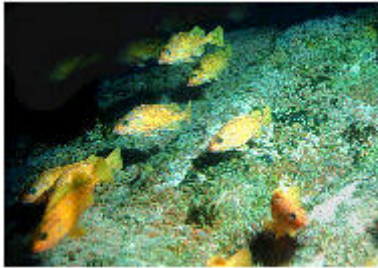


Marine Protected Areas

Pilot Project

BOWIE SEAMOUNT AREA



Seamounts are undersea mountains formed by volcanic activity. They rise steeply from the ocean bottom, not reaching the surface. Scattered throughout the world's oceans, seamounts support a rich assemblage of fishes, birds and other marine life.

Bowie Seamount is located 180 kilometres west of the Queen Charlotte Islands in the northeast Pacific, off the coast of British Columbia. Probably the shallowest seamount in Canada's Pacific waters, it rises from a depth of more than 3,000 metres to approximately 20 metres below the sea surface. At its base, the Bowie Seamount is more than 55 kilometres long and about 24 kilometres wide. Bowie is relatively young, having formed less than one million years ago. Scientists believe it was an active volcanic island during the last ice age.

Preliminary oceanographic studies have shown that the Seamount is biologically a very rich productive area. This productivity results partially from the unique oceanographic interactions between the Seamount and ocean currents. Together, they produce closed eddies and upwelled waters loaded with nutrients. Seamounts may be oceanic oases or islands of genetic isolation.

Underwater photography has recorded a large variety of organisms on the Bowie Seamount. The fish most commonly found at Bowie are rockfish, sablefish and Pacific halibut. It is likely that Bowie Seamount supports a wide variety of birds such as Black-footed Albatross, Sooty Shearwater and Fork-tailed and Leach's Storm Petrels.

Plant and animal communities around seamounts are strongly affected by many factors, including their distance offshore, depth of surrounding waters and chance colonization. Thus each seamount, including Bowie, is probably a unique biological community. These same factors however also render seamounts vulnerable to human pressures.

The identification of Bowie as a pilot Marine Protected Area will foster more science, which is needed to better understand this natural ecosystem, its vulnerabilities and assets. Through partnerships and consultations, the most appropriate type of protection will be identified and established for Bowie Seamount Area.



