

SANBI POLICY DOCUMENT

DIVISION: Biosystematics Research and Biodiversity Collections	POLICY NUMBER: E3
EFFECTIVE DATE: 1 October 2016	LAST AMENDED: 22 September 2016

ACQUISITION, STORAGE AND MANAGEMENT OF IMAGES

Background

Images of taxa form an integral part of biosystematics and biodiversity research. Large numbers of images are acquired annually by staff in the Biosystematics Research and Biodiversity Collections (BRBC) Division for research and identification purposes. Furthermore, images mostly in the form of slides/digital images are also donated to SANBI by persons not directly working for SANBI. These images are a valuable resource and need to be effectively stored and managed.

In order to preserve valuable type material and still make specimens available for study, staff of the BRBC Division generates high resolution digital images of this material.

Aim of this policy

To provide guidelines on acquiring, storing and managing images of specimens and photographic material.

Policy

All images acquired as part of SANBI corporate activities (including research and field trips), irrespective of whether official or private photographic equipment was used, are the property of SANBI and must be submitted for inclusion in the Division's Image Library.

SANBI will make available images of specimens online through JSTOR (Journal Storage) and the SANBI database (SANBI Enterprise Imaging System - SEIS) or through requests to herbaria for scans.

Copies of all images received by the Division are to be appropriately stored and managed in co-operation with BIP (Biodiversity Information and Planning).

SEIS will be utilised for the storage of copies of all high quality images taken for corporate purposes and submitted by staff for inclusion in the Division's Image Library.

Use of images from the BRBC Division's Image Library must acknowledge the photographer and SANBI.

Process

A summary of the procedures is provided in ADDENDUM 1 under the following headings:

1. Acquisition of images
2. Storage of images
3. Accessibility of images
4. Image dissemination
5. Limitations of use
6. Conditions of use
7. Metadata for images housed in the Division's Image Library
8. Image quality and format

Procedure specific to scanning type material is outlined in ADDENDUM 2.

Procedures for scanning photographic slides are given in ADDENDUM 3.

ADDENDUM 1

Procedure to acquire, store and manage images

1. Acquisition of images

All images accessioned into the Division's Image Library must be of a suitably high quality (Refer to point 7).

1.1. Acquisition of images by the Division and other SANBI staff members

Staff members in the BRBC Division undertaking field trips to collect plant material are encouraged to take photographs of the plants collected. These photographs should reflect all aspects of a plant, for example flowers, fruit, habit, habitat, leaves, bark, etc.

Staff members intending to provide images of plants and other biodiversity images must be made aware of the correct requirements (size, resolution and metadata) for images to be added to the Division's Image Library.

Copies of all high quality images taken by staff for corporate purposes, including research, along with accompanying metadata (refer to point 6), must be submitted to the responsible officer for inclusion in the Division's Image Library within 1 to 3 months of acquisition.

The images captured together with a specimen should be uploaded onto SEIS. Thereafter the image can be linked to a record in the BRAHMS database.

Poor quality images should only be uploaded if none other is available, and with a note indicating requirement for an improved image.

1.2. Donation of images by third parties

BRBC staff occasionally receives donations of images from third parties.

These images should be made available to the BRAHMS Content Manager or E-Flora Co-ordinator (if applicable to E-Flora project) together with Metadata.

In accepting donations, resources will need to be budgeted to assess the quality of the slides/images and for the cleaning, reframing and scanning of the slides.

An agreement must be in place for use of photographs from third parties. Contributors must complete the template (with fields corresponding to fields in SEIS) and submit it together with the slides/images. Slides and images submitted should be assessed before accepting it into the Division's Library.

2. General guidelines for proper storage of images

All slides, negatives and photographs need to be digitised before storage. All collections of images shall be stored in the most appropriate manner, specific to the type of collection.

Guidelines are given in the table below:

Type of collection	Value	Specifications for storage
Slides	Medium	<ul style="list-style-type: none"> • Dry, 30-40% relative humidity • Cool, temperature preferably at 4.5°C, or at least below 22°C. • Clean and stable environment, with minimum exposure to light, pollutants and vents • Protective enclosures like filing cabinets. • Preferably in archival sleeves • Store in dry, well ventilated room
Black and white, colour photographs and negatives	High	<ul style="list-style-type: none"> • Dry, well ventilated room • Temperature: <30°C and >10°C • Filing cabinets and appropriate filing system. • Sleeves archival quality
Electronic Images	High	<ul style="list-style-type: none"> • Temperature : < 30°C and >10°C. • Store medium in a safe • Use software like DAM for effective storage and retrieval. DAM = Digital asset management software • Preferably store images on hard disk with hard drive redundancy Backup on external hard drive or high quality CD-R • Keep back-up in safe

Adequate storage space must be made available by IT for the purpose of storing the BRBC Division's images.

These images should be easily accessible via the network to approved staff in the BRBC Division.

The Image Data Content Manager should ensure that all images are uploaded onto the Division's Image Management System, that a copy is backed-up and stored in the Art Safe and that a second back-up is submitted to IT to store safely on a network drive. Back-ups to be made continuously or depending on the number or importance of images received.

3. Image dissemination

Copies of images and accompanying metadata (refer to point 6) must be made available in electronic format, either directly onto the designated server or on an external medium such as an external drive, CD-ROM or DVD, which must be handed to the responsible officer or via DropBox. This must include a clear indication of which images may not be dispatched or released to third parties as they are part of ongoing research.

3.1. Images sent to Biodiversity Information Management (BIP) Directorate

The copies of images approved (by creator/researcher) for dissemination should be sent, together with metadata, to the BIP Image Manager of the SANBI Enterprise Image System (SEIS), for inclusion into SEIS.

The BRBC division would also be able to upload images onto the SANBI Enterprise Image System (SEIS) after being trained by the system administrator to do so.

Those that submit images to the administrator should provide the required metadata information in the provided excel spread sheet on a disk or flash disk. Drop box can be used as an alternative way to submit the images to be uploaded.

The responsible officer is to keep a record of all images dispatched to SEIS, indicating date dispatched and nature of images.

Through consultation with BRBC staff, the managers of SANBI's three herbaria will compile a master list of image collections that could be digitised. Prioritisation of image sets included on the list is done at the Biosystematics Management Committee Meetings.

3.2. Images dispatched to third parties

Images may not be made available to third parties if they form part of unpublished research, unless approved by the provider of the images.

In addition, if images are required for special or restricted use by SANBI, access will be restricted, e.g. protecting locality data for Red Data Species.

The responsible officer is to keep a record of all images dispatched to third parties. This must include date, name of third party, and nature of images. See Policy E2 on Making Electronic Biodiversity Information Accessible.

4. Limitations of use

SANBI staff members and third parties may use non-restricted images without prior approval, as long as the creator and owner (SANBI) of the image is acknowledged. SEIS must accommodate the acknowledgement of SANBI and external contributors, which chose to retain copyright.

SANBI staff members and third parties may use restricted images for official or private purposes only if permission has been granted by the creator of the image. The owner (SANBI) may not grant permission without prior consent by the creator of the image.

5. Conditions of Use

Before images are supplied, the Image Supply Agreement which contains the conditions of use must be signed by the person requesting the images. See Policy E2 on Making Electronic Biodiversity Information Accessible.

Each time an image is used, the user must cite/acknowledge the owner (SANBI) and creator (if known) of the image.

Standard format for citations/acknowledgements:

The South African National Biodiversity Institute is acknowledged for the use of the following images:

Name of image: Photographer:

Organizations/individuals receiving images from SANBI may not share the images with other third parties without prior permission from SANBI.

6. Metadata for images housed in the Division's Image Library

Metadata should accompany images submitted to the Images Library. For older images, where metadata may be lacking, the data available, though incomplete will be captured.

The following minimum metadata must be provided with each image:

1. Creator of image
The creator of the image will be acknowledged as such, and this information will be included in the metadata.
2. Date created
3. Description of subject matter
4. Common name (if applicable)
5. Name of plant (if available/applicable)
6. Common name (if applicable)
7. Synonym (if applicable)
8. Locality of subject matter, Country, city, GPS, etc?
9. Reference to voucher specimens (if applicable)
10. Restrictions on access to image
11. Creator's image reference number (if applicable)
12. Keywords
13. Copyright notice
14. Institution

Other metadata may also be included (optional):

Format

- a. Colour
- b. File format (e.g. .jpg, .tif, .gif)
- c. Size

7. Image quality

Photos to be taken with the highest quality the camera will allow. When using a scanner, scan photos at a high resolution (ideally 300 to 600 dpi).

In assessing quality of images, the following needs to be assessed:

- a. Lighting/contrast
- b. Focus
- c. Composition
- d. Physical damage (slides)
- e. Resolution (digital images)

ADDENDUM 2: Procedure to digitize type material

Refer to Manual on scanning specimens.

ADDENDUM 3: Procedure to scan photographic slides

Refer to Manual on scanning slides.