Report of the Joint Inspections’ Program undertaken by Brazil, Ecuador, Peru, Poland, and the United States to the ASMA No. 1 - Admiralty Bay, King George Island

Report of the Joint Visit undertaken by Brazil, Ecuador, Peru, Poland, and the United States to the Antarctic Specially Managed Area No.1 – Admiralty Bay, King George Island.

Summary

From 13-31 January 2022, personnel from the United States visited Copacabana Field camp and reviewed the western shore of the Admiralty Bay region. Personnel from Brazil were at Admiralty Bay from February 28 to March 17 and a Polish team sent information regarding the area around Arctowski Station. In summary, visiting personnel concluded that the values for which the ASMA No. 1 was designated remain relevant and several measures are in place to ensure the aims and objectives of the Management Plan are being met. The Parties report this visit was conducted under Article 10 of Annex V to the Protocol that provides for Parties to “make arrangements for collecting and exchanging records, including records of permits and reports of visits, including inspection visits, to Antarctic Specially Protected Areas and reports of visits to Antarctic Specially Managed Areas.”

Introduction

Admiralty Bay is located on King George Island, South Shetland Islands, about 125 kilometres from the northern tip of Antarctic Peninsula. The primary reason for its designation as an Antarctic Specially Managed Area (ASMA No. 1) is to protect its outstanding environmental, historical, scientific, and aesthetic values by assisting in the planning and coordination of activities, avoiding possible conflicts, improving cooperation among Parties and minimizing environmental impacts. Admiralty Bay was first visited by sealers and whalers in the 19th and early 20th centuries, and relics from these periods still remain. The area is characterized by magnificent glaciated mountainous landscape, varied geological features, rich seabird and mammal breeding grounds, diverse marine communities, and terrestrial plant habitats. For nearly four decades coordinated scientific research has been conducted in Admiralty Bay by five countries. Research on penguins has been undertaken continuously since 1976 and ASMA No. 1 is the site of longest continuous penguin study conducted in Antarctica. Admiralty Bay also has one of the longest historical series of meteorological data collected for the Antarctic Peninsula, considered as one of the most sensitive areas of the planet to climate change, as stated in its current Management Plan (https://www.ats.aq/devph/en/apa-database/3), which is currently under review.

Officials from Brazil and the United States visited the area to ensure that its designation as an ASMA provided continued protection of the special values based upon which it was initially designated. The ASMA No 1 Management Plan and other relevant background information were reviewed prior to the start of the review. The “Checklist to Assist in the Inspection of Antarctic Specially Protected Areas and Antarctic Specially Managed Areas” (Resolution 4 (2008)) was used as a guide during these visits. The visit was planned and conducted, when possible, in coordination with science and program support activities to minimize environmental impact.

This visit included identifying whether significant changes had occurred within ASMA No. 1 and whether the ASMA No. 1 Management Plan, as implemented, remains relevant and sufficient to protect the values of the Area.

Site Visit

From 13-31 January 2022, personnel from the United States visited Copacabana Field camp, which is located with ASPA No. 128. The team conducted annual scientific research, continuing long-term monitoring of penguins, skua, and giant petrels. They also performed several flights with a small fixed-wing remotely piloted aircraft systems (RPAS) to survey penguin colonies at Llano Point and Rakusa Point, including beyond-visual-line-of-sight flights.

From 28 February to 17 March 2022, the team from Brazil visited the areas around the Comandante Ferraz Station, on the edges of the Keller Peninsula and visited Hennequin Point, where the República del Ecuador Refugee is located, and also visited Crepin Point, at the area of Machu Picchu Station.

From 20 January to 18 February 2022, a Peruvian team conducted annual scientific research in Crepin Point. From 11-18 February personnel from Peru visited the areas around Machu Picchu station and observed/ found a few individuals of Antarctic tern, as well as Skuas populations.

The values for which the Area was designated pertain primarily to the status of penguins, skuas, and giant petrels along the western shore of Admiralty Bay. In general, all species identified in the Management plan remain present and relevant for protection under the Management Plan. Chinstrap and Adélie penguin populations continue to decline, while gentoo populations have increased. The decline of chinstrap penguins within the ASMA is particularly striking, with several former breeding areas now abandoned. In contrast, the expansion of areas used by the growing gentoo penguin population has resulted in trampling and loss of vegetation in some areas, notably near Llano Point along the far eastern end of lateral moraines left by the retreat of Ecology Glacier. Skua and giant petrel populations remain abundant, with relatively stable distributions of breeding areas. Among other regularly occurring birds identified in the Management Plan, breeding kelp gulls, sheathbills, storm petrels, Antarctic terns, and blue-eyed shags were observed, indicating the continued use of ASMA No. 1 by a diverse suite of seabirds.

The occurrence of other rare species to the ASMA was noted again this year during their short visits to Copacabana Field Camp. A king penguin laid and abandoned an egg during their stay. This bird (banded by Polish researchers several years ago) has been present in the Copacabana colonies for several years now A small flock of white-rumped sandpipers was observed near the Baranowski Glacier. An adult macaroni penguin visited for several days. These observations suggest the broader importance of Admiralty Bay for bird species not typically present in the ASMA No 1.

The presence of several marine mammal species was also noted. Humpback, fin and killer whales, and leopard seals were observed at sea within ASMA No. 1. On shore, numerous elephant, Antarctic fur, and Weddell seals were observed. The presence and abundance of such species suggests that species in ASMA No. 1 remain abundant and attractive to a diverse set of marine predators.

In the general vicinity of Copacabana Field Camp, other values to be protected include the rich vegetation, including grasses, lichens, and mosses. Observations suggest healthy and lush growth in areas not routinely used by penguins for breeding.

Near the Comandante Ferraz Station two moss carpet areas occur, both of which are almost 300 m long. Hennequin Point has large moss carpet areas as well. Even though moss carpets are the most conspicuous vegetation form, there are several small patches of mosses distributed everywhere on ice free areas across the bay.

In the vicinity of the Henryk Arctowski Station the eradication of the non-native species of grass *Poa annua* continues. Eradication is carried out in accordance with the methods proposed in the multi-year research program “The causes, course and consequences of the expansion of *Poa annua* L. in Western Antarctica, a multi-aspect population study” which was carried out in 2014 – 2017. In accordance with Annex II of the Protocol on Environmental Protection to the Antarctic Treaty, as well as the CEP non-native species manual, and the Management Plan of ASPA No 128, measures to eradicate *P. annua* from the area are undertaken. Progress was reported to ATCM XXXVIII/CEP XVIII (IP78), ATCM XXXIX/CEP XIX (IP60), ATCM XL/CEP XX (IP47), ATCM XLII/CEP XXII (IP150) and ATCMXLIII/CEP XXIII (IPIP089).

Human activity

There are currently two permanent year-round research stations (Henryk Arctowski Station and Comandante Ferraz Station), three seasonal research stations/facilities (Machu Picchu Station, Copacabana Field Camp and República del Ecuador Refuge) and several minor structures (historical remains, emergency refuges, permanent field camps) in the Area.

In addition to numerous scientists, supporting personnel and research expeditions, Admiralty Bay has been visited by an increasing number of tourists, the latter mainly as organized tourist ship expeditions and private yachts. However, visitor numbers dropped dramatically during the COVID-19 pandemic.

Recommendations

* All personnel entering the ASMA No. 1 should be made aware of the provisions of the Management Plan and required to follow the guidance;
* Personnel should be trained to reduce the risk of introducing non-native species to the ASMA No. 1, including food-borne pathogens;
* Personnel should be instructed to use vegetation-free walking routes whenever possible to minimize trampling; and
* Coordination among members of the ASMA No. 1 Management Group should continue to ensure successful management of the area.