

ANTARCTIC BIODIVERSITY NETWORKS



“[...] SCIENTIFIC OBSERVATIONS AND RESULTS FROM
ANTARCTICA SHALL BE EXCHANGED AND MADE
FREELY AVAILABLE.”

ARTICLE III, 1c OF THE ANTARCTIC TREATY

SPONSORSHIP & PARTNERSHIP OPPORTUNITIES

BIODIVERSITY.AQ



THE IMPORTANCE OF BIODIVERSITY IN ANTARCTICA

As a region of the world with some of the most pristine ecosystems on the planet, the Antarctic is home to unique flora and fauna. New species are being discovered here continuously. These species are fascinating objects of study for the scientific community, which can learn a lot about Antarctic ecosystems and how they are responding to a changing climate. Many of these species, such as krill and various species of fish, are also important living resources that have important economic value to people all across the world.

Understanding biodiversity - the degree of variation of organisms and the ecosystems in which they live - is important for maintaining healthy and stable ecosystems.

For this purpose it is important to ensure that the fundamental scientific knowledge and resources they have to offer will be readily available for future generations.

Antarctic ecosystems have exceptional value and provide important resources:

The Southern Ocean is vital for the planet and all organisms living in it, as it greatly contributes to the regulation of the Earth's climate and plays an important role in the carbon cycle, sequestering carbon from the atmosphere.

Ecosystems worldwide include highly valuable resources. At least 40% of the world's economy is based on living resources and 80% of the needs of the poor are derived from biological resources¹. The Southern Ocean is a major source of ecosystem services, such as krill harvested for aquaculture or fish consumed by millions of people.

Healthy and stable ecosystems have higher productivity and can recover more easily from exploitation (fishing) or disasters than those with low biodiversity. Healthy ecosystems can also cope more easily with stressors such as environmental change

The richer the diversity of life, the greater the opportunity for medical discoveries and sustainable economic development. For example, several organisms found only in the Antarctic are potentially useful in the development of new drugs.

1



2



1. Amphipod, *Eurythenes gryllus*, found during the ANDEEP3 expedition.
Author: Bruno Danis

2. Antarctic fur seal, *Arctocephalus gazella* at Jordan Cove, Bird Island
Author: Anton Van de Putte

MANAGING ECOSYSTEMS

Antarctic flora and fauna are highly adapted to their unique environment and are highly vulnerable to environmental changes. A growing body of scientific evidence - which includes results presented at the Biannual International Polar Year (IPY) conferences and SCAR meetings - indicates that the Antarctic environment is changing rapidly. These changes pose a serious threat to ecosystems, as they put enormous stress on them and affect their normal functioning as well as their capacity to provide resources and regulate earth's climate. While scientists have learned a lot about Antarctic ecosystems and biodiversity, especially during the International Polar Year 2007-2008, there is still a great deal more to explore and learn.

2

If we want to efficiently conduct research to understand and protect these ecosystems, it is vital to maintain and develop an open, free and effective mechanism for exchanging information on Antarctic biodiversity. The Scientific community has embraced the idea that primary biodiversity data should be made publicly available as soon as possible after it has been collected in the spirit of article III. 1c of the Antarctic treaty¹.

¹ "[...] Scientific observations and results from Antarctica shall be exchanged and made freely available."

² Box-Corer on deck

Author: Bruno Danis





VALUABLE TOOLS FOR THE SCIENTIFIC COMMUNITY AND BEYOND

BIODIVERSITY.AQ's predecessors, SCAR's Marine Biodiversity Information network (SCAR-MarBIN) and the Antarctic Biodiversity Information Facility (ANTABIF) are valuable tools that answer the scientific community's need for free and readily accessible data, which can be used to describe, understand and predict potential changes. This information in turn allows policymakers to devise schemes to manage and protect Antarctic ecosystems.

BIODIVERSITY.AQ is an open-access platform designed for scientists to publish and share baseline scientific data on Antarctic biodiversity as well as relevant environmental data and models. The large amounts of practical, high-quality data the networks provide are a valuable tool to help scientists tackle complex scientific questions and fine-tune established theories in fields such as polar biodiversity, biogeography, and evolutionary biology.

With access to thousands of images and videos on the websites, both networks are also useful educational tools for teachers and educators (commercial or for-profit use of data and materials from the BIODIVERSITY.AQ network is strictly forbidden).

Light-manteled Sooty Albatross,
Phoebastria palpebrata
Author: Eric Woehler



ACCOMPLISHMENTS AND RECOGNITION

As a project initiated under the International Polar Year (IPY), SCAR-MarBIN has been able to reach its objective of managing and providing free access to biodiversity data collected during the extensive five-year sampling effort conducted by the Census of Antarctic Marine Life (CAML). Having compiled the first baseline data against which future changes in Antarctic ecosystems will be measured, SCAR-MarBIN established itself as an important part of the IPY/CAML legacy.

Conservation/management agencies such as the Commission for the Conservation of Antarctic Marine Living Resources (CCAMLR) and the United Nations Environmental Program's World Conservation and Monitoring Center (UNEP-WCMC) recognize the BIODIVERSITY.AQ network as authoritative sources of biodiversity data.



FACTS AND FIGURES

- First authoritative Register of Antarctic Marine Species (RAMS), from microbes to whales, with data on 17,500 different taxa.
- Access to distribution data of Antarctic organisms: over 2,000,000 records, from more than 5000 distributed datasets.
- Data constantly updated, checked and improved on the web by top experts from all over the world.
- Data can be directly accessed, mapped, downloaded or published in other contexts using robust web services (Web 2.0).
- The SCARMarBIN and biodiversity.aq web portals have seen a steady increase in users since it first went online in 2005, having had about 1200,000 visitors, 8,500,000 hits and 60,000,000 records downloaded thus far.

SPECIAL PROJECTS

In addition to maintaining the BIODIVERSITY.AQ network, we also work on special projects and produce tailor-made data products for end users. Some of the ongoing projects include:

Dynamic Antarctic field guides: Immediately accessible, custom-built flora and fauna identification guides using content from our data systems.

Digital Biogeographic Atlas of the Southern Ocean: maps and tools that can be used to visualize the current, historic and potential distribution of Antarctic organisms while taking into account global changes.

DNA data: tools that can be used to visualize and better understand how micro-evolutionary processes are influenced by a fast-changing environment. 15,000 DNA sequences are currently available (DNA barcoding).

BIODIVERSITY.AQ



LOOKING AHEAD

The original SCAR-MarBIN network focused on the marine life in Antarctica. BIODIVERSITY.AQ network builds on the success of its predecessor and expands the project to include the terrestrial realm. For this it is creating an overarching network that will give access to data from both the marine and the terrestrial realms, thanks to a close collaboration with the Australian Antarctic Division (AAD), and other partners.

In the cooperative spirit of the Antarctic Treaty, our future goals will be to optimize the data flow the SCAR community of experts offers towards wide-scale initiatives such as the Global Biodiversity Information Facility (GBIF), the Ocean Biogeographic Information System (OBIS), the Southern Ocean Observing System (SOOS), the Polar Information Commons (PIC) and the Intergovernmental Science-Policy Platform on Biodiversity and Ecosystem Services (IPBES). By doing so, the requirements of the Antarctic research community will be taken into account in future

FOUNDING ORGANIZATIONS

Since their creation, SCAR-MarBIN, AntaBIF and now BIODIVERSITY.AQ have been managed in partnership with national and international institutions, including the Belgian Science Policy Office (BELSPO), the Belgian Biodiversity Platform, the Royal Belgian Institute of Natural Sciences, the Flanders Marine Institute (VLIZ), the Scientific Committee on Antarctic Research (SCAR), the Census of Antarctic Marine Life (CAML), the Ocean Biogeographic Information System (OBIS) and the Global Biodiversity Information Facility (GBIF).

1 Scientists looking at iceberg from
RV Aurora Australis
Author: Anton Van de Putte



BUDGET 2013-2017 (EUR)

To reach maximum efficiency and be synchronized with ongoing SCAR science programs, we hope to obtain reliable funding sources to maintain and expand the information networks and services over the next five years via a system of international contributors from the public and private sectors. The table below gives an estimate of the budget required to maintain and develop the BIODIVERSITY.AQ network. The networks require three full-time employees (one project manager and two IT specialist), working out of the Belgian Royal Institute of Natural Sciences.

We are looking to maintain the basic operation of the BIODIVERSITY.AQ network over the next five years at a level of approximately €250,000 per year.

The budget below details the funding needs for the core activities of the networks over the next five years, including the development of high-visibility projects such as the Antarctic Field Guides, the Biogeography Atlas of the Southern Ocean, or requests for digitization or data rescue. The budget also takes into account subcontracting, which is needed in some cases to expedite technical developments.

Partnership/Sponsorship opportunities include the possibility to fund the maintenance of the networks, and/or specific projects.

BUDGET PROJECTION 2013-2017

	2013	2014	2015	2016	2017	Total 2013-2017
Personnel	€160 000	€168 000	€176 000	€185 000	€194 000	€883 000
Operations Costs	€20 000	€20 000	€20 000	€20 000	€20 000	€100 000
Subtotal	€180 000	€188 000	€196 000	€205 000	€214 000	€983 000
Special projects (ongoing)	€20 000	€20 000	€20 000	€20 000	€20 000	€100 000
Special Projects (potential)	€30 000	€30 000	€30 000	€30 000	€30 000	€150 000
Subcontracting	€10 000	€10 000	€10 000	€10 000	€10 000	€10 000
Subtotal	€60 000	€60 000	€60 000	€60 000	€60 000	€300 000
Total	€240 000	€248 000	€256 000	€265 000	€274 000	€1283 000

SPONSORING BIODIVERSITY.AQ

The information networks are live, dynamic and interactive, which makes it possible for your organization to gain exclusive exposure to a wide spectrum of influential players in the polar biodiversity community. Sponsors are offered an exceptional opportunity to network with academics, policymakers, NGOs, and other major stakeholders from the public, private and third sectors.

ASSOCIATIONAL BENEFITS

Sponsoring the BIODIVERSITY.AQ network will identify your organization as a leader in developing innovative solutions for sustaining a worldwide network of specialists, institutes and databases recognized as an important IPY legacy. Your organization will receive positive brand association and increased visibility as a supporter of these community-driven tools, and develop global recognition as a pioneer in polar biodiversity issues, a topic that will be a major issue in global discourse over the coming decades.

RECOGNITION

Recognized as a major source of biodiversity data by the scientific, conservation and management communities, BIODIVERSITY.AQ is attracting greater attention across multiple channels. Becoming a sponsor or partner is an excellent opportunity to gain global public recognition as a leader on polar biodiversity issues as well as a catalyst helping to maintain the networks as a tool to sustain Antarctica as a natural reserve devoted to peace and science.

SPONSORSHIP PACKAGES

PRIVILEGED PARTNER

Institutions, private foundations, companies or NGOs that provide financial or in-kind support of €25,000 or above will be granted “Privileged Partner” status. Partnership benefits include:

- The opportunity to help us maintain and develop the networks as well as organize focused, explorative workshops, or carry out special projects.
- The opportunity to take part in the functioning of the networks, for example in the proposal or evaluation of new projects (digitization, targeted data products.). If they wish, Privileged Partners will have the opportunity to join ad hoc evaluation panels.
- Privileged Partners' logos will be prominently featured on the footer of the relevant BIODIVERSITY.AQ websites along with links to their websites. Their logos will also be prominently featured on reports, flyers and related communication products by the networks.
- Privileged Partners can communicate their support for the networks or specific projects with the Press and on their websites using multimedia material (pictures and videos) available from the networks (with approval from BIODIVERSITY.AQ).

PARTNER

Institutions, private foundations, companies or NGOs providing financial or in-kind support of €10,000 or more will be granted 'Partner' status. Sponsorship opportunities include:

- The opportunity to help us maintain and develop the networks as well as organize focused, explorative workshops, or carry out specific projects.
- Partners logos will be featured on the relevant BIODIVERSITY.AQ websites along with links to their websites. Sponsors logos will also appear on reports, flyers and related communication products the networks release.
- Partners can communicate their support for the networks or specific projects with the press and on their websites.

ASSOCIATE PARTNER

Institutions, private foundations, companies or NGOs providing financial or in-kind support of €5,000 or more will attain "Associate Partner" status. Opportunities include:

- The opportunity to help us develop special projects.
- Associate Partner logos will appear on the BIODIVERSITY.AQ websites along with links to their websites as well as in selected publications.
- Associate Partners can communicate their support for the networks or specific projects with the press and on their websites.

FRIEND

Organizations or individuals providing advice and in-kind support to a specific event or project will have 'Friend' status. Friends will be acknowledged in selected network publications.

CONTACT INFORMATION

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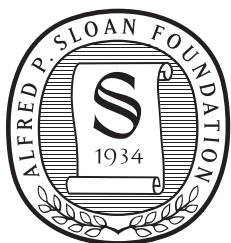
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PRIVILEGED PARTNERS



ALFRED P. SLOAN
FOUNDATION

Belgian Science Policy Office



PARTNERS



ASSOCIATE PARTNERS

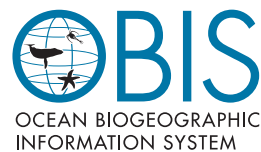
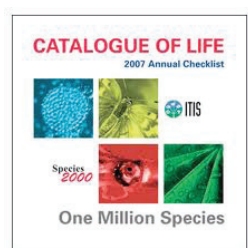


1 mosses and lichens form a
cryptogamic fellfield vegetation,
Bird Island

Author: Pete Convey

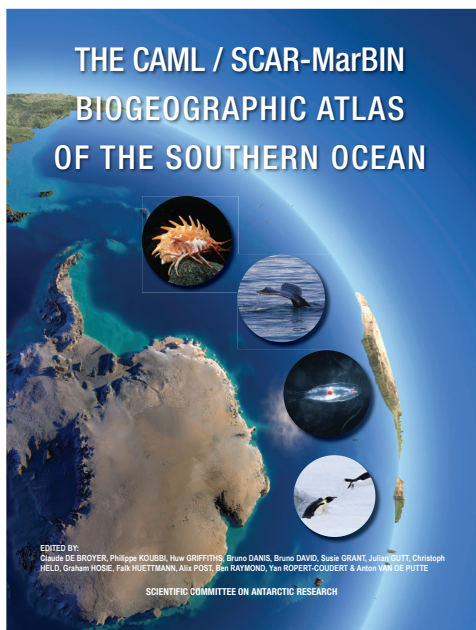


FRIENDS



PROJECT SUPPORT

THE CAML / SCAR-MarBIN BIOGEOGRAPHIC ATLAS OF THE SOUTHERN OCEAN



ANTARCTIC FIELD GUIDES



British Antarctic Survey
NATURAL ENVIRONMENT RESEARCH COUNCIL



