

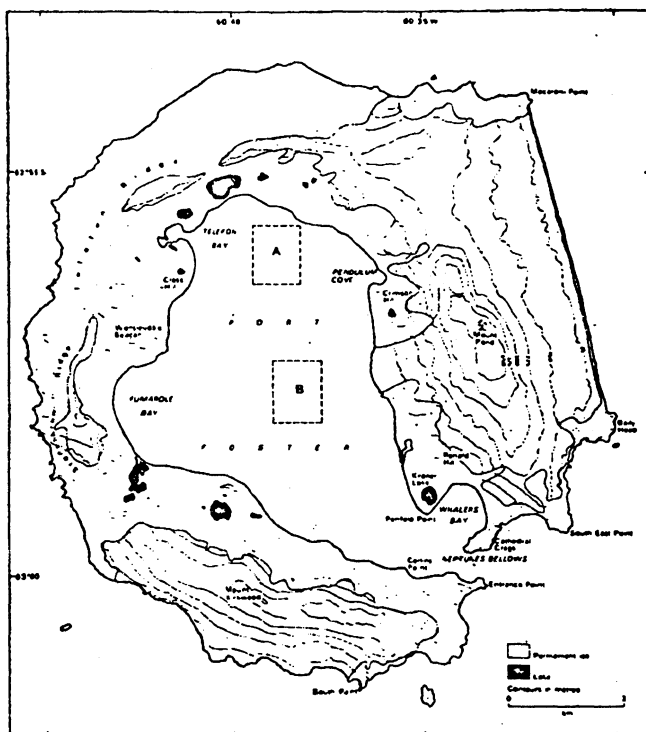
Antarctic Specially Protected Area No. 145 (Site of Special Scientific Interest No. 27)

Port Foster, Deception Island, South Shetland Islands

i. *Description of the site*

Physical features. The site comprises two small areas of benthic habitat located in Port Foster as follows: Benthic habitat A: between 50 and 150 m depths and the coordinates: lat 62°55.5'S long 60°38'00"W, lat 62°56.2'S long 60°37'00"W. Benthic habitat B: between 100 and 150 m depths and the coordinates: lat 62°57.2'S long 60°37'20"W, lat 62°57.9'S long 60°36'20"W. Deception Island is a caldera formed by subsidence of a group of Cenozoic volcanoes superimposed along radial faults. Port Foster is an almost entirely enclosed body of water which receives large volumes of fresh water during periods of melt. In several places there is geothermal activity. The bottom of habitat A consists of coarse to medium-sized, poorly sorted volcanic sediment, and that of habitat B of medium to fine, better sorted volcanic ash.

Biological features. The composition of the benthic assemblages has varied greatly since the volcanic eruption of December 1967. The most recent data indicate a high dominance of polychaetes, both in terms of numbers and biomass. The most conspicuous macrofauna in dredge samples include the nemertean *Lineus* sp and *Paraborlasia corrugatus*, the isopod *Serolis kemp*; the bivalve *Yoldia eightsii*, the echinoids *Abatus agassizi* and *Sterechinus neumayeri*, the asteroids *Lysasterias perrieri* and *Odontaster validus*, the ophiuroid *Ophionotus victoriae* and the holothurian *Ypsilothuria* sp.



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Map A*

- ii. *Reason for designation.* The area is of exceptional ecological interest because of its actively volcanic character. The two habitat areas are subject to long-term research programmes and the purpose in designating them is, as far as possible, to reduce the risk of accidental interference which could jeopardize these scientific investigations.
- iii. *Outline of research.* Following the volcanic eruption of December 1967 at Deception Island, a long-term programme of research was initiated at Port Foster to study the mechanism and paths of the re-establishment of the benthic communities. Community studies to observe biota changes, augmented with other relevant studies to suit the requirement of a long-term biological monitoring programme, are performed periodically.
- iv. *Date of expiry of designation.* 31 December 1997.
- v. *Access points.* Although access points as such are not designated, free passage of ships through these areas is not in any way prejudiced.
- vi. *Pedestrian and vehicular routes.* Not applicable.
- vii. *Other kinds of scientific investigation that would not cause harmful interference.* Scientific research other than that disturbing benthic habitats and communities.
- viii. *Scientific sampling.* Samples from the benthic habitats should be taken only for compelling scientific purposes.
- ix. *Other restraints.* The dumping of waste from ships and bottom trawling should be avoided. Anchoring should be avoided except in compelling circumstances. Siting of bottom devices should be avoided.