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

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## **PERMIT: Sampling**

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

Permit Holder: Dr Alexander Antonites

University of Pretoria - Anthropology and Archaeology

Human Sciences Building 8-22

Pretoria

Object: Pont Drift Shell Samples - Mapungubwe Period Site Analysis , Schroda Shell Samples - Mapungubwe

Period Site Analysis

To: Chantalle Dominique Kruger

This permit is issued to Dr. Alexander Antonites (University of Pretoria), on behalf of Ms Chantalle D. Kruger (University of Pretoria), 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. The material is currently housed in the Ditsong National Museum of Cultural History.

## Conditions:

- 1. Sampling may not reduce the structural integrity, overall completeness or the potential for future morphometric and descriptive research.
- 2. No holotype or paratype material may be sampled.
- 3. Analysis will take place in the MRI Stable Isotope Laboratory at the University of Pretoria.
- 4. A permit report on the activities of this permit is due on 31 December 2019.
- 5. Reprints of all the published papers or copies of these and/or reports resulting from this work must be lodged with the heritage authority.
- 6. SAHRA shall not be liable for any losses, damages or injuries by or to persons or properties as a result of any activities in connection with this permit.
- 7. SAHRA reserves the right to cancel this permit by notice to the permit holder.

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8. Request to renew permits must be done at least two months prior to the expiry of the existing permit.

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This permit is valid from **30/11/2018** to **31/12/2019** 

Ragna Redelstorff Heritage Officer

South African Heritage Resources Agency

Phillip Hine

Acting Manager: Archaeology, Palaeontology and Meteorites Unit

South African Heritage Resources Agency

Additional Info:

Please note that this permit may be suspended should an appeal against the decisions be received by SAHRA within 14 days from the date of the permit. SAHRA may not be held responsible for any costs or losses incurred in the event of the suspension or retraction of this permit.

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