

ANTARCTIC SEABIRDS AND SEALS AND MANAGEMENT OF HUMAN ACTIVITIES AT THE FILDES PENINSULA, KING GEORGE ISLAND

H.-U. Peter, C. Buesser, A. Froehlich, O. Mustafa, S. Pfeiffer, M. Ritz

Polar & Bird Ecology Group, Friedrich Schiller University, D-07743 JENA, Germany

Between 2003 and 2006, we conduct a research project "Risk assessment for the Fildes Peninsula and Ardley Island and the development of management plans for designation as Antarctic Specially Protected or Managed Areas" at the south-western part of King-George Island, South Shetland Islands, Antarctic. For the assessment, bird breeding sites of penguins, skuas, gulls, Antarctic terns, southern giant petrels, cape petrels and storm petrels and resting sites of elephant seals, weddell seals, crabeater seals and fur seals were mapped with GPS/GIS. Of particular interest were changes in breeding pair numbers, breeding success and the distribution of selected bird species in relation to near-by human activities. The study area is intensively used for scientific, logistic and tourism-related activities. We collected data on the frequency and distribution of air traffic, land vehicle use, movements of ships and visitor traffic to quantify the potential impact on wildlife. Especially, disturbed southern giant petrels changed their breeding sites to areas of low human activity. The existing area protection only covers one island with high biodiversity. We suggest to extend the protection measures by a zoning system within a 'Antarctic Specially Managed Area' with a number of restricted, sensitive, facility and tourist zones. The latter are particularly established in seabird breeding sites, and recommendations will be given to increase habituation effects.

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