

BRITISH ANTARCTIC SURVEY  
BAS 25 Series

BAS 25 Sheet 3

RYDER BAY

Scale 1:25 000

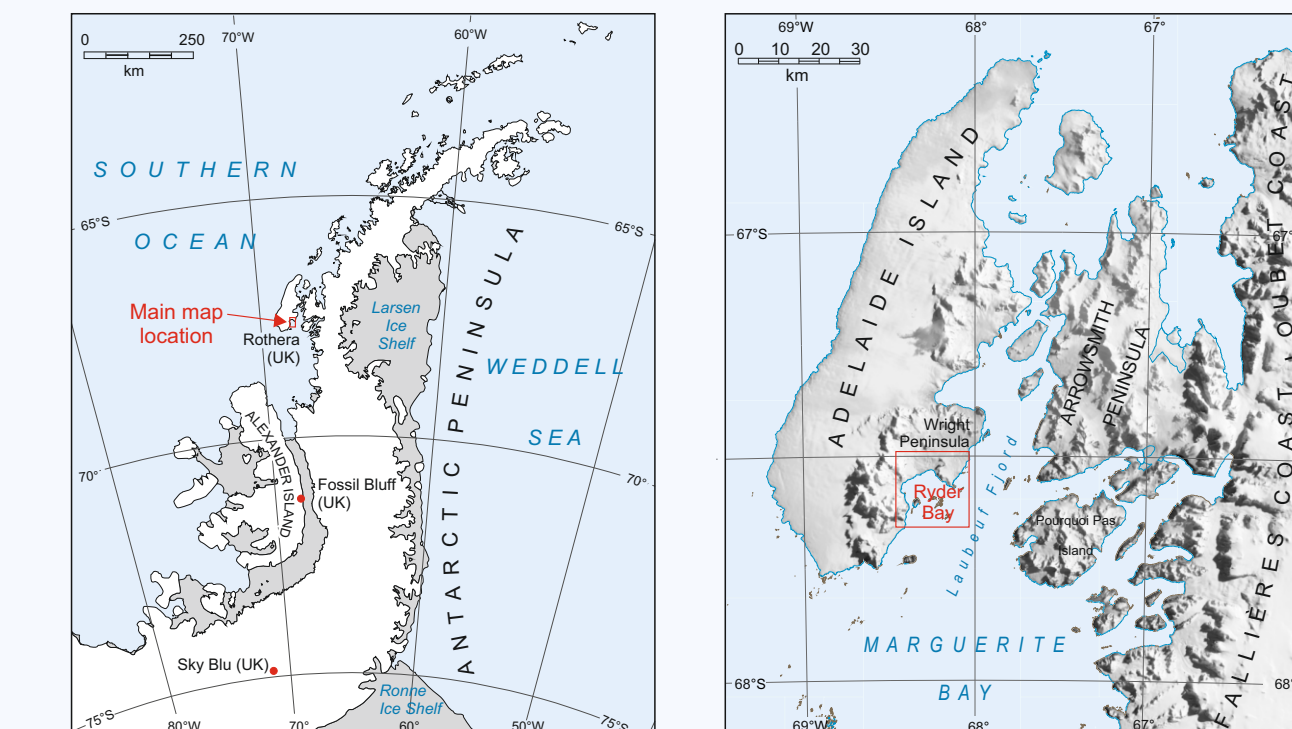


Reptile Ridge and Ryder Bay (M. Gray)



CAMBRIDGE, UK 2006

LOCATION MAPS



DATA SOURCES AND REFERENCES

**Images:** The background image mosaic was compiled from colour vertical aerial photographs (BAS/5/05), acquired 20 January 2005. A 3D surface model was derived using photogrammetry and the photographs were 'draped' over it to create distortion-free images. These images were then joined to form the back-drop for this map.

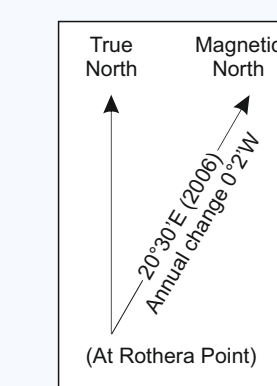
**Topography:** Coastline: Interpolated from vertical aerial photographs (BAS/5/05). Spot heights and survey points: GPS survey points obtained using high precision geodetic Trimble GPS receivers, with resulting RMS-error below 10cm. See BAS GPS survey field report 2004-6, for more details. Spot heights derived photogrammetrically. Contours: Contours derived photogrammetrically; approximate contours derived from Antarctic Digital Database and adjusted to fit image mosaic.

**Bathymetry:** Bathymetry: Compiled from UK Hydrographic Office Admiralty Chart No. 3462 (1999) and BAS Sostanap Sheet 1B (1995). Shore areas: Admiralty Chart. Offshore Rocks: Admiralty Chart, BAS Sostanap Sheet 1B and interpreted from BAS/5/05 aerial photographs.

**Toponymy:** Placenames selected from: Antarctic Placenames Committee Gazetteer: [www.antarctica.ac.uk/Resource/AF/Placenames/](http://www.antarctica.ac.uk/Resource/AF/Placenames/)

Magnetic Variation (declination): ICGF-01 database, NOAA National Geophysical Data Centre, [www.ngdc.noaa.gov/geomag/geomag.jsp#Declination.jsp](http://www.ngdc.noaa.gov/geomag/geomag.jsp#Declination.jsp)  
Heights in metres above mean sea level.  
Vertical datum is EGM96. <http://earth-info.nga.mil/GandG/wgs84/gravitymod/wgr96/inpt.html>

**CAUTIONS:** Absence of visible crevasses does not necessarily indicate a crevasse-free area. Bathymetry and offshore rocks not for navigation purposes.



Projection: Lambert Conformal Conic, Standard parallels at 67°33'S and 67°35'S, Central Meridian at 68°07'W, Horizontal datum WGS84

Ryder Bay was discovered and first surveyed in 1909 by the French Antarctic Expedition (FRAE) under Dr. Jean B. Charcot. It was rediscovered in 1938 by the British Graham Land Expedition (BGLE) led by John R. Rymill and in 1948 by the Falkland Islands Dependencies Survey (FIDS). The bay is named after Lieut. C. D. Ryder, second mate on the *Thetis* during the BGLE, 1934-37. Léonie Island is the largest of the group of islands lying in the entrance to Ryder Bay and was named by the FRAE. The BGLE selected the coverage of the name to the entire group.

Rothera Point was named after John M. Rothera, FIDS surveyor at Horseshoe Island station in 1957 and at Detalle Island in 1958. Rothera is now the British Antarctic Survey's logistics centre for the Antarctic Peninsula and home to well-equipped laboratories and facilities for a wide range of research, including biology, geoscience, glaciology and atmospheric sciences. It is also the main air facility for fieldwork, depot laying, airborne survey and links to the Falkland Islands and South America. The station was established in 1975 and the opening of a 900 metres gravel runway and hangar in 1991-92 greatly improved access to the base. There is a maximum summer population of 130 scientists and support staff and an average winter population of 22.

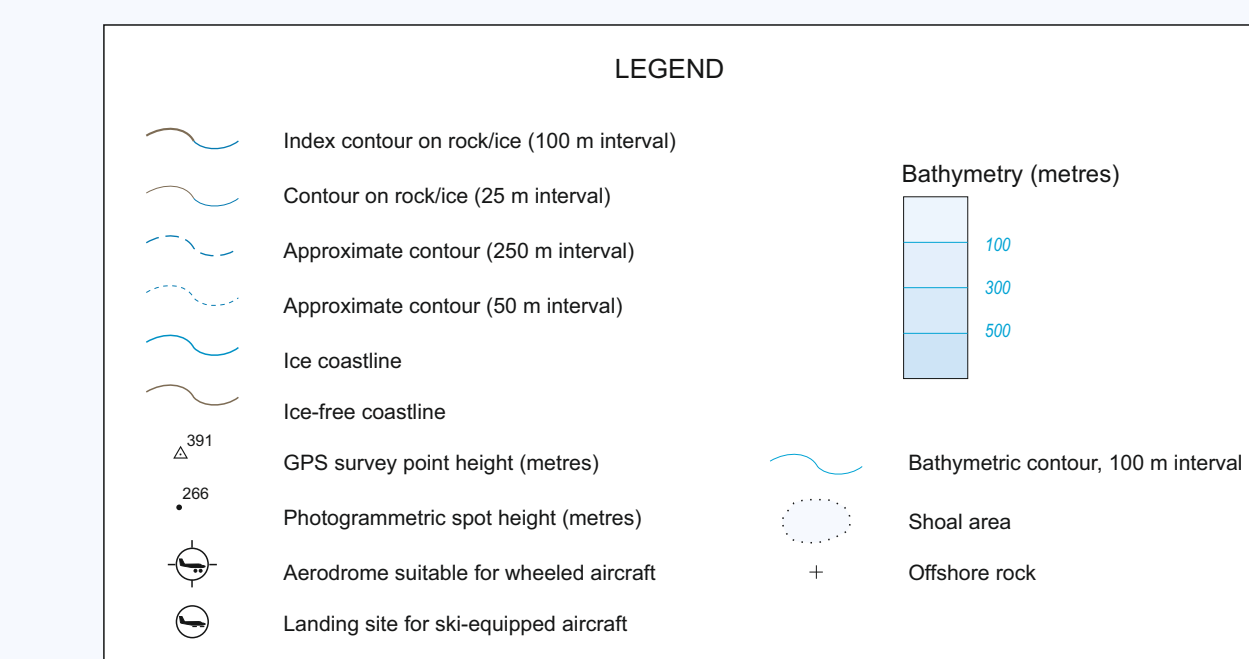
The northern part of Rothera Point was designated an Antarctic Specially Protected Area (ASPA) in 1996. The site serves to monitor the impact of the nearby research station on this Antarctic fielded ecosystem. Entry to ASPAs requires a permit.

The Léonie Islands are frequently visited by scientists staying at Rothera Research Station. Biologists study small plants and insects found on the islands to determine how life can survive in extreme environments and what enables colonisation on land. Marine biologists study the marine life of Ryder Bay to investigate how organisms adapt to changes in their environment.

In the summer months many wildlife species can be seen in Ryder Bay. The most common birds are Adélie Penguins, Seals and Antarctic Terns. Wedge Seals are the most common seal species, but Crabeater, Leopard and Elephant Seals are also seen in the area. Increasing numbers of Fur Seals arrive on the islands and Rothera Point towards the end of the summer. Orcas and Minke Whales also sometimes appear in Ryder Bay.

In the winter the bay often freezes over. Rothera staff travel across the sea-ice to the Léonie Islands on skidoos and can also access other parts of Adelie Island by travelling northwards across Wright Peninsula.

For further information see [www.antarctica.ac.uk](http://www.antarctica.ac.uk)



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