

SUMMARY OF THE ANTARCTICA TODAY AND TOMORROW CONFERENCE

The conference ‘Antarctica Today and Tomorrow’ took place in Paris, France, on 29 June 2017. The meeting was organized by the Varda Group on behalf of the Antarctic and Southern Ocean Coalition (ASOC), and convened in partnership with the Oceanographic Institute/Albert I Prince of Monaco Foundation, the Prince Albert II of Monaco Foundation and The Pew Charitable Trusts.

The conference brought together 250 participants representing governments, research institutions, non-governmental organizations and civil society. Participants addressed the environmental challenges facing Antarctica and the Southern Ocean, and discussed the opportunity presented by the creation of marine protected areas (MPAs), with special focus on the an East Antarctic.

In the morning, after an opening ceremony, the first roundtable ‘Lessons from a Franco-Australian Success Story, thirty years on – from the Wellington Convention to the Madrid Protocol’ was held. In the afternoon, two other roundtables took place: ‘The Antarctic and Southern Ocean in a changing environment’ and ‘Marine protected areas in the Antarctic and Southern Ocean.’ The one-day event concluded with a closing ceremony.

A BRIEF HISTORY OF THE ENVIRONMENTAL MANAGEMENT OF THE ANTARCTIC

ANTARCTIC TREATY: The global response to the need to adopt an international framework for activities carried out in the Antarctic began with the adoption of the Antarctic Treaty, which was signed in Washington DC, US, on 1 December 1959. Its main purpose is to ensure “in the interest of all mankind that Antarctica shall continue for ever to be used exclusively for peaceful purposes and shall not become the scene or object of international discord.” The Treaty also provides for: freedom of scientific investigation in Antarctica and cooperation toward that end; the exchange of and free access to scientific observations and results from Antarctica; a prohibition on military activities; and an inspection regime. It entered into force in 1961 and as of 27 June 2017, the total number of Parties to the Treaty was 53. The “preservation and conservation of living resources in

Antarctica” is one of the obligations of Antarctic Treaty states and has been acted upon through the adoption of a number of international instruments. The main ones are described below.

CONSERVATION OF ANTARCTIC MARINE LIVING RESOURCES: The Conference on the Conservation of Antarctic Marine Living Resources was held in Canberra, Australia, from 7–20 May 1980 and agreed on a Convention of the same name (CAMLR Convention). The international treaty was adopted in response to concerns that unregulated increases in krill catches in the Southern Ocean could be detrimental for Antarctic marine ecosystems. The objective of the CAMLR Convention is conservation of marine living resources. This is implemented through an ecosystem-based approach - decisions about fishing and associated activities focus not only on target species but also on their predators and the ecosystem at large. This differentiates the CAMLR Convention from regional fisheries management organisations.

WELLINGTON CONVENTION: The Convention on the Regulation of Antarctic Mineral Resource Activities (CRAMRA) was signed in Wellington on 2 June 1988. The underlying assumption of the Convention was that it may be possible for mining to be consistent with the protection of the Antarctic environment.

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JOINT AUSTRALIAN/FRENCH INITIATIVE: Between May and August 1989, the then Australian Prime Minister, Robert Hawke and the then Prime Minister of France Michel Rocard announced that their countries opposed mining in Antarctica and rejected the Wellington Convention. The two Prime Ministers indicated they saw mining in Antarctica as incompatible with protection of the Antarctic environment and called for a comprehensive regime for its protection. The Antarctic Treaty operates under a consensus regime, and thus the Wellington Convention never came into force.

MADRID PROTOCOL: Spurred by the joint Australia/France initiative, the Protocol on Environmental Protection to the Antarctic Treaty was negotiated in under a year during four sessions of the 11th Antarctic Treaty Special Consultative Meeting. It was signed in Madrid, Spain, on 4 October 1991 and entered into force in 1998. The Protocol designates Antarctica as a “natural reserve, devoted to peace and science.” The Protocol also sets forth basic environmental principles applicable to human activities in Antarctica, established an Environmental Protection Committee, and prohibits all activities relating to Antarctic mineral resources except for scientific research.

ROSS SEA MARINE PROTECTED AREA: In October 2016, after several years of discussions, the members of the Commission for the Conservation of Antarctic Marine Living Resources (CCAMLR) agreed to designate a 1.55 million km² area of the Ross Sea as a MPA. The MPA will come into force on 1 December 2017, and will limit, or entirely prohibit, certain activities in order to realize specific conservation objectives. A ‘no-take’ zone will make up 72% of the MPA, while other sections will permit some harvesting of fish and krill for scientific research. CCAMLR has committed itself to establishing a network of MPAs in the Southern Ocean around Antarctica. The Ross Sea region MPA is only the second to be adopted, and the largest to date.

ANTARCTICA TODAY TOMORROW REPORT

OPENING CEREMONY

Robert Calcagno, CEO, Oceanographic Institute – Prince Albert I of Monaco Foundation, explained that the conference aims to support and raise awareness of the proposal by Australia, France and EU partners to create a new MPA East Antarctic. He expressed the hope that this MPA will be approved at the October 2017 meeting of CCAMLR. He called for the creation of two further MPAs by 2020, one in the Antarctic Peninsula and one in the Weddell Sea.

Via video, Prince Albert II of Monaco, stated that the designation of the Ross Sea MPA is “an incentive to go further.” He supported the establishment of a network of MPAs in the Antarctic, stressing the importance of the support of EU partners. He pointed to the engagement in the protection of Antarctica by former French Prime Minister Michel Rocard, who died just a year ago this week.

Participants then viewed a film about Michel Rocard’s polar advocacy, including footage from 2013 at the Oceanographic Institute.

Stephen Brady, Australian Ambassador to France, highlighted three key components of the Australian Antarctic Strategy and 20-Year Action Plan launched in 2016, namely: taking a lead role in major research projects, including the search for a million-year-old ice core; commissioning a new world leading multi-purpose ice breaker; and scoping options for expanded aviation capability for year-round access from Hobart to Antarctica. He stressed: the importance of the Antarctic Treaty system; Australia’s commitment to a network of proposed East Antarctic MPAs; and Australia’s continued support to the ban on mining in Antarctica.

LESSONS FROM A FRANCO-AUSTRALIAN SUCCESS STORY, THIRTY YEARS ON – FROM THE WELLINGTON CONVENTION TO THE MADRID PROTOCOL

This roundtable was moderated by Claire Nouvian, CEO, BLOOM Association, who explained it would focus on the success factors of the adoption of the Madrid Protocol.

Jim Barnes, Founder, ASOC, described the negotiations that lead to the adoption of the CRAMRA or Wellington Convention, noting the lack of transparency of these negotiations as a main concern at the time. He highlighted the role of civil society in the campaign to ban mineral activities in the Antarctic. Stressing that the Wellington Convention had to be ratified by all signatory States for it to come into force, he explained that Australia’s and France’s rejection of the Convention “effectively killed it.” He recalled the subsequent negotiation of the Madrid Protocol, underlining that it includes a 50-year ban on all commercial minerals activities.

Kelly Rigg, Greenpeace Antarctica Campaign Coordinator (1984-1992), Co-Director, The Varda Group, discussed the Greenpeace campaign history of the journey from the Wellington Convention to the Madrid Protocol. She outlined Greenpeace’s campaign strategy during that time, including tactics in the countries that are party to the Antarctic Treaty as well as on the Antarctic continent itself. Rigg highlighted how Greenpeace established a scientific station on the ice to raise public awareness of Antarctic wildlife and threats from mining in order to generate “moral outrage” during this treaty-making process. She added that the Greenpeace Antarctica base was also instrumental in facilitating NGO access to Antarctic Treaty negotiations, as with the base, the NGO was meeting standards of scientific engagement on the continent equivalent or higher than those countries had to comply with to become Treaty Parties.

Brice Lalonde, President of the French Water Academy, Former Environment Minister in Michel Rocard’s Government (1988-1991), described the context in which Rocard became engaged in the fight for the protection of the Antarctic, pointing to Rocard’s eagerness to wipe out the stain represented by the bombing of the Greenpeace ship *Rainbow warrior* in New

Zealand in 1985 by French secret services under orders from a previous government. He also mentioned the creation of the Intergovernmental Panel on Climate Change (IPCC) and the Exxon Valdez tanker accident in Alaska. He explained that as Environment Minister, he travelled to Australia and New Zealand to discuss the ban on mineral activities in the Antarctic. He stressed the close collaboration between the French Government and Greenpeace, as well as the importance of the work of the Cousteau Foundation.

In the ensuing discussions, panelists identified success factors in the ban on mineral activities in the Antarctic, including the need for an international strategy combined with national strategies, and the role of political will. Barnes said the consensus-based system of the Antarctic Treaty implies that an individualized strategy for each country is required. Underlining that policy decisions are not made based on facts and science, Rigg stressed the importance of being “clever and creative to reach people’s hearts.”

Panelists said major powers curtailing efforts to raise awareness of the need to protect the Antarctic include States that have perceived interests in resources and States that are less accountable to the general public. Participants and panelists also discussed, *inter alia*: the collective success of NGOs that steered the process from the Wellington Convention to the Madrid Protocol; the political feasibility of extending the UN notion of the “responsibility to protect” as a tool for Antarctica’s protection; increased transparency in the pathway to consensus; the need for “black and white” issue to encourage public engagement; and the importance of building personal relationships to influence decision making.

THE ANTARCTIC AND SOUTHERN OCEAN IN A CHANGING ENVIRONMENT

Moderated by Rémi Parmentier, Co-Director, The Varda Group, this roundtable focused on the state of the Antarctic and the Southern Ocean, as well as climate change adaptation measures that could be taken to increase its resilience.

Thomas Stocker, University of Bern, Co-Chair IPCC Working Group I, stated that 147 billion tonnes of freshwater is lost per year in Antarctica. He underlined that the Southern Ocean is changing rapidly and substantially as a result of increasing carbon dioxide (CO₂) concentrations in the atmosphere. He listed projected impacts of the substantial warming of the Southern Ocean, including: destabilization of the ice shelf, due to the warming of the ocean underneath; mass loss of Antarctica, even in scenarios consistent with a warming below 2°C above pre-industrial levels; and possibly several meters of sea-level rise. He mentioned the impacts of ocean acidification on the Antarctic fauna and pointed to the upcoming release of the IPCC Special Report on the Ocean and Cryosphere in a Changing Climate in 2019.

Françoise Gaill, Scientific Director, Ocean & Climate Platform, noted that the currents across the Antarctic region come from various oceans. She pointed to an increase in the warm currents from the tropical regions, which have significant impacts on organisms living in the ocean. She mentioned for example the decline in the population of Emperor penguins due to the disappearance of ice cover. Gaill also referred to the invasion of the continental shelf by King crabs because of the warming of the Southern Ocean, affecting other species, including sea stars.

Anne-Catherine Ohlmann, CEO, Fondation Université Grenoble, ICE Memory Project, explained that the Project is an international initiative that collects ice cores from glaciers most at risk from climate change and stores them in Antarctica for future generations of scientists. She discussed how this archive of ice cores will be retrieved, analyzed and stored in Antarctica, including the legal implications of managing ice cores for humanity.

In the ensuing discussions, participants noted the challenges of accessing glaciers in different countries and ensuring ice cores that belong to Ice Memory are accessible to the scientists of today and tomorrow. One participant stressed the relevance of the ‘Massive open online course’ on climate change. Some pointed to the impact of climate change on key species such as krill, its use as feed in aquaculture and gaps in scientific understanding of krill’s ecosystem functions. One participant pointed to the threat posed by illegal, unreported and unregulated (IUU) fishing to the Antarctic ecosystem.

Participants also called for raising awareness of mountain communities of the impacts of climate change and stressed the need for changes in their behavior. Panelists indicated that the IPCC would strive to disseminate the key findings of its Sixth Assessment Report (AR6) to the public at large and underlined the importance of bringing scientific results to schools. On MPAs, discussions highlighted their role in building resilience to climate change, serving as climate change reference areas and protecting biodiversity.

Keynote Address ‘France in the Antarctic, Today and Tomorrow:’ Serge Ségura, French Ambassador in charge of the Oceans, Ministry of Foreign Affairs, discussed the scientific capacity of France in the Antarctic, with two scientific bases on Antarctica, three bases on sub-Antarctic islands and two polar ships. He underlined: the role of the French Southern and Antarctic Lands Territories (TAAF) administration in facilitating research in the Antarctic; the role of CCAMLR in regulating France’s fishing activities; France’s efforts to enter into bilateral agreements with countries such as Australia and South Africa; and the “genius” of the Antarctic Treaty to deal with the issue of sovereignty in Antarctica.

MPAS IN THE ANTARCTIC AND SOUTHERN OCEAN

This roundtable was moderated by Uta Bellion, Director, European Marine Programme, The Pew Charitable Trusts.

Philippe Koubbi, Pierre and Marie Curie University, Paris, explained that the designation of MPAs is based on knowledge of where fish populations are located, since they are prey for predators such as sea birds and marine mammals. He stressed that climate change affects ecological thresholds and should be taken into account. Noting that Australia, France and South Africa have declared MPAs in Antarctica, he stated that the CCAMLR goal of establishing various MPAs is “starting to be reached.” He drew attention to the importance of deep sea fauna and monitoring of the smallest species.

Anne-Gaëlle Verdier, Deputy Director for the Environment, TAAF, France, presented on the TAAF, the French Southern and Antarctic Lands Territories Administration. She pointed to the ecological characteristics of these territories, noting they are located 2000 kilometers away from the coast and are a significant source of endemism. Verdier outlined threats and pressures to the territories, including: climate change impacts; alien invasive species; pollution; IUU fishing; avian mortality caused by fisheries by-catch; and human disturbance. She described the nature reserve designated in the French sub-Antarctic islands, highlighting no-take zones and an advisory scientific committee.

Ryan Dolan, The Pew Charitable Trusts, described the abundant wildlife supported by the Ross Sea and discussed how CCAMLR established the Ross Sea Region MPA. He outlined the pathway to consensus from 2012 to 2016, discussing in particular how China and the Russian Federation agreed to the MPA. He identified lessons learned on reaching consensus, including the need for: a solid framework for developing a network of MPAs; strong science to underpin the proposal; the understanding of parties’ interests; compromise proposals; a commitment to robust monitoring; and high-level diplomatic outreach.

In the ensuing discussion, participants highlighted the challenge of IUU fishing in MPAs, stressing the need for increased monitoring and surveillance, particularly in CCAMLR areas. One participant noted that “pirate boats” undertake maintenance work in Cape Town, South Africa, and queried whether these boats can be seized given a recent agreement between France and South Africa. Participants also discussed whether an island can provide a legal base for MPAs and exclusive economic zones. Some noted how lessons learned from the Ross Sea MPA process could be applied to the proposed East Antarctic MPA, such as the need for high-level political support. In closing, participants stressed the need for public engagement on these issues and high-level diplomatic outreach.

CLOSING CEREMONY

Nicole Aussedat, on behalf of ASOC, emphasized the need to see France, the EU and Australia lead in securing an ambitious East Antarctic MPA this year, thanked all the participants and invited them to take part in the campaign #Antarctica2020 in support of Southern Ocean MPAs.

Jean-Louis Étienne, Polar Explorer, stressed the impact of climate change on biodiversity, noting the changes in species’ behavior to find food. Stressing the need for further exploration efforts, he presented the Polar Pod project, a manned oceanographic platform. He explained that the project consists of an autonomous vertical ship that will reach 80 meters under sea level in the Southern Ocean. He added that this structure will assess the ability of the ocean to absorb the carbon, carry out an inventory of wildlife acoustics and validate satellite measurements. He concluded by stating that “Antarctica is not a continent for man, it is a continent for the Earth.”

UPCOMING MEETINGS

SCIENTIFIC COMMITTEE ON ANTARCTIC RESEARCH (SCAR) BIOLOGY SYMPOSIUM: The main theme for the XIIth SCAR Biology Symposium is ‘Scale Matters.’ It aims to focus on understanding biological distribution and trends as well as adaptation and processes, both in the marine and terrestrial realm including the human biology. The symposium will also focus on the societal impact of Antarctic biological sciences and how this can be communicated, not only to the general public, but also to policy makers. It will bring together scientists with an interest and expertise in Antarctic biology. **dates:** 10-14 July 2017 **location:** Leuven, Belgium **www:** www.scar.org/events/51-events/138-scar-biology-symposium

4TH INTERNATIONAL MPAs CONGRESS (IMPAC4): Hosted by Chile, this Congress will be one of the last milestones in the road of conferences on marine conservation before reaching the 2020 deadline for the Aichi Targets. The event will provide an opportunity to evaluate and review practices in MPAs towards fulfilling Target 11, and for combining MPA management with advances on UN Sustainable Development Goal 14 (life below water). The Congress will bring together MPA practitioners from across the world. **dates:** 4–8 September 2017 **location:** La Serena-Coquimbo, Chile **www:** <http://www.impac4.org/>

FOURTH OUR OCEAN CONFERENCE: Organized around the theme ‘An Ocean for Life,’ this Conference will be hosted by the European Commission. It will address various ocean issues, including MPAs, climate change, sustainable fisheries and marine pollution. **dates:** 5-6 October 2017 **location:** Malta **www:** <http://ourocean2017.org/>

36th MEETING OF THE COMMISSION OF THE CONVENTION FOR THE CONSERVATION OF ANTARCTIC LIVING MARINE RESOURCES (CCAMLR): The 25 States Parties to CCMLAR gather to discuss and consider conservation measures for the Southern Ocean, including the creation of large-scale MPAs. **dates:** 16–27 October 2017 **location:** Hobart, Australia **www:** <https://www.ccamlr.org/en/ccamlr-xxxvi>