Assessment and Conservation of Geological Specimens for Travelling Exhibition



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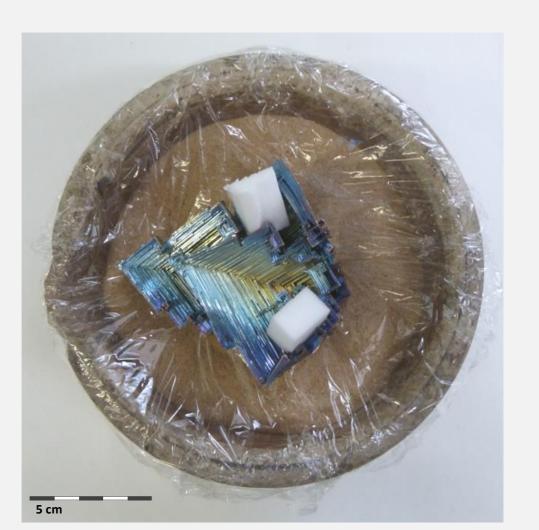
1. Introduction

The Horniman Museum and Gardens runs a free loans project called Object in Focus. A selection of exhibits are available from across our collections (Natural Sciences, Anthropology) and Musical Instruments) and come as a pre-mounted display, in a museum grade case, with interpretation panel and a 'curator talk' if required. Recently, a new geological exhibit was put together which is going to its first venue in September 2021.

2. Conservation Assessment

Conservation assessments were carried out for all specimens prior to final selection to ensure neither the specimens nor staff/visitors were at risk due to their inclusion. Two specimens were flagged as requiring further attention before they could go on loan.

Bismuth is a post-transition metal and was included for



3. Display

Due to so many staff members working remotely throughout 2020/21, we had to devise a way to hold layouts virtually. Workshop Technician and Mount Maker Phil Sofer was on site whilst the Curator, Collections Access Officer and Conservator were present thanks to Zoom and a well placed ladder.





interest both and its aesthetic nature. Bismuth is brittle material and а fragments several had broken off sometime in the past. These breaks were repaired using 40% w/v Paraloid B72 acrylic resin, in acetone and IMS (50:50).

Bismuth (NH.2008.11) mid-treatment to adhere breaks. © Horniman Museum.

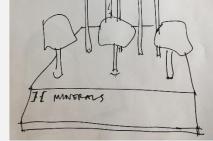
The mica schist (being schist!) caused much discussion as the friable surface constantly sheds fine green flakes. The Conservator considered using a consolidant to prevent surface deterioration, however this would result in darkened colour and increased glossiness of the specimen, thus altering the true surface appearance of the rock.

specimen of mica Flaky (NH.2008.10). © Horniman Museum.



schist In order to avoid never putting any specimens susceptible to - various types of – deterioration on display (all taxidermy for example, re UV damage), a level-headed approach to an 'acceptable level' of degradation must be utilised based on а number of factors such historical importance, rarity, ease of replacement, etc. After all, why do we keep specimens if not for public engagement, teaching, and scientific research?





Rough sketch of the stepped mounts, to be used for the display. © Horniman Museum.

Although unconventional, it allowed the Team to decide on order, positioning, and heights of the specimens within the case, without delaying the delivery of the exhibition to the host venue. The specimens were grouped by type; Rocks, minerals, and lab-grown bismuth.

The specimens are being mounted in padded cradles (of minimal size) atop metal rods, to create a stepped display. This display method creates more lines of sight to each specimen for visitors. The text panel will be placed at the front, around 65 cm from the ground, to facilitate a comfortable viewing experience for visitors of varying heights and physical abilities.

4. Transportation of Specimens

Transportation of the minerals between the Museum's store and the conservation/layout areas (and in the future to the host venue) was done using recesses cut into Plastazote that were lined with Teflon[®] Relic Wrap[™]. This minimises friction and helps to prevent snagging, particularly important for both the mica and staurolite-garnet schists. Display at the venue will include environmental monitoring and a preconditioned 40% RH Prosorb silica gel cassette to regulate humidity levels.

It was concluded that as the mica schist is not of historical importance and any surface degradation would be extremely minor, not using a consolidant was the preferable option to altering its natural state and appearance.

5. Acknowledgements

Huge thanks go to the following people for their hard work: Julia Gresson; Conservation Manager Emilie Masse; Previous Conservator Sarah Sinka; Collections Access Officer Phil Sofer; Workshop Technician and Mount Maker Lynn Platoni; Conservation Volunteer