

Metadata Details

Title

Study on Anthropogenic Pressure on Water Bodies Situated in Schirmacher Oasis and Larsemann Hills, Antarctica.

Science Keywords

Category	Biosphere
Topic	Aquatic Ecosystems
Expedition Year	2004-2005
ISO Topic	Biodiversity and Biotechnological Potential

Summary

Abstract

With the opening up of the route to the Antarctica, anthropogenic activities of various types are being experienced which are getting reflected in the freshwater bodies. The variation in chemical composition of different water bodies in Schirmacher Oasis and in Larsemann Hills of Indian base signifies the role of the respective catchment areas. The inflow from glaciers and accumulated snow are also responsible for governing the metabolic activity of the Antarctic water bodies. Besides, the hydrological detention governing the nutrient accumulation in water bodies has been found to be the main parameter responsible for the chemical and biological status of these water bodies. Though temperature and light intensity are the chief factors in Antarctica yet the enhancement in nutrient levels has been found to give a shift in the primary productivity and nutrient levels towards higher side in the Antarctic water bodies.

Purpose

Present study sums up the limnological status of water bodies located within the geographical coordinates, 77° 45' 51.5" to 70° 48' S and 11° 44' 2.7" to 11° 55' W (Schirmacher Oasis) and 69° 24.428' S and 76° 12.339' E (Larsemann Hills). These water bodies are accessible only during summer period. Water bodies situated at the higher elevations of the Schirmacher Oasis remain frozen during austral summer also, depicting their true amictic nature because the higher latitudes experience rapid fall in atmospheric temperature compared to the lower latitudes.

Data Center