



## Antarctic Environments Portal: Content Management Plan

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The Antarctic Environments Portal ([www.environments.aq](http://www.environments.aq)) provides ready access to high-level summary information on Antarctic issues that represents the best available scientific knowledge.

‘Information Summaries’ published in the Portal are aimed at a range of Antarctic stakeholders with policy and management interests and roles in the decision-making bodies of the Antarctic Treaty System. They can serve a number of purposes. Some address the current state of knowledge on a topic that is of policy or management interest while others are intended solely to provide scientific background information on important aspects of the Antarctic.

This Content Management Plan outlines the topics under which Information Summaries are published and also identifies material under consideration for development as Information Summaries; the six broad topics are:

- The Antarctic Terrestrial Environment
- The Southern Ocean Environment
- Inland Aquatic Environments
- The Antarctic Atmosphere Environment
- The Antarctic Cryosphere Environment
- Human Activities and the Management of Antarctica

The Content Management Plan is regularly reviewed and updated by the Portal Editor and Editorial Group including a comprehensive annual review to determine priorities for updates to existing Information Summaries and proposals for new material.


**We would be pleased to receive feedback from you on the work that is planned. Is anything missing from the list? What would you prioritise? Are there any specific aspects of these topics that you would like to see addressed?**

Please provide comments and feedback via the Portal Editor, Dr Keith Reid - [editor@environments.aq](mailto:editor@environments.aq)

About the Information Summary process:

The Portal Editor manages the process of developing Information Summaries, working with an invited lead author to more fully scope and draft the article. All Information Summaries are reviewed by the Editorial Panel and selected external peer reviewers. More information is available on the website.

## Antarctic Environments Portal - Content Management Plan

The Antarctic Terrestrial Environment		
This category will provide a series of information summaries on the state of knowledge of terrestrial Antarctica. This will include topics related to geology, pedology, permafrost, terrestrial ecosystems and terrestrial species, as well as the establishment of non-native terrestrial species.		
Topics related to the implications of climate change for the Antarctic terrestrial environment will also be included.		
Planned Portal Information Summary	Scope	Status
Terrestrial Biodiversity	The current state of knowledge on terrestrial biodiversity, and factors influencing its distribution.	Initial stage*
Response of terrestrial ecosystems to climate change	The observed and potential future responses of terrestrial ecosystems at broad scales to changing climatic conditions across Antarctica.	First review
Antarctic flowering plants	The abundance and distribution of <i>Deschampsia antarctica</i> and <i>Colobanthus quitensis</i> and the implications of climate change for these species	Initial stage
Antarctic terrestrial invertebrates	The abundance and distribution of terrestrial invertebrates and the implications of climate change.	Initial stage
Antarctic moss and lichen	The abundance and distribution of moss and lichen species and the implications of climate change.	Initial stage

Already published under this topic	Date published
The introduction of non-native species to Antarctica	18/08/2014
Antarctic Wildlife Diseases	14/12/2015
Important Bird Areas in Antarctica	26/05/2016
Geothermal environments in Antarctica	06/02/2018
Non-native microbial introductions: what risk to Antarctic ecosystems?	13/03/2018
Pathways for the Introduction of Terrestrial Non-Native species	27/11/2018
Specially protected and managed areas in Antarctica	15/04/2019
Status of known non-native species introductions and impacts	10/05/2019

**\*Key:**


**Initial stage:** author group being identified, and scope being developed;

**Drafting stage:** author group preparing first draft;

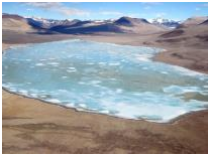
**Peer review:** information summary out for peer review and revision by the authors;

**Editorial review:** information summary with Editorial Panel for final review;


**Translation:** Information summary being translated for publication.

The Southern Ocean Environment		
<p>This category will provide a series of information summaries on the state of knowledge of the Antarctic marine environment. This will include topics related to oceanography, sea-ice, marine ecosystems and species, ocean acidification and non-native marine species.</p> <p>Topics related to the implications of climate change for the Antarctic marine environment will also be included.</p>		
		
Planned Portal Information Summary	Scope	Status
Individual status reports for Antarctic seals: <ul style="list-style-type: none"> <li>• Antarctic fur seal</li> <li>• Weddell seal</li> <li>• Crabeater seal</li> </ul>	Status reports on Antarctic seals including implications of future climate scenarios.	Initial stage Initial stage Initial stage
Southern Ocean acidification	Anticipated change in Southern Ocean chemistry as a consequence of increasing atmospheric CO <sub>2</sub> and its implications for Southern Ocean biota.	Initial stage
The role of sea-ice in the Southern Ocean	Three companion IS covering: The role of Antarctic sea ice, the biology of sea ice and anticipated change in sea ice conditions under future climate scenarios.	Peer review
Ocean temperature shifts	The role of the Southern Ocean in heat uptake; observed changes in ocean warming and future implications.	Peer review
Antarctic krill	Population past and present, drivers of change and krill fishing	Initial stage
Antarctic whales	Population past and present and drivers of change	Initial stage


Already published under this topic	Date published
Climate change as an emerging threat to Emperor Penguins	15/08/2014
Antarctic Wildlife Diseases	14/12/2015
Antarctic Marine Biodiversity	10/02/2018
Sampling the Southern Ocean: technology for observing the marine system	21/06/2018
Vulnerability of Southern Ocean biota to climate change	25/11/2018
Ross Seal	15/04/2019
Changes in penguin distribution over the Antarctic Peninsula and Scotia Arc	15/04/2019
Southern Elephant Seal	15/09/2020
Leopard Seal	25/10/2021
SCAR Ant-ERA Review	21/02/2022

<b>Inland Aquatic Environments</b>  This category will provide a series of information summaries on the state of knowledge of Antarctic freshwater environments. This will include topics related to all inland aquatic systems and their associated biology.  Topics related to the implications of climate change for Antarctic freshwater environments will also be included.		
Planned Portal Information Summary	Scope	Status


Already published under this topic	Date published
Antarctic Subglacial Lakes	15/04/2019
Diversity of Antarctic lakes, ponds and streams	10/05/2019
Inland Aquatic Biodiversity in Antarctica	21/08/2019

The Antarctic Atmosphere Environment		
This category will provide a series of information summaries on the state of knowledge of the Antarctic atmosphere. This will include topics related to the Antarctic ozone layer, meteorology, aurora, clouds and aerosols, as well as issues related to longer-term climate changes.		
Planned Portal Information Summary	Scope	Status
The Antarctic ozone hole	The role of the ozone layer, observed changes in ozone over Antarctica over the last few decades, anticipated future changes and its significance for climate change in the region.	Initial stage
Antarctic meteorology	How Antarctic weather is recorded and reported and what we know about weather patterns in the region.	Initial stage
Antarctic weather and climate change	How do we expect Antarctic weather patterns to behave under different climate scenarios?	Initial stage

Already published under this topic	Date published
Predicting Antarctic Climate Using Climate Models	15/04/2019

<b>The Antarctic Cryosphere Environment</b>  This category will provide a series of information summaries on the state of knowledge of the Antarctic cryosphere. This will include topics related to the ice sheets and ice shelves including the implications of climate change for ice mass balance and sea level rise.		
<b>Planned Portal Information Summary</b>	<b>Scope</b>	<b>Status</b>
The Antarctic ice sheet and climate change	The response of the Antarctic ice sheet to future climate scenarios	Initial stage
Antarctic ice shelves	The function of Antarctic ice shelves and factors affecting their stability	Initial stage
Potential methane reservoirs and climate change	Sources and implications of methane reservoirs in Antarctica	Initial stage

<b>Already published under this topic</b>	<b>Date published</b>

Human activities and the management of Antarctica		
This category will provide a series of information summaries on the state of knowledge of human activities in the region including tourism management, pollution and remediation, area protection and management, the built environment and aesthetic and wilderness values.		
Planned Portal Information Summary	Scope	Status
Human footprint in Antarctica	Current understanding and interpretation of human footprint in Antarctica and implications for ice-free areas.	Initial stage
Environmental consequences of the use of remotely piloted aircraft systems	State of knowledge of the environmental consequences of operating remotely piloted aircraft systems and mitigation measures.	Initial stage
Bioremediation methods	Review of bioremediation experiences in Antarctic soils and potential application of techniques.	Initial stage
Inorganic pollutants in Antarctica	Sources and implications of inorganic pollutants in Antarctic terrestrial and nearshore marine environments.	Initial stage
Antarctic Heritage Conservation	Best practice approaches to the conservation of human heritage in Antarctica.	Initial stage
Geological conservation in Antarctica	The current state of national and international Antarctic geo-conservation effort.	Initial stage
Antarctic conservation biogeographic regions	An overview of the how the ACBRs have been developed and the data and information used to derive them.	Initial stage

Already published under this topic	Date published
Human Disturbance to Antarctic Wildlife	03/04/2014
Environmental Remediation	11/02/2018
The impacts of trampling and ground disturbances on Antarctic soils	13/03/2018
Micropollutants in Antarctic waters	02/04/2018
Microplastics in the Southern Ocean	16/05/2018
Clean-up of past waste disposal sites and abandoned work sites in Antarctica	15/04/2019
Sources, dispersal and impacts of wastewater in Antarctica	15/04/2019
Persistent Organic Pollutants in Antarctica	19/08/2019
Southern Ocean Noise	26/05/2021