Contributions to the promotion and awareness of the care of palaeontological heritage in the Antarctic region

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**Information paper submitted by Argentina**

Summary

This document reports on an Argentine initiative to promote visitor awareness regarding Antarctic palaeontological heritage. Given the growing increase in Antarctic tourism, the diversification of activities and the landing in areas rich in fossil content, Argentina considered the need to establish an appropriate awareness mechanism to avoid the impact and preserve this scientific heritage and natural resource, as well as contribute with the educational contents of the visitors.

***Introduction***

Palaeontological studies constitute an important axis in the research carried out in the Antarctic continent and the fossils obtained from there allow carrying out significant studies to determine significant data on issues related to climate change, palaeobiogeography, palaeographic reconstruction and evolutionary analysis, among others. In this discipline, field work is essential and must be carried out with great rigour in order to obtain data that allows validating scientific conclusions. Palaeontological heritage is unrepeatable and, as such, each specimen is unique. However, not only is the fossil piece itself important, but it is essential to maintain the environment and the position in which this piece is found in the stratum without alterations, so that improper manipulation can cause loss of information or modify completely the information to which the researcher accesses.

Given the growing increase and diversification of Antarctic tourism activities with landings in areas rich in fossil content, where curiosity about the unknown can lead to wanting to manipulate these pieces, it is proposed to increase visitor awareness on issues related to palaeontological heritage to avoid their disturbance at the discovery sites and to minimise the impact on data collection by scientists working in different areas. The importance of valuing and protecting the fossil content even beyond the specially protected areas (ASPA) or scientific sites of special interest, has a double purpose: on the one hand, it promotes the conservation of palaeontological resources and, on the other, it contributes to the educational content of the shore excursions that visitors take.

By promoting a responsible visit to the Antarctic continent, through raising awareness about the care and respect for palaeontological heritage, it will be possible to minimise the cumulative impact, unnecessary human disturbance and inappropriate collection of fossil material, which is ultimately part of history of the continent and of our planet.

***Background***

As related background, it is important to note the Working Papers (WP 57 and WP 50) presented by Argentina in CEP XVII (ATCM XXXVII, 2014) and CEP XVIII (RCTA XXXVIII, 2015), respectively, expressing its concern about the protection of fossils in Antarctica as well as WP 9 presented by New Zealand, at the CEP IV (ATCM XXIV, 2001). In the latter case, the importance of the protection of Antarctic meteorites is raised, the debate on which gave rise to Recommendation 3/2001.

For its part, the SCAR Environmental Code of Conduct on geoscience research activities in the field in Antarctica (Resolution 1, 2021, Annex) describes fossils as finite scientific resources and highlights the importance of their safeguarding.

Generally speaking, the CEP and the ATCM have exposed their concern about the possible impact that tourism can generate in Antarctica, mentioning the importance of education for the dissemination of the values of Antarctica through different provisions, particularly related to tourism. In this regard, it should be noted that in the final report of ATCM XXXVIII (2015) “(t)he Committee expressed concern about the commercial collection of Antarctic fossils and other geological materials. The Committee urged all Parties, national programmes and IAATO to take appropriate measures to ensure that the collection of fossils and other geological materials is carried out for scientific purposes only and that such materials are properly archived for research purposes” (# 212, p. 161).

In general terms, the Antarctic Programmes have a protocol and an established methodology for the collection of fossils based on their regulatory frameworks, but there are other ways of accessing Antarctica, which involve personnel who may not have sufficient information and whose activities may ultimately affect the ongoing scientific studies. In particular, tourism in its various modalities shows a growing trend, halted during the seasons affected by the pandemic, but which has been reactivated during the last southern summer season 2022-2023, where a significant increase was observed in tourist flows in Antarctica.

Resolution 7 (2009), on the general principles of Antarctic tourism, urges operators and Parties to cooperate “to disseminate best practices in environmental management…” as well as to focus on “activities aimed at enriching and educating visitors about the Antarctic environment and its protection.”

***Proposal for protection through education for visitors***

As the Antarctic Treaty provisions relating to visitor behaviour on land are generally focused primarily on the protection of wildlife and the guidelines for visitor sites have site-specific content, it is considered appropriate and advisable to use an educational tool that contributes to the generation of a positive behaviour towards fossils as part of the Antarctic heritage. In this way, in accordance with Resolution 7 (2009) on the general principles of Antarctic tourism, it contributes to the generation of an instrument for tourism and non-governmental activities in Antarctica in a proactive way.

It is for this reason that Argentina has taken the initiative to develop educational material for Antarctic visitors. This material, within the framework of a collaboration between the University of Tierra del Fuego and the National Directorate of the Antarctic-Argentine Antarctic Institute, consists of a poster and a brochure, as tools to raise awareness about a little-known heritage but which represents significant aspects of the history of the Antarctic continent.

This awareness will be carried out at the points where visitors are in Ushuaia as the gateway city to Antarctica, as well as in the most visited Argentine scientific stations in Antarctica. The posters will be available in printed format in the boarding area of the port of Ushuaia, at the Secretariat of Tourism Reports and at the National University of Tierra del Fuego, together with a QR code that will allow access to download a brochure with educational information. It should be noted that the poster will also be available at the Argentine bases, recalling the importance of not disturbing the state of the fossil remains, since their environment is highly significant information in scientific studies.

Argentina makes the attached brochure available and requests the CEP to recognise its value and usefulness in raising awareness among Antarctic visitors about the importance of protecting the Antarctic palaeontological heritage through the promotion of responsible tourism, and invites the Parties to make comments for the improvement of this material during the intersessional period, to share similar experiences at the next meeting and, if they consider it pertinent, to use the brochure as a basis for the preparation of their own dissemination material.