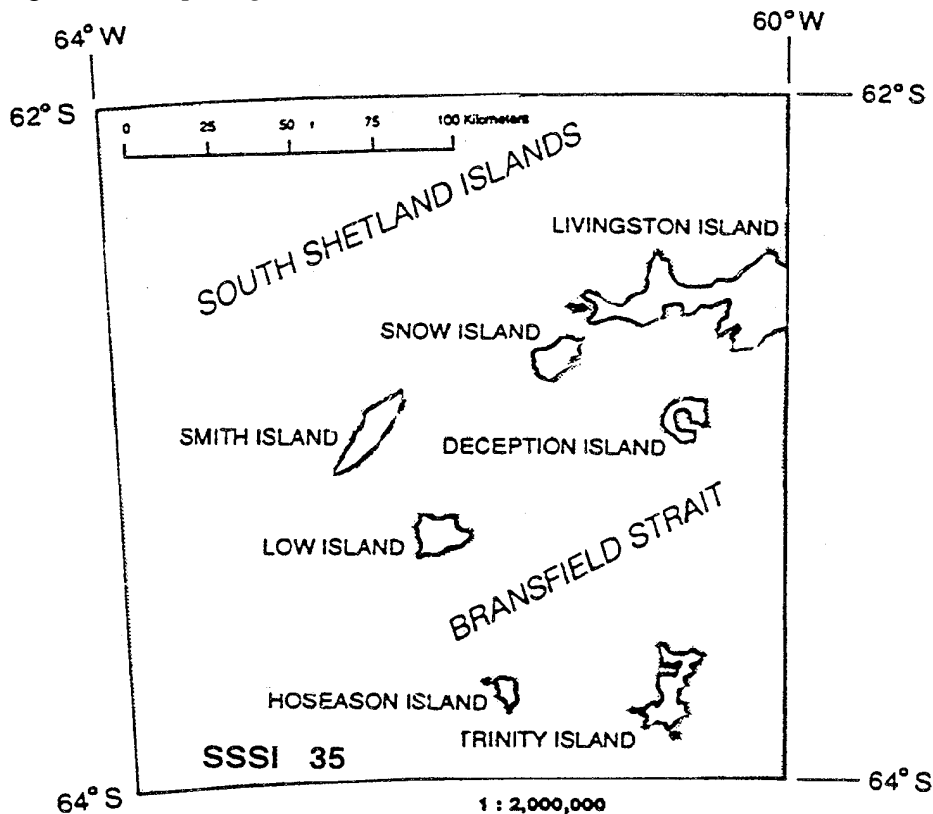
Antarctic Specially Protected Area No. 152 (Site of Special Scientific Interest No. 35)

Western Bransfield Strait, off Low Island, South Shetland Islands

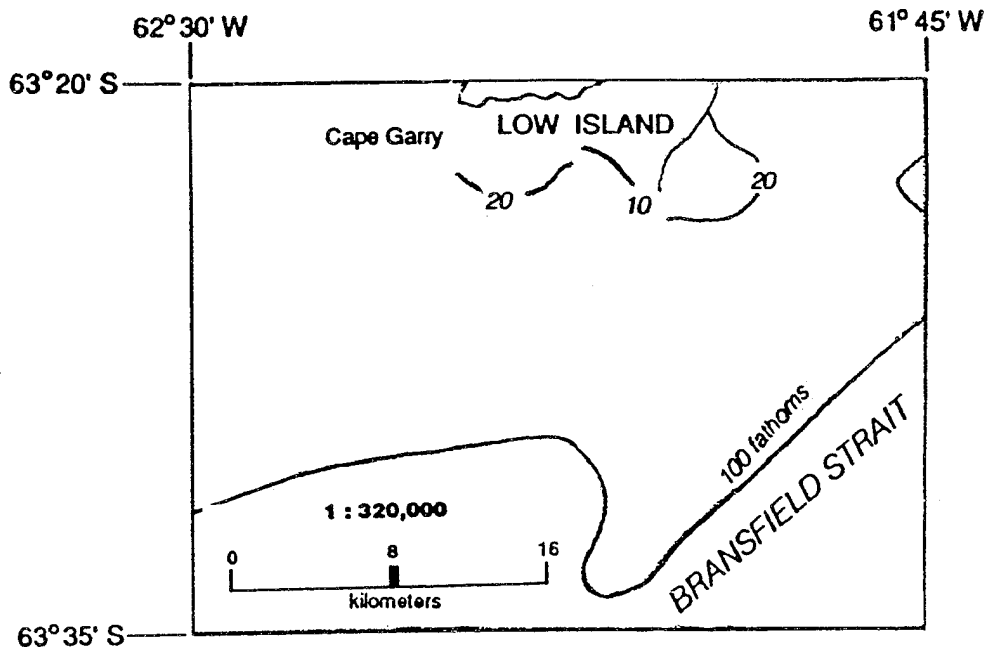
1. *Geographical location.* The Site is located off the southern shore of Low Island, western South Shetland Islands, between latitudes 63°20'S and 63°35'S and between longitudes 61°45'W and 62°30'W (with reference to U.S. Defense Mapping Agency Hydrographic/Topographic Center Chart No. 29121). A small portion of the Low Island landmass/snowmass projects into the northern boundary of this domain; here the northern limit of the Site will be the associated intertidal zone. East, west, and south of the island the bottom slopes gently from the intertidal zone to depths of approximately 200 m and then drops off rapidly near the boundary limits of the Site.

2. *Management Plan*

i. *Description of site.* The bottom consists of a sand/mud/cobbled-rock matrix and supports a rich benthos, e.g. numerous fish species, invertebrates (sponges, anemones, annelids, molluscs, crustaceans, asteroids, ophiuroids, echinoids, holothurioids, brachiopods, tunicates), and marine plants, in several distinct communities. Fish species commonly collected near Low Island include *Notothenia gibberifrons*, *Chaenocephalus aceratus*, *Harpagifer bispinis*, *Parachaenichthys charcoti*, *Trematomus newnesi*, and *N. corriceps neglecta*. Species rarely found at Low Island include *Pseudochaenichthys georgianus*, *Champscephalus gunnari*, and *Chionodraco rastrispinosus*. In addition, the Low Island shelf appears to be a major spawning ground for several fish species (e.g. *N. corriceps neglecta* and the ice fish *C. aceratus*).



ASPA 152
Map A*



ASPA 152
Map B*

- ii. *Reason for designation.* The shallow shelf south of Low Island is one of only two known sites in the vicinity of Palmer Station that are suitable for bottom trawling for fish and other benthic organisms. From an ecological standpoint, the Low Island site offers unique opportunities to study the composition, structure, and dynamics of several accessible marine communities. The Site, and in particular, its benthic fauna, is of exceptional scientific interest and requires long-term protection from potential harmful interference.
- iii. *Outline of research.* Studies of this area by scientists from Palmer Station began in the early 1970s. The current research programme uses fish from Low Island to study the biochemical adaptations that enable proteins to function at low temperatures and physiological adaptation of muscle and energy metabolism to low temperatures. These studies are conducted each year during the austral summer.
- iv. *Date of expiry of designation.* 31 December 2001.
- v. *Access points.* Any boundary point may be used for entry. Free passage of ships through this Site is permitted.
- vi. *Pedestrian and vehicular routes.* Not applicable.
- vii. *Other kinds of scientific investigations that would not cause harmful interference* Ecological studies of the sea floor and its benthos by any method should be restricted to the minimum necessary for research activities and should be carried out with minimal disturbance of the Site.
- viii. *Scientific sampling.* Sampling of the sea floor and its benthos by any method should be restricted to the minimum necessary for research activities and should be carried out with minimal disturbance of the Site.
- ix. *Other restraints.* Ships should, where possible, avoid anchoring within the boundaries of the Site.