



DIGITAL CONSERVATION OF KEY HERITAGE SITES IN THE KRUGER NATIONAL PARK

WHY IS THIS WORK IMPORTANT?

The Kruger National Park (KNP) is arguably South Africa's premier tourist destination, attracting more than 1,8 million visitors per year. The Park spans 19,633 km² and is world renowned for its wildlife, including the Big Five, cheetah and wild dog, and more than 500 species of birds. Significantly, the Park also contains a diversity of historical and cultural sites, ranging from early Stone Age (roughly 1 million years ago) to San rock art and various Iron Age settlements. Whilst they may not be as well known to the general public, many of these sites hold cultural and spiritual importance and are a significant component of the Park's offerings.

There are more than 255 recorded archaeological sites in the KNP, but the often fragile heritage resources are at risk from various natural and human-induced threats.



HOW DID ACT WORK TO PRESERVE THE HERITAGE OF THE AREA?

With funding provided by the National Heritage Council, the heritage team digitally documented three significant sites within the Kruger National Park; the Makahane Ruins, the Albasini Ruins and the Mahula Complex. The resulting datasets will not only assist in the preservation of these sites for future generations, but also provides highly accurate baseline data for change monitoring. This work included:

- The 3D laser scanning of each site using a C10 Leica terrestrial scan station, thereby creating metrically accurate models
- Taking 360° panoramic images at key locations at each site, and creating a virtual tour of them
- High resolution aerial photography of Makahane and Mahula sites
- The digital enhancement of San rock art found at the Mahula site
- Detailed archaeological reports and assessments

Further information on the heritage sites and technological techniques utilised is available on our heritage website at <http://www.actheritage.org/kruger-documentation/>

EXPLORATION FOR PREVIOUSLY UNDOCUMENTED SITES

In addition to the documentation work, ACT has also conducted some preliminary exploration for unrecorded sites. The Kruger National Park has been occupied to various degrees by humans since the earliest of the Stone Age, through the Iron Age until present day. In this instance we were interested in the Iron Age settlements and, after some research and GIS modelling, we identified 9 potential sites of interest and possible settlement.

The team managed to investigate 6 of the sites on foot during the fieldwork period. Of those, 4 Iron Age settlement sites were found which included remnants of stonewalling, ceramics and stone tools. One site in particular yielded evidence of built stone walling and a significant shard of pottery that does not belong the geographical area. It seems to belong to the Mapungubwe or Khami period and location, both of which are significantly removed from the location of this site. We are currently sourcing funding to research this area further, to better understand the role this settlement had in the landscape.

You can read more about the exploration on our blog post: <http://projectafrica.com/lost-cities-of-the-kruger/>

