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Editorial

Marine biological diversity beyond areas of national jurisdiction

When the Convention for Biological Diversity (CBD) was originally designed it focussed entirely on the biological resources that lie within the territorial scope of sovereign states. Finding a formula that would allow most of the present countries to sign and ratify the Convention was clearly challenging enough so those areas that lay outside legal boundaries, for example the high seas, or those that were not sovereign territory, like the Antarctic, simply fell through the holes. Getting the CBD up and running was the first priority and, now that almost all countries have signed up, the lawyers can turn their interests to the less obvious areas.

The Antarctic is clearly a major and growing source of biologically useful material, as an Information Paper compiled by the Netherlands and submitted to the recent Antarctic Treaty Consultative Meeting in Sofia clearly showed. With at least 77 Antarctic species being mentioned in patent applications and with 42% of the patents traced so far being related to krill there is clearly active developmental research happening on a wide range of Antarctic material. The use of these genetic resources also proves to be diverse with several applications for anti-cancer drugs, one concerned with the diagnosis of anaemia and another for enhancing the synthesis of collagen. Antarctic lichens have provided an anti-inflammatory compound as well as another that has antibiotic activity. Industrial applications include cold-activated amylases for washing powders, compounds for use in freezing processes and baking as well as those that provide UV protection to the skin. The development of krill oil for a wide variety of medical applications, from joint treatments to anti-ageing compounds, suggests that this will continue to be a very fruitful source of new developments. However, none of this material is covered by the CBD resource sharing or by its sustainable use objectives and Treaty Parties clearly have different view about initiating regulation in this sphere.

There was international concern as long ago as 2005 when the United Nations General Assembly established an Ad Hoc Open-ended Informal Working Group to look at how to treat marine resources beyond national jurisdiction. This consultation has developed significantly and is now considering a new international instrument under the UN Convention on the Law of the Sea (UNCLOS) to provide for the conservation and sustainable use of biodiversity beyond national jurisdiction covering marine genetic resources, area management tools, capacity building, marine technology and benefit sharing. The current discussions are expected to report in 2017.

Where does this leave the Antarctic and the Southern Ocean? Some Parties have made public statements about their interest in developing commercial products from Antarctic species whilst many others have simply done it without declaring their activities. In 2005 the Treaty Parties decided that bioprospecting activity should be reported through the Electronic Information Exchange System but as they failed to agree on a definition of bioprospecting this has been little used, despite fresh exhortations in 2013. Whilst the Treaty Parties briefly discussed the recent paper and re-iterated that only they should be able to make laws on bioprospecting for the Treaty area, it seems likely that the UN will provide an internationally binding instrument covering the marine resources of the Southern Ocean, which may find a way of sidestepping the territorial sovereignty issues that have often complicated change and development in Antarctica. This will presumably have to be accepted by all those countries that have ratified UNCLOS. So how will such a change be incorporated into the activities of both the Antarctic Treaty and CCAMLR? And why are there not currently legal discussions at the ATCM to prepare for this eventuality?

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