SCAR Environmental Code of Conduct for Geosciences Field Research Activities in Antarctica

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Working Paper submitted by SCAR

Summary

Following broad and extensive consultation, SCAR has updated earlier advice to geoscientists undertaking field research in Antarctica with the preparation of the *SCAR Environmental Code of Conduct for Geosciences Field Research Activities in Antarctica* (see Attachment A). SCAR recommends that the CEP considers the Code of Conduct and, if agreed, encourages its dissemination and use when planning and undertaking geosciences field research activities in Antarctica.

Introduction

Exposed rock constitutes only c. 0.3% of Antarctica’s area, yet it is within these ice-free areas that the majority of human activity occurs. Potential threats to geological features of environmental or scientific value by field researchers might include:

* oversampling of rare rocks, fossils and minerals for scientific purposes; or
* inadvertent damage to the relevant scientific values of a location by movement of rock and fossils out of their stratigraphical context (e.g. movement of a surface fossil from one location to another may give false information of the presence of that organism in the stratigraphic record).

The CEP has previously acknowledged the importance of guaranteeing protection of geological values and welcomed further discussions on the matter (CEP Final Report 2014, para. 203).

SCAR has previously provided advice to researchers undertaking geosciences research in Antarctica through the SCAR Geological Sampling Code of Conduct (GeoReach Newsletter, SCAR Geosciences Standing Scientific Group, Vol. 7, May 2008). The original Code of Conduct, generated over a decade ago, concentrated predominantly on geological sampling with little or no consideration of other issues relevant to geosciences fieldwork. Following the establishment of the SCAR Action Group on Geological Heritage and Geoconservation in 2014, the need was identified for more comprehensive guidelines on geological field research activities to promote effective conservation of Antarctic geological values.

SCAR Codes of Conduct

SCAR has an established record of developing Codes of Conduct that provide non-mandatory advice to those undertaking research activities in Antarctica (see: <https://www.scar.org/policy/scar-codes-of-conduct/>). The Codes of Conduct are often considered useful in planning, including during the environmental impact assessment process, and undertaking activities within the Treaty area. Examples of SCAR Codes of Conduct include the:

* Code of Conduct for the use of Animals for Scientific Purposes in Antarctica (Resolution 4, 2019);
* Environmental Code of Conduct for Terrestrial Scientific Field Research in Antarctica (Resolution 5, 2018);
* Code of Conduct for the Exploration and Research of Subglacial Aquatic Environments (Resolution 2, 2017); and
* Code of Conduct for Activity within Terrestrial Geothermal Environments in Antarctica (Resolution 3, 2016).

Following wide consultation with the geoscience community, COMNAP and CEP (see ATCM XLII IP50 *Draft SCAR Code of Conduct on Geosciences Field Research Activities in Antarctica*), SCAR has now updated the existing advice and expanded the scope to produce the SCAR EnvironmentalCode of Conduct on Geosciences Field Research Activities in Antarctica (see Attachment A). The Code of Conduct includes issues worthy of consideration before going into the field, once in the field and once fieldwork is completed. It also highlights issues relevant to geological work on fossils, geomorphological features, meteorites and the use of specific techniques including cosmogenic analysis and other geophysical methodologies (e.g. seismic surveys, electrical resistivity, tomography or radar surveys). The Code of Conduct also includes, as an Annex, a preliminary list of national repositories (museums, universities, institutes, etc.) housing Antarctic geological and palaeontological specimens.

Recommendation

SCAR recommends that the CEP:

1. recognizes that broad and extensive consultation has been undertaken in the development of the voluntary SCAR Environmental Code of Conduct for Geosciences Field Research Activities in Antarctica (Attachment A);
2. recognises that this Code of Conduct replaces the earlier SCAR Geological Sampling Code of Conduct;
3. considers the Code of Conduct for dissemination and encouragement of adoption when planning and undertaking geoscience field research activities in Antarctica; and
4. recommends that Parties maintain updated information concerning their national repositories housing Antarctic geological and palaeontological specimens, as recorded in the SCAR list available at: <https://www.scar.org/scar-library/search/science-4/geosciences/5595-list-of-national-geosciences-repositories/file/>

Annex A. Draft Resolution

Environmental Code of Conduct for Geosciences Field Research Activities in Antarctica

The Representatives,

Recalling Article 3 of the Protocol on Environmental Protection to the Antarctic Treaty (“the Protocol”), which requires that activities in the Antarctic Treaty area shall be planned and conducted so as to limit adverse impacts on the Antarctic environment and dependent and associated ecosystems;

Recognising that Antarctica may contain geological, palaeontological, glaciological and geomorphological features of high environmental and scientific value;

Acknowledging that the Antarctic environment may be at risk from impacts associated with research activities, including oversampling of fossils, rocks and minerals;

Welcoming the development by the Scientific Committee on Antarctic Research (“SCAR”) through broad consultation, including with the input of the Council of Managers of National Antarctic Programmes (“COMNAP”), of the SCAR Environmental Code of Conduct for Geosciences Field Research Activities in Antarctica (“SCAR Code of Conduct”) that Parties can apply and use, as appropriate, to assist with meeting their obligations under the Protocol;

Recommend that their Governments:

1. endorse the non-mandatory SCAR Environmental Code of Conduct for Geosciences Field Research as representing current best practice for planning and undertaking geoscience field research activities in Antarctica;
2. encourage the consideration of the SCAR Environmental Code of Conduct for Geosciences Field Research during the environmental impact assessment process for geoscience field research activities within Antarctica and encourage their researchers to abide, to the best of their ability, by the contents of the Code of Conduct in conducting geosciences field research activities in Antarctica; and
3. maintain updated information concerning their national repositories housing Antarctic geological and palaeontological specimens.