Antarctic Environments Portal
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Working Paper submitted by
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Summary
The Antarctic Environments Portal is now well established and a year into its operational phase. This Working Paper records the benefits of the Portal that are now being realised and reviews the progress made since CEP XVIII: notably, the Portal has been transferred to the University of Canterbury, Christchurch, and three-years of external funding to support the management of the Portal has been generously provided by the Tinker Foundation. The paper also lists the articles in various stages of preparation for publication.

The paper authors recommend that the Committee continue to engage with and support the Portal (not least by encouraging contributions from their science communities); review the material in preparation, and continue to discuss the longer-term management arrangements for the Portal.

Background
The purpose of the Antarctic Environments Portal (the Portal; www.environments.aq) is to provide the Committee with easy access to up-to-date, summary information on the current state of knowledge on aspects of the Antarctic environment that are of interest or importance to the CEP and ATCM, so as to support discussions and decisions on environmental management.

The Portal was initiated in 2012 and developed under the guidance of an international steering group. The Portal was launched as a completed product on the margins of ATCM XXXVIII in 2015, and recognised by the ATCM through Resolution 3 (2015) (Appendix 1).

Scientists and subject matter experts draft articles for the Portal. The review and publication process is managed by an Editor in collaboration with the Chief Officer of SCAR’s Standing Committee on the Antarctic Treaty System. The Editor is supported by an Editorial Group comprised of two SCAR representatives and two environmental / policy representatives.

Progress since CEP XVIII
After CEP XVIII, the Portal received a grant from the U.S.-based Tinker Foundation, providing financial support to the Portal for the period 2015-2018. The funding that has been provided covers the costs of employing a part-time Editor, the hosting and maintenance costs for the website and the costs of translation of all Portal articles from English into two of the Antarctic Treaty languages (Russian and Spanish).

We wish to acknowledge and express our gratitude to the Tinker Foundation for generously providing the funding.

The paper authors also wish to express their gratitude to France for their support in translating Portal articles into French.

Oversight and management of the Portal has been passed to the University of Canterbury, in Christchurch, New Zealand. Residing the Portal in an academic institute is consistent with its role as a neutral communicator of scientific knowledge.

A management board has been established with representatives from SCAR, Antarctica New Zealand and Canterbury University. The Portal Editor has an ex officio position on the management board. The purpose
of the management board is to provide governance and oversight of the Portal initiative for at least the next three years during the period for which funding is provided by the Tinker Foundation.

Several new articles have been added to the Portal, and further articles are in various stages of development (see Appendix 2). The Committee is invited to review this list and identify any additional articles that it would wish to see published in the Portal.

Each article now has a digital object identifier (doi) to assist with searching for and citing the material published in the Portal.

A Portal Facebook page and Twitter account are established and will increasingly be used to communicate information on and updates about the Portal.

A Portal Handbook has also been developed to provide for continuity in the operation and management of the Portal.

**Benefits of the Portal**

The Portal facilitates the communication of scientific knowledge. It has been developed specifically to support the work of the CEP and to ensure the Committee and the ATCM are as informed as they can be on issues of relevance to their roles and functions.

The Portal also assists SCAR to fulfil its primary role of providing objective and independent scientific advice to the Antarctic Treaty Consultative Meetings and other organizations, such as the UNFCCC and IPCC, on issues of science and conservation affecting the management of Antarctica and the Southern Ocean and on the role of the Antarctic region in the Earth system.

The information contained in the Portal is also publicly available. It provides a window on the current understanding of the state of Antarctic environments and a public demonstration of the important work being undertaken through the Antarctic Treaty System.

In practical terms the Portal also provides a resource to Antarctic Treaty Parties and national Antarctic programmes, including for example: for policy development; as a resource to support environmental impact assessment processes, and as a resource to inform their preparations for meetings and discussions during meetings.

The Portal also provides a means for assessing gaps in knowledge, and allows the CEP to call for state-of-knowledge articles to be prepared, or to call for additional research to be undertaken to meet an identified knowledge gap. CEP XVIII specifically noted that it could suggest issues for future inclusion in the Portal relevant to issues it was addressing (Report of CEP XVIII para 11 refers). This might be undertaken, for example, in conjunction with the CEP’s annual review of its five-year work plan.

**Next steps**

The utility of the Portal lies in the extent to which it is used as an information source. The Editor, Editorial Group, Management Board and Portal manager are keen to hear feedback on the style and formatting of the information contained in the Portal, and in particular on any information summaries that are needed.

As noted above, the Committee at its annual meeting, and CEP members throughout the year, are encouraged to consider and identify information summaries that they wish to see published in the Portal.

In addition, CEP XVIII noted that the future governance and management of the Portal were matters the Committee should return to at future meetings, including the possibility that the Secretariat might be the eventual host of the Portal. Whilst the operation of the Portal is secured until June 2018, the Committee’s and the ATCM’s early consideration of the long-term management options is encouraged.

CEP engagement in the Portal can also be facilitated through the Editorial Group. Options as to how the Committee may wish to nominate representatives to serve on the Editorial Group may need to be considered.

Finally, CEP member countries are encouraged to promote the Portal at their national levels and to work with their science communities and SCAR to motivate authors to provide articles so as to ensure a wide
geographic coverage and a steady flow of information to support the CEP’s environmental management responsibilities.
Recommendations

The Working Paper authors recommend that the CEP, and CEP members:

1) reaffirm the importance of the Portal as a mechanism for making high quality, accurate, non-political and up-to-date scientific advice to the CEP and the Antarctic Treaty Parties;

2) maximise the use of the information contained in the Portal to support their discussions and other policy and information needs;

3) advise the Editorial group on information summaries that it wishes to see prepared for publication in the Portal (e.g. through the 5-year work plan or CCRWP);

4) continue to encourage scientists to work with SCAR in the preparation of articles for publication in the Portal;

5) consider and make recommendations to the ATCM on options for the future management of the Portal in accordance with Resolution 3 (2015);

6) give thought as to how to identify representatives to serve on the Editorial Group.
Resolution 3 (2015)

The Representatives,

Recalling Article 3 of the Protocol on Environmental Protection to the Antarctic Treaty (“the Protocol”), in particular its requirement that activities in the Antarctic Treaty area shall be planned and conducted on the basis of information sufficient to allow prior assessments of, and informed judgments about, their possible impacts on the Antarctic environment and dependent and associated ecosystems and on the value of Antarctica for the conduct of scientific research;

Recognising that the increasing complexity of protecting the Antarctic environment in the context of increasing human activity and a changing Antarctic climate requires access to policy-ready information to support the effective implementation of the Protocol;

Acknowledging with appreciation the longstanding scientific advisory role to the Antarctic Treaty system of the Scientific Committee on Antarctic Research (“SCAR”);

Welcoming the development of the Antarctic Environments Portal (“the Portal”) as a mechanism to provide state-of-knowledge reports on priority or emerging issues, which can be drawn on to support effective management and governance of the region, including effective implementation of the Protocol;

Noting that the Portal will also provide a mechanism to support SCAR in providing independent, scientifically based information to the Antarctic Treaty system;

Recommend that their Governments:

7) commend the Portal as an important mechanism for making high quality, accurate, non-political and up-to-date scientific advice available to the Committee for Environmental Protection (“CEP”) and the Antarctic Treaty Parties and as a useful tool for its use by Parties on a voluntary basis;

8) request SCAR to use the Portal as appropriate for providing state-of-knowledge reports on issues of policy and management relevance;

9) encourage scientists to participate in the preparation and review of articles for the Portal;

10) consider opportunities to support the management of the Portal; and

11) invite Members of CEP to contribute to the environmental policy relevance of the Portal through active involvement in the Editorial Group, and by providing feedback on the content of the Portal, including the identification of new material.
PORTAL ARTICLES CURRENT STATUS (MARCH 2016)

Existing (published) Information Summaries to be updated
• Specially Protected and Managed Areas.
• Human Disturbance to Antarctic Wildlife.
• Clean-up of past waste disposal sites and abandoned work sites in Antarctica.
• The introduction of non-native species to Antarctica.
• Status of known non-native species introductions and impacts.

Existing (published) Emerging Issue to be updated
• Climate change as an emerging threat to Emperor Penguins.

In translation prior to being published
• Vulnerability of marine habitats to climate change.
• Ross Seal.
• Changes in penguin distribution over the Antarctic Peninsula and Scotia Arc.

Under review by the Editorial Group
• Prediction of Antarctic climate.

Under review by the authors
• Important Bird Areas.

Under review by the science community
• Marine biodiversity.
• Long range transported pollutants.

Commissioned and awaiting first draft
• Remediation of hydrocarbon spills.
• Response of terrestrial systems to climate change.
• Sewage and waste-water.
• Geothermal areas.
• Micropollutants.
• Monitoring climate change impacts.
• Inorganic pollutants.
• Biodiversity of freshwater and saline systems.

To be commissioned
• Microorganisms as non-native species.
• Pathways for non-native species introductions.
• Acidification of the Southern Ocean.
Topics under consideration

- Terrestrial biodiversity.
- Impacts of marine noise on mammals.
- Ground disturbance.
- Impacts of drones.
- Fossil management and protection.
- How does climate change influence Antarctic ecosystems?
- Non-native species and climate change: Assessing the risk of invasion.
- Role of sea ice in structuring marine ecosystem
- How could changes in climate change the vulnerability of organisms?
- Ocean temperature shifts.
- Impact of the ozone hole.
- Permafrost and clathrates.