Draft Specially Protected Species Action Plan for the Emperor Penguin: complementary actions by Australia

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**Information Paper submitted by Australia**

Summary

At CEP XXIV (2022) many Members and Observers expressed intent to use the draft Specially Protected Species Action Plan for the Emperor Penguin *Aptenodytes forsteri* (the Action Plan), provided in ATCM XLIV/WP34, as guidance to support their actions on the management of this species. Australia supports the goal and objectives of the draft Action Plan, and approval of the Action Plan at the earliest opportunity. This paper outlines complementary actions by Australia concerning the protection of emperor penguins.

Background

At CEP XXIII (2021), the Committee considered [ATCM XLIII/WP037](https://documents.ats.aq/ATCM43/wp/ATCM43_wp037_e.docx), which presented SCAR’s assessment that the emperor penguin is vulnerable to ongoing and projected climate change, warranting protection as an Antarctic Specially Protected Species. The Committee established an open-ended intersessional contact group (ICG) to prepare a draft action plan for the emperor penguin to be presented to ATCM XLIV - CEP XXIV, together with SCAR’s assessment of the emperor penguin’s conservation status, in accordance with the *Guidelines for CEP Consideration of Proposals for New and Revised Designations of Antarctic Specially Protected Species under Annex II to the Protocol*.

At CEP XXIV (2022), the Committee considered ATCM XLIV/WP34, which presented the results of the ICG, including a draft Specially Protected Species Action Plan for the Emperor Penguin, *Aptenodytes forsteri,* Gray, 1844(the Action Plan). The ICG recommended designation of the emperor penguin as a Specially Protected Species under Annex II to the Protocol, and approval and timely implementation of the Action Plan. The Committee did not reach consensus on the proposal to list the emperor penguin as a Specially Protected Species. However, many Members and Observers expressed intent to use the draft Action Plan as guidance to support their actions on the management of the species, including conducting further monitoring of emperor penguin populations.

Complementary actions by Australia

Australia strongly supports the goal of the draft Action Plan ‘To reduce and, where practicable, prevent threats to emperor penguins and their habitat at all stages of their life cycle, taking into account observed and potential impacts of climate change on emperor penguins, in order to improve the threat status and degree of endangerment of the species’ and associated objectives.

Australia has a long history of activities to understand and protect emperor penguins, with a focus on breeding populations that occur in East Antarctica. While these colonies predominately occur on Antarctic fast ice, ice shelves, and icebergs, there are two colonies on land. Australian scientists have also contributed to recent research to assess the global population of emperor penguins over the past 10 years. When published, this research will provide additional information of relevance to designation of the emperor penguin as a Specially Protected Species and approval of the Action Plan.

There are four Antarctic Specially Protected Areas (ASPAs) in East Antarctica designated to protect emperor penguins: ASPA No 101 (Taylor Rookery, Mac.Robertson Land), ASPA No 120 (Pointe-Géologie Archipelago, Terre Adélie), ASPA No 127 (Haswell Island), and ASPA No 169 (Amanda Bay, Ingrid Christensen Coast, Princess Elizabeth Land). Australia manages ASPA No 101 and jointly manages ASPA No 169 with China, while France and the Russian Federation manage ASPA No 120 and ASPA No 127, respectively.

Australia has commenced preliminary work to consider a nomination for listing of the emperor penguin as a threatened species under its national environmental legislation, the *Environment Protection and Biodiversity Conservation Act 1999* (Cth). The nomination will consider the taxonomy, distribution, biology and ecology, threats, threat abatement, and eligibility for listing the species under the legislation. Australia applies a common assessment method to listings under its national environmental legislation. This approach is complementary with that used by the International Union for Conservation of Nature (IUCN) for including species on the Red List of Threatened Species, with necessary changes to ensure consistency with the legislation.

Australia supports the earliest designation of the emperor penguin as a Specially Protected Species, and the formal approval and implementation of the Action Plan. Approval of the Action Plan will initiate several processes to be led by the CEP and SCAR, such as regularly reviewing the conservation status and population trends for the emperor penguin, developing guidelines for visits to emperor penguin colonies, developing guidance on what constitutes a ‘compelling’ scientific purpose, and improving community support for the conservation of the emperor penguin. Australia looks forward to engaging in those processes along with other Members. The table at Annex A identifies selected complementary actions currently undertaken by Australia.

Annex A. Complementary actions by Australia

| **Action in draft Action Plan** | | **Complementary actions by Australia** |
| --- | --- | --- |
| Objective A1: Identify priorities for compelling research and monitoring activities in order to promote conservation, minimise unnecessary pressure on the species and avoid duplication of research effort. | | |
| A1.1 | Undertake a comprehensive review of emperor penguin research and monitoring activities and identify gaps relevant to the protection and management of the species | Australia conducts research and monitoring activities in East Antarctica, and is undertaking a review to inform the potential listing of the emperor penguin under Australia’s national environmental legislation. |
| A.1.2 | Identify compelling research and monitoring priorities that directly contribute to the conservation of emperor penguins. | Australian emperor penguin research and monitoring is directed towards informing and supporting conservation actions.  Consistent with the relevant management plans, Australia limits the research and monitoring that may be undertaken by its scientists in ASPAs to:   * compelling scientific research which cannot be undertaken elsewhere and which will not jeopardise the avifauna or the ecosystem of the Area * sampling which should be the minimum for the approved research programs. |
| A.1.3 | Develop a coordinated international research and monitoring programme for the emperor penguin to advance compelling research and monitoring priorities and to minimise unnecessary pressure due to overlapping research programmes. | Australia contributes to international emperor penguin research and monitoring activities, including through the SCAR Expert Group on Birds and Marine Mammals. There are synergies in ensuring these activities are coordinated. While there is also value in avoiding duplication of research effort, Australia recognises that each colony has its own characteristics that may require individual investigation. |
| Objective A2: Monitor Emperor Penguin population size and trends, and identify environmental factors that may affect the species over time and at different scales (particularly the effects of climate change on sea ice extent/duration). | | |
| Population size and trends | | |
| A.2.1 | Undertake population assessment studies to monitor emperor penguin population size and trends at the colony scale, the regional scale and the circumpolar scale. | Australia undertakes emperor penguin population assessments in East Antarctica. There are logistical constraints that limit access to many of the emperor penguin colonies in East Antarctica.  In East Antarctica, Australia undertakes ongoing ground and/or aerial surveys of emperor penguin populations in ASPA No 101, and ASPA No 169, as well as more remote colonies when logistically feasible. Australia also accesses satellite imagery to monitor all colonies of interest in East Antarctica. |
| A.2.3 | Undertake research to provide more information on the distribution of juveniles, breeding birds and non-breeding birds, which sometimes forage far from the Antarctic continent. | Australia recognises there are difficulties in using remote sensing approaches to determine the distribution of different life stages of emperor penguins away from their breeding colonies, as well as interchange between colonies. Tracking studies by researchers from Australia and other nations show that juveniles will travel considerable distances from their natal colony. |
| Environmental factors | | |
| A.2.6 | Undertake further modelling of climate change impacts on emperor penguin populations over different spatial and temporal scales, taking into consideration Antarctic environmental factors (e.g., sea ice extent) and global responses to climate change (e.g., changes in greenhouse gas emissions). | As outlined in ATCM XLV/IP072 *Australia’s Antarctic climate science*, Australia undertakes complementary collaborative research into climate change effects in Antarctica and the Southern Ocean, including effects on sea ice extent and duration. |
| Objective A3: Identify and prioritise the threats to Emperor Penguin populations, including through research on agents of decline, population dynamics, distribution and management techniques and their effectiveness. | | |
| A.3.1 | Identify and prioritise threats to breeding populations of emperor penguins by direct and indirect activities. | Australia considers that the threats to the emperor penguin are well outlined in Section 2.9 of the draft Action Plan.  If the emperor penguin is listed under Australia's national environmental legislation, then a Conservation Advice will be developed that would outline the threats to the species, as well as potential mitigation actions. |
| A.3.2 | Work with CCAMLR, COMNAP, IAATO and other relevant organisations to identify and prioritise threats to emperor penguins within the marine environment. | As for A.3.1. |
| Objective B1: Ensure the protection and management of Emperor Penguin populations within their habitats in the Antarctic region through the application of management tools that regulate interaction with human activities. | | |
| Area management and protection | | |
| B.1.1 | Use existing management tools to regulate human activity in the vicinity of each emperor penguin colony (e.g., through development of Site Guidelines for Visitors or designation of the location as an Antarctic Specially Protected Area (ASPA)), as appropriate. | Australia manages two ASPAs designated primarily to protect emperor penguins: ASPA No 101 and ASPA No 169 (with China).  Measures within the management plans for the ASPAs prescribe access to the colonies. These include prescriptions designed:   * to minimise human disturbance * to minimise the possibility of the introduction of pathogens that may cause disease in populations of birds, such as avian influenza (H1N1) * to minimise the possibility of introduction of alien plants, animals and microbes to the colonies. |
| B.1.2 | Establish and implement measures that restrict access to some colonies only for specified purposes. | Australia has developed guidelines that seek to prevent or minimise human disturbance to the Auster Colony near Mawson station while allowing appropriate access for Australian Antarctic Program expeditioners.  Australian Antarctic expeditioners are subject to an Environmental Code for Participants in the Australian Antarctic Program that, among other things, seeks to minimise disturbance to wildlife including emperor penguins, except where activities are authorised under a permit.  The potential for disturbance by Australian Antarctic Program vehicles and aircraft (fixed wing, rotating wing and remotely piloted aircraft systems) is minimised through prescribing vehicle entry to ASPAs, and guidelines for avoiding disturbance of emperor penguin and wildlife colonies. Such avoidance is regulated though, for example, precautionary distances between aircraft and wildlife concentrations set out in Australia’s authorisation for Australian Antarctic Program aviation operations, and its effectiveness is subject to ongoing monitoring. |
| B.1.3 | Where a colony is already afforded protection through designation of an ASPA, evaluate the effectiveness of the protected areas in providing heightened protection. Parties managing ASPAs that protect emperor penguin colonies shall provide regular updates to the CEP on the status of the emperor penguin population within the Area. | Australia reports to the CEP on the five-yearly review of the management arrangements for ASPA No 101 and ASPA No 169 (with China). The next reviews of these ASPA are due to commence in 2026 and 2024, respectively. |
| B.1.4 | Consider the designation of further protected areas to afford additional protection to emperor penguin colonies that are representative of: (i) climate change refugia populations, and (ii) genetically distinct meta-populations, which may be important for future resilience to environmental change. | As reported in ATCM XLIV/IP047, Australian researchers are undertaking work to inform ongoing CEP discussions on further developing the Antarctic protected area system. |
| Objective B2. Reduce threats to breeding and foraging populations of emperor penguins, including due to taking or harmful interference by human activities, taking into consideration life cycle stages when birds are most sensitive to threats. | | |
| Guidelines | | |
| B.2.1 | Review existing guidelines concerning direct human behaviour and activities in the vicinity of Antarctic wildlife, taking into consideration their effectiveness concerning emperor penguins at different stages of their breeding cycle. Update the guidelines as necessary to provide additional protection mechanisms. Examples of such guidelines are, the ‘General guidelines for visitors to the Antarctic' contained in Resolution 4 (2021), the ‘Guidelines for the operation of aircraft near concentrations of birds' contained in Resolution 2 (2004) and the ‘Environmental guidelines for operation of Remotely Piloted Aircraft Systems (RPAS) in Antarctica’ contained in Resolution 4 (2018). | Australia keeps under review the Environmental Code for Participants in the Australian Antarctic Program, the Auster Emperor Penguin Colony Australian Antarctic Program Visitation Policy, and management measures for ASPA No 101 and ASPA No 169 (with China). Australia maintains an Environmental Policy on Remotely Piloted Aircraft (Drones) in Antarctica, which is being reviewed in 2023. Potential impacts of Australian Antarctic Program aviation activities on wildlife are subject to ongoing monitoring, and the outcomes of this monitoring informs relevant polices and guidance, such as Australia’s annual review of flight path guidelines for avoiding wildlife in East Antarctica. |
| B.2.2 | Using the best available science, and working with SCAR, COMNAP, IAATO and other relevant organisations, develop species specific guidelines for visits to emperor penguin colonies. To ensure the minimization of disturbance to emperor penguin colonies, establish specific guidelines on, for example, (i) emperor penguin approach distances by visitors, (ii) the use of small boats and overland vehicles, (iii) the establishment of camps, refuges or hides; (iv) biosecurity measures; (v) limits on the frequency of visits; (vi) limits on the number of visitors, (vi) visitor behaviour; and (viii) effects of the presence of vessels on local sea-ice margins. | As noted above, Australia maintains various guidelines and regulatory requirements for avoiding disturbance to emperor penguins and other wildlife in Antarctica. These are applied, for example, through authorisations and permits for all Australian activities in Antarctica that may involve proximity to wildlife. |
| Management of logistical activities | | |
| B.2.4 | Consider how planned activities in the vicinity of emperor penguin colonies (including on ground and aerial activities) could be better communicated in advance of any planned activity (including between national Antarctic programmes and tourism operators, for example) so that disturbance is limited over time and in duration (e.g., by working with CCAMLR, COMNAP and/or IAATO). | Emperor penguin populations in East Antarctica are remote and infrequently visited, and generally not visited by multiple operators.  Emperor penguins may be present at breeding colonies in most months, and birds are particularly sensitive from May to mid-July, when they are incubating eggs, and from mid-July to mid-September, when adults are brooding chicks. Australia’s management of planned activities includes measures that expressly address these sensitive periods. |
| Objective B3: Develop effective management measure that avoid or minimise identified marine threats. | | |
| B.3.1 | Promote action by all operators to address potential threats to the conservation of emperor penguins while at sea (e.g., by working with CCAMLR, COMNAP, IAATO and other relevant organisations). | All Australian-flagged vessels operating in Antarctic waters are required to adopt measures to avoid and minimise marine pollution and wildlife impacts. As required by CCAMLR, Australian-flagged fishing vessels operating in Antarctic waters carry scientific observers, and there have not been reports of bycatch of emperor penguins during fishing operations. |
| Objective C1. Improve community awareness, understanding and support for the conservation of the emperor penguin, including through education of the general public and continuing education of national Antarctic programme personnel, non-governmental operators including tour and fishing agencies and other relevant human agencies/institutions that would visit or be present in the Antarctic Treaty area. | | |
| National Antarctic programme personnel, tour operators, fishing operators and other relevant agencies | | |
| C.1.5 | Liaise with the personnel of national Antarctic programmes and other relevant agencies, and with organisations carrying out commercial activities, (e.g., tour operators/tourists and fishing industry companies) to continue to develop and use tailored education and outreach opportunities to raise awareness about (i) the direct and indirect threats to emperor penguin populations, and (ii) practical measures to avoid direct impact/disturbance to the species across all of its life stages. | All Australian Antarctic Program expeditioners are given environmental training, including on avoiding wildlife disturbance. Expeditioners proposing to undertake activities in proximity to any emperor penguin colony receive a comprehensive, site-specific, environmental briefing prior to any activity. Post-activity reporting is also required, to help improve the management measures applying to future activities. Mawson station expeditioners receive additional awareness training, as they are most likely to encounter emperor penguins. |
| Objective C2: Improve global community awareness, understanding and support for the conservation of the Emperor Penguin by Parties working collaboratively to encourage action on addressing climate change, including through collaborative advocacy in other relevant forums (e.g. IPCC, UNFCCC). | | |
| C.2.1 | When engaging in climate change forums, Antarctic Treaty Parties should work collaboratively to inform those forums and participating nations and other stakeholders, as relevant, of the implications of climate change on the protection of the emperor penguin, and to encourage prompt and effective action on global climate change (consistent with Resolution 8 (2021) on ‘Antarctica in a Changing Climate’). | Consistent with ATCM Resolution 8 (2021) and ATCM Resolution 4 (2022), Australia is acting to ensure that its delegations to climate change forums receive briefing about the implications of climate change, including on the protection of the emperor penguin.  Australia continues to advocate in climate change forums for prompt and effective action on global climate change. |