

Export/sampling permits

Please note an export permit must be linked to an object or site that has to be created on SAHRIS! If the object/site you want to work on has not been created yet, you would need to do so. Thanks!

The proposal should include (you can fill these in below):

- a list of participants (name, affiliation, phone no, email addresses) and how they are involved;
- the name and address of the facility, including address, it is being scanned at;
- name and address of the museum/university department that currently hosts the object;
- names of the responsible person(s) during transport and while the fossil is at the facility;
- the period/time frame during which the fossil(s) will be outside the country;
- detailed information on the fossil(s), especially as it is a "unique" specimen;
- detailed information on the research project behind it & methodology including expected outcomes (i.e., the reason for export);
- the written confirmation of the institution that currently hosts the object that the object may be used as proposed and be returned in good condition;
- should there be any damage/destructive analysis (e.g., coating for higher resolution) undertaken, this needs to be stated in detail;
- Statement why this study cannot be done in South Africa.

Applicant (name and affiliation): this is usually the museum curator!

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Applied for (principal researcher):

Naomi Cleghorn
Assistant Professor
University of Texas at Arlington
Arlington, Texas
USA

Participants with affiliations, email addresses, phone numbers (& their role):

1) Ximena S. Villagran,
Assistant Professor
Museu de Arqueologia e Etnologia
Universidade de São Paulo (MAE/USP)
Av. Prof. Almeida Prado 1466
São Paulo, 05508-070, Brazil

Email: villagran@usp.br
Phone: +55 11 3091 2826
Role: Micromorphology Expert Analyst

2) Naomi Cleghorn
Assistant Professor
University of Texas at Arlington
Arlington, Texas, USA
Email: cleghorn@uta.edu
Phone: +1-510-847-4190
Role: Archaeologist, Site Director

The material will be **shipped** from to Spectrum Petrographics for processing in November, 2015 by FedEx. Prepared thin sections (produced by Spectrum Petrographics) will then be shipped by FedEx to Dr. Ximena Villagran for analysis. A thin section from each sample will be shipped back to South Africa by Ximena Villagran.

Institution incl. address that currently hosts the object:

Mossel Bay Archaeology Project CRM, Inc.
Munro House Laboratory
Diaz Museum
Mossel Bay, South Africa

Facility incl. address at which the experiment will be done:

Thin Section Preparation Facility:

Spectrum Petrographics
3315 NE 112th Ave. #B82 Vancouver, WA 98682 USA

Micromorphology Analysis:

Museu de Arqueologia e Etnologia
Universidade de São Paulo (MAE/USP)
Av. Prof. Almeida Prado 1466
São Paulo, 05508-070, Brazil

Table of objects or upload file:

Micromorphology		Stratigraphic	
Sample Number	Record number	Aggregate	Context
1	8374	DHA - Top	Hearth
2	8636	DHA	Hearth
3	8408	DHA - Top	Hearth
4	8802	DHA	Hearth
5	8808	DHA-Shelly	Shell layer
6	8811	DHA/DBS	Stratigraphic transition

Site including age at which object was found:

Knysna Eastern Heads Cave 1 (KEH-1)

Sediment samples are derived from stratigraphic sections currently dated to approximately 18 kya – 44 kya.

Time frame:

Transport to Spectrum Petrographics: November, 2015

Return date: August, 2016

Aim/rationale:

The goal of these analyses is to determine the detailed stratigraphic context of hearth features and a thin shell layer. We would specifically like to know whether the hearths are in primary context or have been disturbed, and to determine the frequency of hearth re-use. This information is critical to understanding the larger depositional context of the site. We also need to know if the shell layer, a thin, unique feature within the stratigraphic section, is a discrete accumulation or significantly mixed.

Methodology (short):

Spectrum Petrographics is a professional thin section preparation company with a good reputation for quality and timely work. They will be cutting the larger sample blocks and preparing the thin sections.

Dr. Villagran will examine the thin sections using transmitted light microscopy.

Confirmation/permit by museum (Attached?):

Excavation permit attached.

Damage/destructive analysis? (if yes, explain in detail)

The samples were initially prepared for micromorphological analysis in South Africa, and some of this preparation was destructive. The small blocks (all smaller than 15 cm x 12 cm x 10 cm) of sediment were cut from the stratigraphic section at the KEH-1 in August 2015, partially encased in plaster though which small access holes were drilled, and impregnated with polystyrene resin in South Africa. This preparation has transformed the sediment blocks into hard resin blocks, and thus rendered them stable for shipment to the United States. Once in the United States, petrographic quality thin sections will be produced from these resin block samples by slicing them thin enough to allow light transmission.

Statement why this study cannot be done in South Africa:

We know of no thin section preparation facility comparable to Spectrum Petrographics within South Africa. We require a commercial firm for this preparation because we need the results in a timely manner for the preparation of publications and future funding applications. Dr. Villagran must analyze the resulting thin sections in Brazil in order to insure access to the necessary analytical equipment available in her lab.