

**Forms of ferromanganese nodules and crusts in the North Penrhyn Basin**  
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**Organisms found with nodules**

Holothurian

Holothurian

Sponge

Holothurian

Sponge

Holothurian

Sponge

Holothurian

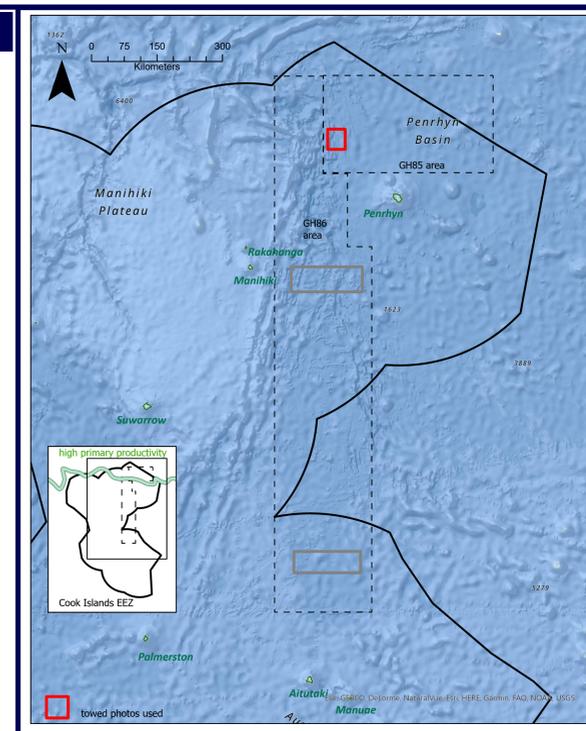
Sponge

burrows

**Elipsoidal Nodules**

In the north Penrhyn Basin elipsoidal and irregular nodules are more common and likely comprise most of the mineral resource. Compared to the south Penrhyn Basin, there is evidence of higher bio-activity through numerous casts and this reflects its more northerly position in equatorial high surface primary productivity zone.

The photos shown here were collected in 1985. Japanese researchers used a camera, suspended on a cable and lowered to the seabed. The camera was lifted slightly and dropped several times at stations, each station was several kilometers apart. As the camera approached the seabed a trigger weight fired a flash and had the camera take a picture. These were collected on old-style film, modern systems can take more and better quality images.



note: the camera trigger weight in all photos is 10 cm across

**Other nodules and crusts**

pebble form  
low abundance

partially buried  
crust

irregular mixed  
size

partially buried  
crust

partially buried  
crust and slabs

crust and slabby form

irregular form

irregular form

partially buried  
slabby form