

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, PhD

Tel: +27 (0)21 202 8651

Email: rredelstorff@sahra.org.za

CaseID: 20402

Date: Tuesday March 07, 2023

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Letter

In terms of Section 32(19) of the National Heritage Resources Act (Act 25 of 1999)

Attention: Dr Asia Alsgaard

Centre for Early Sapiens Behaviour University of Bergen, Norway

Overview This postdoctoral project was developed in collaboration with the above participants. The project is designed as part of the Center for Early Sapiens Behavior (SapienCE) project, contributing towards answering the key research question: how adaptable were humans to environmental change and did climate impacts act as drivers for technological innovation and subsistence adaptation? Furthermore, as part of the European Leaders for Marine Sustainability (SEAS) programme at the University of Bergen, the research will contribute towards research on present day marine sustainability along the southern cape of South Africa. This research project will address two primary questions. Did coastal resource diversity increase between the Middle Stone Age (MSA) and Late Stone Age (LSA) along the southern Cape of South Africa in conjunction with estuary development and changes in the range of cold-water fishes? If diversity and stability increased in the LSA, did the human harvesting of marine resources increase? To test these questions, I will analyze fish teeth, seal teeth, and otoliths from the MSA using carbon and oxygen stable isotope analyses and fish and seal bone collagen from the LSA using carbon and nitrogen stable isotope analyses. I will conduct these analyses using fauna assemblages from Blombos Cave, Klasies River main site, Nelson Bay Cave and Hoffman's/Robberg Cave. These methods will allow me to address both changes in the diversity and stability of marine ecosystem along the southern Cape of South Africa and if human harvesting practices changed. The results have implications not just for how the ecology of the southern coast of South Africa has changed up to present day, but also how humans respond to environmental changes such as the development of seasonal estuary abundance and sardine migrations.

Dear Dr Alsgaard and Prof Henshilwood,

Thank you for your application to sample teeth and otoliths from Blombos Cave, Klasies River main site, Nelson Bay Cave and Hoffman's/Robberg Cave for isotope analysis.

The HWC permits for sampling of material from Blombos Cave, Hoffman's/Robberg Cave and the letter regarding Nelson Bay Cave are noted.

The consent letter from Iziko regarding the sampling of material from Blombos Cave and Nelson Bay Cave is

Responses to Coastal Environment Diversity in Middle and Late Stone Age Fish Harvesting Practices, Southern Cape, South Africa

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also noted. Kindly submit consent letters for Klasies River and Hoffman's/Robberg Cave.

Please submit the consent letters to your application:

<https://sahris.sahra.org.za/cases/responses-coastal-environment-diversit...>

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

Yours faithfully

Ragna Redelstorff, PhD
Heritage Officer
South African Heritage Resources Agency

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

ADMIN:

Direct URL to case: <https://sahris.sahra.org.za/node/611483>

Terms & Conditions:

1. This approval does not exonerate the applicant from obtaining local authority approval or any other necessary approval for

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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.