

Study reveals most biologically rich island in Southern Ocean

May 25 2011

The first comprehensive study of sea creatures around the sub-Antarctic island of South Georgia reveals a region that is richer in biodiversity than even many tropical sites, such as the Galapagos Islands. The study provides an important benchmark to monitor how these species will respond to future environmental change.

Reporting this week in the online journal [PLoS ONE](#), the team from [British Antarctic Survey](#) (BAS), funded by the British Government's Darwin Initiative and the South Georgia Heritage Trust, describe how they examined over 130 years of polar records. About 1500 species were recorded showing South Georgia and its surrounding islands to be the richest area for marine life in the Southern Ocean.

Lead author Oliver Hogg from BAS says, "The biodiversity of South Georgia exceeds that of its nearest rivals such as the Galapagos and Equador in terms of the number of species inhabiting its shores. During the breeding season it hosts the densest mass of marine mammals on Earth."

Specimens were collected from scientific cruises, fisheries vessels and by scuba divers from the seas around South Georgia, famous for great polar explorer Sir Ernest Shackleton's expedition. Species identified include [sea urchins](#), free-swimming worms, fish, sea spiders and crustaceans. Most are rare and many occur nowhere else on Earth.

The near-surface waters around South Georgia are some of the fastest

warming on Earth so this study provides a framework to identify ecologically sensitive areas and species, identify conservation priorities and monitor future changes.

Oliver Hogg continues, "This is the first time anybody has mapped out the biodiversity of a small polar archipelago in the Southern Ocean. If we are to understand how these animals will respond to future change, a starting point like this is really important."

More information: Highly diverse, poorly studied and uniquely threatened by climate change: an assessment of marine biodiversity on South Georgia's continental shelf by Oliver T Hogg, David K. A Barnes and Huw J. Griffiths is published online in *PLoS ONE*.

Provided by British Antarctic Survey

Citation: Study reveals most biologically rich island in Southern Ocean (2011, May 25) retrieved 26 April 2024 from <https://phys.org/news/2011-05-reveals-biologically-rich-island-southern.html>

This document is subject to copyright. Apart from any fair dealing for the purpose of private study or research, no part may be reproduced without the written permission. The content is provided for information purposes only.