# **Export/sampling permits**

Please note an export permit must be linked to an object that has to be created on SAHRIS! If the object you want to work on has not been created yet, you would need to **create an ObjectID**.

Required documents:

- For export of material from KZN, Eastern Cape or Western Cape that involves destructive analysis, the **destructive sampling permit** from the respective Heritage Authority must be submitted;
- A consent letter from the accessioning institution.

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 analysed 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!

Prof Roger Smith

# Applied for (principal researcher):

Mr Christian Kammerer

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

1) Christian F. Kammerer, PhD. <u>Christian.Kammerer@mfn-berlin.de</u>, museum für naturkunde Berlin, Leibniz-Institut für Biodiversitätsund Evolutionsforschung- and -

Institut für Biologie, Humboldt-Universität zu Berlin, Tel +49 (0)30 2093 8941, Fax +49 (0)30 2093 8565

Role: Borrower

2) Prof. Dr. Jörg Fröbisch, joerg.froebisch@mfn-berlin.de, museum für naturkunde Berlin, Leibniz-Institut für Biodiversitätsund Evolutionsforschung- and -

Institut für Biologie, Humboldt-Universität zu Berlin, Tel +49 (0)30 2093 8941, Fax +49 (0)30 2093 8565

Role: Borrowerer and Representative for museum für naturkunde Berlin 3) Role:

The material will be **hand-carried** to Salt Lake City (a conference where Prof Smith will hand the specimen over to Mr Kammerer and Prof. Dr. Jörg Fröbisch) (facility/institution) in October 2016 (month, year) by Prof Roger Smith (name of person responsible for transport) and brought back by a representative of museum für naturkunde Berlin (leave blank if same person as above). Mr Christian Kammerer (name) will be involved with the scanning and transport (e.g., transport/scanning) of objects and

(whatever else).

**Institution incl. address that currently hosts the object:** Graaff Reinett Museum

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

Museum für naturkunde Berlin, Leibniz-Institut für Biodiversitätsund Evolutionsforschung- and -

Institut für Biologie, Humboldt-Universität zu Berlin, Tel +49 (0)30 2093 8941, Fax +49 (0)30 2093 8565

#### Table of objects or upload file:

#### Site including age at which object was found: Graaff Reinett District, Late Permian

#### Time frame:

Transport to Sal Lake City (facility): October 2016 (date) Return date: December 2017 (date)

**Aim/rationale:** Digital scans of these specimens are of vital importance for the proposed work, particularly in order to study the internal anatomy of these specimens without causing any physical damage to the fossils.

Methodology (short): As per attached motivation

Confirmation/permit by museum (Attached?): Yes

## Damage/destructive analysis? (if yes, explain in detail): No

**Statement why this study cannot be done in South Africa:** Conclusive determination of whether the braincase elements of SAM-PK-K011409 are fused or unfused will be impossible without detailed scans. We intend to scan these specimens at the CT facility in the Museum für Naturkunde. However, many Karoo fossils have metallic inclusions that render CT-scanning

useless. If this proves to be the case, these specimens can also be scanned at the neutron scanning facility of the Helmholtz-Zentrum Berlin. I would note that although CT facilities are available in South Africa, at present no neutron scanning facilities are present in the country, so international export is preferred to accomplish this research.