The Monaco Assessment

Antarctica and the Southern Ocean are home to a rich and unique biodiversity. They remain the only region where humans are not known to have caused the extinction of any species, and are virtually untouched by biological invasions.

The need to protect and conserve the region’s biodiversity is broadly recognized, notably through the 1991 Protocol on Environmental Protection to the Antarctic Treaty. The Protocol sets aside Antarctica as a Natural Reserve, devoted to Peace and Science.

Over the past several decades, however, human activity, such as fishing, tourism and science, in Antarctica and the Southern Ocean has been increasing substantially. In the face of such an increase in activity, along with regionally significant, major global impacts, such as climate change, it is imperative to establish the outlook for biodiversity in the Antarctic.

The Strategic Plan for Biodiversity 2011-2020, its five strategic goals, and 20 Aichi Targets provide a universally accepted set of biodiversity conservation ambitions which can inform such an outlook, and by which progress in conserving the Antarctic’s biodiversity can be measured globally.

The Monaco Assessment brought us together as a group of biodiversity and Antarctic experts, with the support of the government of Monaco and several partners, to assess the outlook for the region’s biodiversity and its conservation.

Overall, the biodiversity outlook for Antarctica and the Southern Ocean appears to be no better than that for the rest of the globe.

Mainstreaming biodiversity across science and society will require significantly greater efforts for the region, especially to reduce incentives harmful to biodiversity and to incorporate Antarctic biodiversity values better into both national and regional planning and reporting.

Although the outlook for minimising the impacts of invasive alien species and pollution are much better for the region than globally, other direct pressures on biodiversity remain significant and in need of further attention. Ensuring sustainable use of marine stocks and addressing habitat degradation are falling short of global objectives. The knowledge base for understanding the effects of multiple drivers of biodiversity loss, including ocean acidification, is inadequate.

Safeguards for ecosystems, species and genetic diversity also require greater effort. Protected area extent, coverage of important sites for biodiversity, representation of regionally differentiated ecosystems, and effective management are substantially lagging behind global progress. Remarkably, extinction risk assessments have not been undertaken for species in most groups, and knowledge of genetic diversity remains sparse.

Although much biodiversity knowledge is being shared, participatory planning and reporting across the region remains fragmented and under-resourced. No Antarctic Biodiversity Strategy and Action Plan exists that would provide an effective guide for prioritising activities and investment.

Despite this disappointing outlook for a region so remote, apparently pristine, and theoretically well-protected, the prospects for effective action over the next five years to improve the outlook dramatically are exceptional.

The Antarctic and Southern Ocean are governed under a set of well-established arrangements which lend themselves to swift and effective action. The Protocol on Environmental Protection has been ratified by 37 Antarctic Treaty Parties, a significant appetite exists for improving conservation measures and actions, and there is much support from governments, the tourist industry and the public for conservation in the region.
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A Biodiversity Strategy and Action Plan for Antarctica and the Southern Ocean, adopted and implemented by the Antarctic Treaty Parties, and broadly accepted by all, would provide an effective means to improve the outlook for the region. Much potential exists also for improving the protected area network in both terrestrial and marine systems, and for assessing the extinction risk of the region’s species.

These actions, along with those required to achieve a set of Antarctic Biodiversity Targets, in keeping with the ambitions of the Strategic Plan for Biodiversity 2011-2020, will ensure that the biodiversity of Antarctica and the Southern Ocean is conserved for the benefit of all humankind.

Appendix of Participants

The Monaco Assessment represents the view of the individuals who participated in the meeting and does not necessarily represent the views of the organizations with which they are affiliated. The Assessment was supported by the Government of Monaco, the Centre Scientifique de Monaco, the Scientific Committee on Antarctic Research, and Monash University.

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