ZoMS analysis on Manupgubwe bone tools

Our Ref: 9899



an agency of the Department of Arts and Culture

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PERMIT: Analysis, Export (Permanent)

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

Permit Holder: Justin Bradfield

University of Johannesburg

26 Bosvier Street Brackendowns Alberton

Object: 9436-Site4BP-Bone Points-BATCH-CASEID9436

For invasive sampling (drilling) and permanent export of the following bone powder samples:

10 fractured, unaccessioned bone tools from Mapungubwe, housed at University of Pretoria

The permit is issued to Dr Justin Bradfield (Department of Anthropology & Development Studies, University of Johannesburg) for invasive sampling and permanent export of the bone powder samples taken from bone tools from Mapungubwe for Zooarchaeologyby Mass Spectrometry (ZooMS) analysis at the University of York, UK, under guidance of Profs Matthew Collins and Jane Thomas-Oates. Sampling will be done at the University of Witwatersrand School of Dentistry by drilling 10 mg powder from each bone.

Conditions:

- 1. Only the selected representatives of the material stored in the collections may be exported.
- 2. The material must be carefully packed and all packaging must be clearly marked with the name of the site (if known), and the name and address of the permit holder or the respective housing institution.
- 3. The material will be hand-carried by Dr Justin Bradfield or send via a reputable courier.
- 4. Dr Justin Bradfield is responsible for the analysis of the material and its transport to the above mentioned institutions/collections.
- 5. The samples must be used for study purposes only, and may not be sold or exchanged.

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- 6. The material may not be loaned to any person or institution other than the above stated participants in the study, without the consent of SAHRA.
- 7. Destructive analysis includes drilling of **fractured** bone tools in an unobtrusive location in order to extract 10 mg bone powder.
- 8. A report on the activities undertaken in terms of this permit must be lodged with SAHRA before 31 August 2017.
- 9. Copies of any papers that may result from the export of the material must be lodged with SAHRA.
- 10. SAHRA shall not be liable for any losses, damages or injuries to persons or properties as a result of any activities in connection with this permit.
- 11. SAHRA reserves the right to cancel this permit by notice to the permit holder.

This permit is valid from 08/08/2016 to 31/08/2017.

Ragna Redelstorff

Heritage Officer

South African Heritage Resources Agency

Phillip Hine

Heritage Officer: Permitting

South African Heritage Resources Agency

Additional Info:

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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.