



Antarctic Environments Portal: Content Management Plan

The Antarctic Environments Portal (www.environments.aq) provides ready access to high-level summary information on Antarctic issues, based on the best available scientific knowledge.

‘Information Summaries’ published in the Portal are primarily aimed at a range of Antarctic stakeholders with policy and management interests in the region, in particular the Committee for Environmental Protection (CEP).

This Content Management Plan outlines topics for which Information Summaries are to be developed. It is regularly reviewed and updated by the Portal Editor and Editorial Group.

The following tables identify topics under consideration for development as Information Summaries, falling under six broad headings.

- 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

All the articles listed are relevant to priorities in the CEP’s Climate Change Response Work Programme (CCRWP) and five-year workplan. These have been suggested by the Committee for Environmental Protection, the Editorial Group and other stakeholders. Existing Information Summaries already published in the Portal are also listed.

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? Are there other types of format or output that you would like to see from the Portal? Do you have suggestions for how we could make the links clearer between this plan and the CEP's five-year work plan and/or the CCRWP?

Please provide comments and feedback via the Portal Editor, Neil Gilbert - 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 an editorial Board and selected external peer reviewers. More information is available on the website.

Information Summaries serve a number of purposes. Some are intended solely to provide scientific background information. Others summarise the current state of knowledge on a topic that is of policy or management interest.

The content management plan will be made available on the Portal website (www.environments.aq) and circulated to relevant stakeholder groups (e.g. SCAR, CEP) to ensure that the content published on the Portal website is contemporary and relevant.

Antarctic Environments Portal - Content Management Plan

| The Antarctic Terrestrial Environment | | |
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| <p>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.</p> <p>Topics related to the implications of climate change for the Antarctic terrestrial environment will also be included.</p> | |  |
| 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 |

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*Key:


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

Drafting stage: author group preparing first draft;

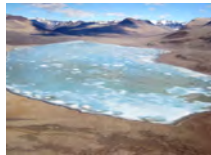
First review: information summary out for peer review;

Second review: information summary with Editorial Group for final review;


Translation: Information summary being translated prior to 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 |
| Climate change threats to Antarctic penguins | The risks posed to penguin species under future climate scenarios | Initial stage |
| Individual status reports for Antarctic seals: <ul style="list-style-type: none"> • Antarctic fur seal • Weddell seal • Crabeater seal | Status reports on Antarctic seals including implications of future climate scenarios. | Initial stage Drafting stage Initial stage |
| Southern Ocean acidification | Anticipated change in Southern Ocean chemistry as a consequence of increasing atmospheric CO ₂ and its implications for Southern Ocean biota. | Initial stage |
| The role of sea-ice in the Southern Ocean | The role of Antarctic sea ice; monitored patterns of change over the last few decades, and anticipated change in sea ice conditions under future climate scenarios. | Drafting stage |
| Ocean temperature shifts | The role of the Southern Ocean in heat uptake; observed changes in ocean warming and future implications. | Initial stage |

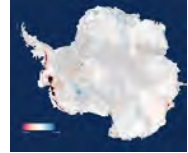
| Already published under this topic | Date published |
|---|-----------------------|
| Climate change as an emerging threat to Emperor Penguins | 15/08/2014 |
| Antarctic Wildlife Diseases | 14/12/2015 |
| Antarctic Marine Biodiversity | 10/02/2018 |
| Sampling the Southern Ocean: technology for observing 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 | Soon to be published |

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| <p>Inland Aquatic Environments</p> <p>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.</p> <p>Topics related to the implications of climate change for Antarctic freshwater environments will also be included.</p> | |  |
| Planned Portal Information Summary | Scope | |
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| 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 |

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| 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 |
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| The Antarctic Cryosphere Environment | |  |
| 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. | | |
| Planned Portal Information Summary | Scope | Status |
| The Antarctic ice sheet and climate change | The response of the Antarctic ice sheet to future climate scenarios | Drafting 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 |

| Already published under this topic | Date published |
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| Human activities and the management of Antarctica | |  |
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| 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. | Drafting 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 | Soon to be published |