Guest editorial

Selecting Antarctic Specially Protected Areas: Important Bird Areas can help

A key element in Antarctic conservation over the past forty years has been area protection. In pursuit of this and the protection of continuing scientific investigations 59 protected areas have so far been agreed by the Antarctic Treaty Consultative Meetings. Although both flora and fauna have been protected under this regime there has only been the habitat matrix devised by SCAR as a guide to selection of areas. What could we do to improve the process of identification and selection?

Inadequacies in the previous *ad hoc* approaches to protecting areas on the Antarctic Continent are supposed to be addressed through applying the criteria in Annex V of the Protocol. These include protecting "areas with important or unusual assemblages of species, including major colonies of breeding native birds or mammals". Birds on the Antarctic Continent are important indicators of the presence of other biota, because nutrient enrichment from seabird colonies encourages the establishment and survival of other terrestrial species. Also, data on the distribution and numbers of Antarctic birds are probably more comprehensive than for any other biota on the continent. So, these data could contribute an important general element in any systematic approach to the selection and assessment of Antarctic Specially Protected Areas (including evaluating existing ones).

The Bird Biology Subcommittee of the SCAR Working Group on Biology is cooperating with the Seabird Conservation Programme of BirdLife International to undertake an Important Bird Areas (IBA) inventory for the Antarctic Continent. The inventory will draw upon compilations of known breeding distributions and numbers of all the continent's 19 species of breeding birds (five penguins, eight petrels, a cormorant, gull, tern, two skuas and a sheathbill) coordinated by SCAR over the last 20 years. For example, more than 300 breeding localities are now known for penguins and 298 for the snow petrel, but only 35 for the Antarctic petrel on the Antarctic Continent. SCAR has contributed funding for the data compilation. The Australian Antarctic Data Centre at the Australian Antarctic Division has created a Web database (http://aadc db.antdiv.gov.au/dataaccess/fauna search) of fauna breeding localities. In terms of protecting birds per se an important criterion being used in the Antarctic IBA Inventory is that a site should regularly hold substantial proportions (usually 1% or more) of the total breeding population of a colonial species. Other criteria being considered are the presence of globally threatened and restricted range (endemic) species. Application of the 1% criterion would identify the emperor penguin colony at Auster, Princess Elizabeth Land (11 150 of a total of 200 000 breeding pairs) as a potential ASPA. Scullin Monolith, Mac. Robertson Land and Svarthamaren, Dronning Maud Land with their massive Antarctic petrel colonies (157 000 and 250 000 pairs, respectively, of a minimum total of half a million pairs) also qualify as Antarctic IBAs and thus warrant consideration or continued protection as ASPAs. Until more is known about the distribution of non-avian fauna and flora on the Antarctic Continent, what we already know about Antarctic birds could greatly help the scientific community in proposing new Antarctic Specially Protected Areas.

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