An exploration of seasonality from Mapungubwe period sites using stable isotope (?13C and ?18O) analysis of freshwater mussels.

Our Ref:



an agency of the Department of Arts and Culture

T: +27 21 462 4502 | F: +27 21 462 4509 | E: info@sahra.org.za South African Heritage Resources Agency | 111 Harrington Street | Cape Town P.O. Box 4637 | Cape Town | 8001 www.sahra.org.za

Enquiries: Ragna Redelstorff Tel: +27 (0)21 202 8651 Email: rredelstorff@sahra.org.za CaseID: 13205

Date: Friday November 30, 2018 Page No: 1

Letter

In terms of Section 27(18) of the National Heritage Resources Act (Act 25 of 1999)

Attention: Chantalle Dominique Kruger

Department of Anthropology & Archaeology, University of Pretoria University of Pretoria Lynnwood Road, Hatfield Pretoria 0002

This research project aims to determine seasonal variation of site occupation at several archaeological sites within the larger Mapungubwe landscape in northern South Africa. In this regard, my study will focus on seasonality during the 9th- 13th century Middle Iron Age (MIA) period in the Limpopo Valley of northern South Africa. This study will use a novel technique to determine the season of occupation of archaeological sites through stable isotope analysis (?13C and ?18O) of freshwater mussels. The aim will be to better understand settlement patterns of 13th century people within the Limpopo Valley and highlight the potential of sclerochronology to infer past human behavior. The study will be completed at the University of Pretoria. Gauteng

Dear Ms Chantalle D. Kruger,

Thank you for your application for invasive sampling of 44 specimens of fossil freshwater mussels (Unionidae) from the sites Pont Drift and Schroda within the Mapungubwe World Heritage Site for isotope analysis at the University of Pretoria. As the SAHRA Permitting Policy and Guidelines state that the applicant should at least have a master's degree, your supervisor Dr Alexander Antonites is the permit holder on your behalf.

SAHRA has reviewed your application and decided to approve it.

We wish you every success with this project.

Should you have any further queries, please contact the designated official using the case number quoted above in the case header.

Yours faithfully

An exploration of seasonality from Mapungubwe period sites using stable isotope (?13C and ?18O) analysis of freshwater mussels.

Our Ref:



an agency of the Department of Arts and Culture

T: +27 21 462 4502 | F: +27 21 462 4509 | E: info@sahra.org.za South African Heritage Resources Agency | 111 Harrington Street | Cape Town P.O. Box 4637 | Cape Town | 8001 www.sahra.org.za

Enquiries: Ragna Redelstorff Tel: +27 (0)21 202 8651 Email: rredelstorff@sahra.org.za CaseID: 13205

Page No: 2

Date: Friday November 30, 2018

Ragna Redelstorff Heritage Officer South African Heritage Resources Agency

Phillip Hine Acting Manager: Archaeology, Palaeontology and Meteorites Unit South African Heritage Resources Agency

ADMIN:

Direct URL to case: http://www.sahra.org.za/node/514752

Terms & Conditions:

- 1. This approval does not exonerate the applicant from obtaining local authority approval or any other necessary approval for proposed work.
- 2. If any heritage resources, including graves or human remains, are encountered they must be reported to SAHRA immediately.
- 3. SAHRA reserves the right to request additional information as required.