

GIS AND ARCHAEOLOGY: A SPATIAL ANALYSIS OF  
ROCK ART SITES IN THE MATOPO HILLS AREA  
IN SOUTHWESTERN ZIMBABWE

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INTRODUCTION: MATOPO HILLS AREA

The Matopo Hills area is located 35km south of the modern city of Bulawayo in southwestern Zimbabwe. The area, which is defined on the basis of the impressive granite geological formations, consists of Matopo National Park, Khumalo and Gulati communal areas and commercial farms located north of the park. The area described above covers almost 54 000 hectares. The Matopo Hills area is archaeologically one of the best documented regions in Sub-Saharan Africa (Walker 1995). The Matopo Hills area is basically a granite pluton characterised by flat alluvial valleys cut by streams and fairly steep sided rocky hills (Walker 1995; MacGregor 1951). The picturesque physiography of the area provides a popular tourist attraction and constitutes a unique cultural landscape. The vegetation is typical of the high veld, comprising a mixture of woodlands interspersed with savannah grasslands. The area receives between 500mm and 600mm of rain per year. This environment has played a role in shaping the cultural landscape.

The combination of topography and climate of the Matopo Hills area has attracted human settlements from pre-historic times. As a result, the area encloses a large number of archaeological, historical and ritual sites. There are more than 3000 recorded archaeological sites, with rock art sites making up over 1000, one of the highest concentrations of rock paintings in Sub-Saharan Africa. 300 of these rock art sites are known to exist in the National Park alone. There are several hundred Iron Age, Stone Age and several historical sites. The hills still play an important spiritual role to the Shona and Ndebele people. Rain making ceremonies and cleansing rituals have been, and are still, performed in the Matopo Hills area, including at some of the rock art sites such as Silozwane.

In terms of archaeological research, the Matopo National Park, which constitutes about 83% of the Matopo Hills area, is one of the most extensively researched areas yielding more than 3000 recorded sites out of a present national database of 14000. The research has focussed on the Stone Age periods, the Iron Age and interpretation of rock paintings (Walker 1995, Cooke 1974).