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Department of Arts and Culture

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SITE INSPECTION REPORT: BARBERTON MAKHONJWA MOUNTAINS

BY

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HERITAGE INSPECTORATE UNIT

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1. Introduction

Section 27 (3) of the National Heritage Resources Act 25 of 1999 (NHRA) states that “Any person may submit a nomination to SAHRA for a place to be declared as a National Heritage Site (NHS) or to the provincial heritage resources authority for a place to be declared as a provincial heritage site. The heritage authority concerned may prescribe the format and procedures for such nomination”. In March 2016, SAHRA Heritage Inspectorate Unit received a call regarding the nomination of the Barberton Mountain Land as a National Heritage Site. As part of the nomination process, SAHRA officer went to the site to do inspections.

2. Purpose of the site visit

On the 15th of April 2016, SAHRA officer visited the Barberton Mountain Land following a call of nominating the site as a NHS. The inspection took place in compliance with section 27 of the NHRA which states that “SAHRA must identify those places with qualities so exceptional that they are of special national significance.....” The main objective of the inspection was to inspect whether the site is worthy of NHS status and also to take the nominator through the nomination process.

3. Background

During the 1700s and 1800s, the Barberton Mountain Land was sparsely occupied by the Swazi and Pastoralist. The steep and rocky landscapes did not provide well for human livelihood, in this case human occupation fluctuated seasonally and according to the flow of local conflicts. Substantial settlements were rare, being limited mainly to the larger river valleys.

At the time of European settlement in 1860s, it became a contested border zone. Land deals were struck between the Swazi King and Transvaal Colonists. The evidence of this still remains to this day. The Barberton Mountain lies mostly in



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South Africa with 20% in the north west of Swaziland. The region is mainly used for timber growing, nature conservation, catchment protection and communal livestock grazing. Mining was a major activity but it is now minor and declining.

4. Significance Value of the Makhonjwa Mountains

The significance of the Barberton Mountain Land first became known when alluvial gold was found at Kaapsehoop in 1875. This was followed by the Moodies and the Barber's reef discoveries and subsequent gold rush into the hill above the Suid Kaap River. Barberton's gold rush was quickly spent in 1886. At that time, South Africa's mineral wealth grew enormously. The result of this prosperity was the development of geological science to support mining. In the first half of the 20th century technical expertise and geological exploration expanded rapidly, supported by academic research.

From these ranks, the twin brothers Richard and Morris Viljoen were students in 1969 and the first to describe the distinctive Achaean lavas from the Komati river valley, now known as Komatiites. This landmark discovery identified volcanic rocks, formed at temperatures approximating 1650 degrees. The highest temperature ever described for volcanic rocks on the Earth's surface and this triggered a new enquiry into the nature of the early Earth. These discoveries, followed by many others helped to publicise the existence of the ancient but remarkably preserved Achaean sequences. The Barberton Mountain Land became known for a different purpose other than its gold rush history. This is derived from 360 million years old rocks, the high quality of the state of preservation and integrity and accessibility of such Achaean time scale.

Beside the mining history, there are other interesting cultural features such as stone-age, artefacts, ancient ochre mines, rich contemporary history of local African cultures and early colonial settlements. The areas scenic beauty and high biodiversity has made the Barberton Mountain Land known to the conservation authorities. This has resulted in a number of large and small nature reserves and other protected areas within the site. These beautiful mountain settings provide landscapes and natural resources for visitors to explore.



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5. Assessment

The Barberton Mountain Land consists of the oldest and best preserved sequence of volcanic and sedimentary rocks on Earth, known as the Barberton Greenstone Belt. The physical and chemical characteristics of these rocks provide scientific information about the early Earth. This makes the site one of the special geological sites that South Africa has yet to offer.



Picture 1: Black Chert Geological feature



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Picture 2: Tsunami Conglomerate Geological feature

North West of Swaziland is an abandoned Ngwenya iron ore mine, which is the oldest mining site ever dated. Interesting cultural features include Lion Cavern located at the Ngwenya mine, an extremely high stone-age tools, related artefacts and San cave paintings.

This site not only offers a rich history regarding the early Earth and mining but it also supports exceptional, rich plant and animal life. The steep terrain, soils of unusual mineral composition, high and variable rainfall give rise to a wide variety of plant habitats. As a result, it is known as a Centre of Plant Endemism making it one of the 20 biodiversity hotspots in South Africa.



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Picture 3: Makhonjwa Mountain Range



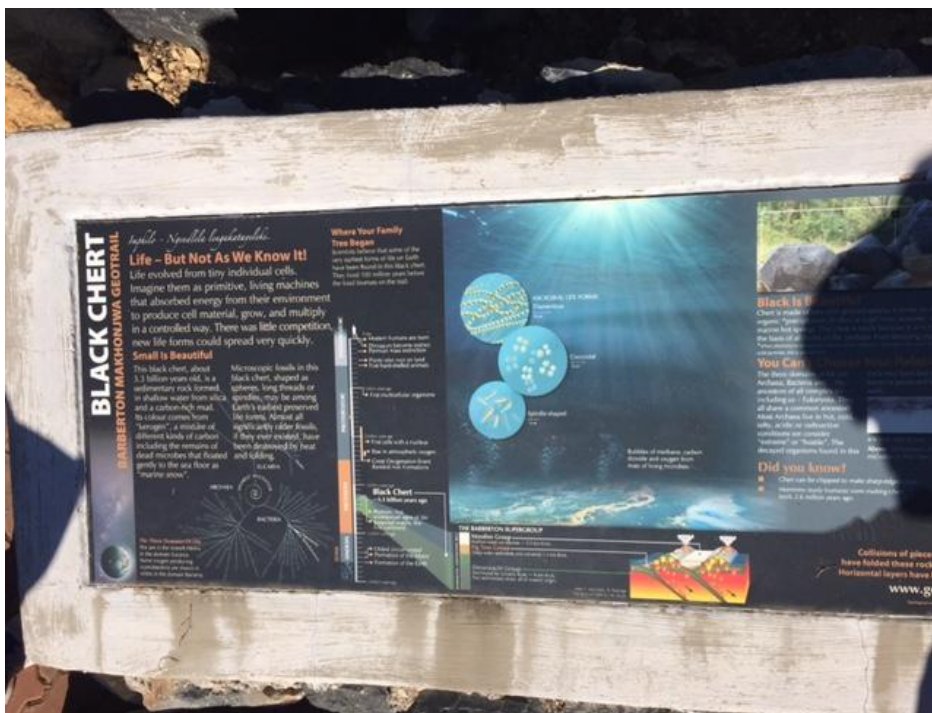


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Picture 4: View of the Makhonjwa Mountain with the area, where tourist can sit and enjoy the view.

The site uses illustration panels to draw the curtain of arcane geological communication and reveal the significance of the Barberton Greenstone Belt in everyday language and concept that is understood by all. They show the viewpoint of scientists in terms of how the earth looked long ago. By bringing the Achaean eon to life and explaining how the landscape became what it is today. There are also a number of view panels to interpret some of the key features of the landscape.



Picture 5: Black Chert information chart of how it was formed.



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Picture 6: Tony Ferrar explain the processes of geological formation with the dizzying spiral picture 7 below.





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Conclusion

All identified rock outcrops occur naturally in the landscape. Each of them is a non-living and durable natural resource that does not require manufactured protection, except possibly from the impact of human activities. Generally these outcrops have little or no commercial value, other than to geological researchers and collectors. As such they have very limited and fairly predictable vulnerability. Similarly, threats to their protection and persistence are limited, and are readily managed by means of the Integrated Management Plan (IMP).

At present the site is not formally recognized by National or Local Heritage Institutions, although the process is under way hence the nomination. The process of applying for global recognition for the country's prime sites will materially assist in this endeavour.

The potential of these geosites, and the WHS as a whole, is for them to become a world class scientific and educational resource for ongoing geological research, public education and geo-tourism. The geosites are set in a very attractive natural environment that is highly accessible to visitors. These features, occurring close to several large Protected Areas with abundant wildlife and very attractive scenery, provide a sound basis for the development of sustainable tourism. With all that has been said about the site, it will be a good idea to accept the nomination due to the rarity and authenticity of the features of the site.