

${ m AMAFA}$ aKwaZulu-Natali

Archaeology Unit

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Rock Art Access Form

Rock Art:

(i) No intervention

Conditions for accessing sites:

a) All person/(s) must be accompanied by an Amafa-accredited custodian

b) Custodians must be remunerated in accordance with fees agreed to by Amafa and the owner of the property on which the site is situated. The Fee will be R25, OO per person to hike to and from the site within 3 hours time; the fee will be R50, OO if the time to reach the destination and hike back to the reception takes between 3 and 5 hours; anything longer will be charged at R75, OO per head and per rock art site visited.

c) Custodian to brief visitors on rock art etiquette before venturing to the site.

d) Ensuring that members of the public do not see the person/(s) accessing sites that are officially closed for public visitation.

e) No publication either descriptive or in GPS format regarding the location of the site/(s) and no landscape photos to be taken giving the public guidance or directions to access any rock art site without being accompanied by an Amafa-accredited custodian.

f) Permits must be obtained from both Amafa/Heritage KwaZulu-Natal as well as Ezemvelo KwaZulu-Natal Wildlife (lastly-mentioned is only applicable if the Heritage site is in the Protected Area of the World Heritage Site).

g) The reason for visitation to rock art site/(s) must adhere to principles of no direct intervention (e.g. no action which includes having direct contact with the rock surface, e.g. tracing of panels/images; no restoration, adaptation or stabilisation of rock art panels are allowed).

h) Limiting the number of people in the group in accordance with total amount agreed to by Amafa, taking into consideration the size, sensitivity of the site and access routes.

i) Amafa indemnity.

j) No activity which will lead to the damage of the heritage site will be allowed.

k) No thermal lights will be allowed closer than 2m away from any rock surface consisting of rock art panels depicted on it. I) Adhere to the code of conduct when visiting rock art sites:

- Do not stir dust – as it forms a dark crust covering the art that can not be removed by throwing water over it.

- Do not through water or any other substance on the rock surface: throwing water over art causes silica, salt and lime accretion over paintings.

- Do not touch the art: our hands contain oil and fats which combines with the art, leading to colour loss and chemical deterioration.

- Respect the religious integrity of the site and its setting as rock art is in essence a religious art
- Be careful not to accidentally rub against the art
- Do not litter
- Do not collect artifacts
- Do not camp or overnight inside a shelter or cave containing rock art
- Do not smoke, burn candles or make a fire inside a cave or shelter containing rock art: the soot covers the art and the heat also causes exfoliation of panels.

A) Media-related purposes

- a) A copy of the finished product to be supplied to Amafa.
- b) Amafa/staff to be acknowledged for their input.

c) An undertaking that material filmed/published not be made available to a third party for a use other than stipulated in the brief.

- d) Activities of the crew must not inconvenience other visitors at the rock art site /(s).
- e) The decision to levy charges may be made by the CEO of Amafa or Deputy Director Support Services.

Applicant applying for media-	African Conservation Trust (ACT)
permit	
Related institution	University of KwaZulu-Natal (UKZN)
Site name/(s)	Public rock art sites in the UDP
Farm/game reserve name/(s) or	Ukhahlamba Drakensberg Park (UDP)
communal area	
Magisterial District/(s)	uThukela, Umgungundlovu, Sisonke
Film or publication	Possible publications
EKZNW Conservation Manager	
responsible for the site/(s)	
Motivation of methodology that will	The Leica ScanStation C10 scanner will be used in the
be applied in order to insure that	documentation of the rock art shelters. This scanner uses
equipment and personnel do not	visible wavelengths of light and is not harmful to the rock art in

damage the rock art and its	any way. 3D laser scanning has been used extensively in the	
setting.	Ukhalhamba Drakensberg Park to document rock art and create	
	a permanent digital record of this fragile heritage.	
Date and duration of the project	19 th September 2013 - 19 th September 2015	
Name of production/publication	CyArk website, Amafa website (if desired), potential for written	
	publications	

Purpose of the film/publication

ACT and UKZN have partnered with an American non-profit organization, CyArk (www.cyark.org), who specialize in the use of 3D laser scanning for heritage documentation. CyArk is launching their CyArk 500 project in London on the 22nd October (<u>http://archive.cyark.org/500/</u>) and have asked ACT and UKZN for an example of a heritage building from the Heritage Mapping Unit Project (HMU) project, and a rock art example from the Rock Art Mapping Project (RAMP). Since the RAMP project did not document any public sites, ACT would like to scan Game Pass Shelter to use as the rock art example. ACT and UKZN have also been asked to create interactive displays for the rock art interpretation centre in Didima as well as the KwaZulu-Natal Museum, further scans of public rock art shelters will be used in these displays.

Possible outlets	The CyArk website, the Amafa website, possible popular or
	academic publications.
Target Market	This project will benefit local and international visitors to the
	Didima rock art interpretation Centre and the KwaZulu-Natal
	Museum. The scan will also be shown of the CyArk website
	and seen by an international audience which will put South
	Africa on the map for the spatial documentation of heritage
	sites.
Number of persons on site during	2 people and one guide to assist with carrying of equipment
filming	

B) Educational visitation to rock art site or visitation for research and academic purposes.

Applicant applying for permit	African Conservation Trust (ACT)	
Applicant's Postal Address	P.O.Box 310, Link Hills, 3652, South Africa	
Applicant's Contact Details'	Carl Grossmann (Chairman): 079 695 2398	
Landline	Michelle Dye (GIS Specialist): 076 208 6043	
Cellular number		
Synopsis of the Research Proposal	The main goal of this proposal is to create a 3D metrically	
& objectives.	accurate model of public rock art sites in the UDP. This will	
	be achieved through the following objectives:	
This application must accompany a		

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 Taking multiple scans throughout the sites which will later be registered to form one complete point cloud of the site
 Capturing 360° high resolution digital images of this site which will be used to colour the scan.

Methodology

The laser scanner works by emitting a pulse of light which is reflected off the rock's surface and detected by the scanner's sensor. The time the light takes to return to the scanner calculated and since the speed of light is known the scanner is able to mark the point where it touches the rock. The scanner sends out millions of points and the resulting point cloud is so dense that it looks like a solid surface. Multiple scans are taken all around the rock shelter so that the scanner is able to 'see' all the angles of the rock art, and these are later stitched together to form one point cloud of the whole site. Digital photography is taken from each scanner position and that photography is used to colour the point cloud so that it is a real-colour computer model. The model is accurate to the last millimetre and creates a permanent record for future generations.



Land surveyors from the RAMP project receiving training by Justin Barton from CyArk in the 3D scanning of rock art.



Point cloud or a rock art shelter showing both the raw intensity colours, and true colour

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Related institution/s supporting this	The University of KwaZulu-Natal (UKZN) is working with
project.	ACT on this project.
Procedures that will be taken to	3D scanning is a non-contact documentation method, and
ensure that no damage occurs to the	the visible light has no effect on the rock art. Furthermore,
rock art and its setting	ACT and UKZN have worked on the RAMP project and are
	aware of the rules and regulation regarding rock art sites.
	ACT will take every precaution to ensure that the rock art is
	not damaged in any way.
Farm/nature reserve name/(s)	Ukhahlamba Drakensberg Park (UDP)
Magisterial District/(s)	uThukela, Umgungundlovu, Sisonke
Name of site/(s) to be visited and	Public sites within the UDP.
name of the farm/property/nature	
reserve on which it is situated.	
Number of people in the group	2 people (Carl Cossmann and Michelle Dve)
	If possible we would like to hire a guide who could assist
No more than 12 people will be	with carrying equipment
allowed at the site at once	
Date/(s) of visitation linked to	19 th September 2013 – 19 th September 2015
specific sites	

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Declaration

I, Michele Dye undertake strictly to observe the terms, conditions, restrictions, by-laws and directions under which the Council of Amafa aKwaZulu-Natali may issue the permit to me.

Signature Michael Dy	Place	Hillcrest
	Date	16/09/13
Witness 1 Rad	Place	Hillcrest
	Date	16/09/13
Witness 2	Place	Hillcrest
	Date	16/09/2013