

Supplementary Material

Annexure 1 – Survey Questions

Background information

1. Name: (will not be shared)
2. Email address: (only if you would like feedback on survey results)
3. Job title:
4. Where do you work:
5. South African resident (yes/no)
6. Other Affiliations, i.e. higher learning institute:
7. In which discipline do you work/conduct your research? (taxonomy, evolution, ecology, molecular biology, conservation biology, other – please specify)

Survey questions relating to Objective 1: perceived value of natural science collections (NSCs) to researcher community.

8. When required in your research, do you have access to museum specimens and associated data (physical or digital access)? (yes/no)
9. How often do you have access to or have contact with NSCs? (daily/weekly/monthly/biannually/annually/less frequent)
10. What type of specimens do you routinely work with? (animal, plant, fossil, fungi, other – please specify)
11. Has access to museum specimens directly contributed to your research? (yes/no – specify how: loans, using lab space/equipment, students, images of types, associate researchers, other)
12. If access to the museum specimens has directly contributed to your research, do you inform the museum once the research has been published and/or send them a copy of the manuscript? (yes/no)
13. To which of the following fields does/did your research that used natural science collections contribute? (documentation and classification of biodiversity, evolution, nature conservation, environmental impacts of climate change, pest and disease control, solving crime, public health, food security, agriculture, if other, please specify)
14. On a scale from 1 to 5 how important is access to NSCs (specimens, associated data and collaboration with NSC staff) to your research? (rate on scale from 1 to 5: not at all – slightly – moderately – very – extremely)
15. Has your access to the NSCs specimens contributed to the curation process and/or formed collaboration with NSC staff? (yes/no/uncertain)

Survey questions relating to Objective 2: perceived or experienced barriers in relation to access to natural science collections and associated data for use in applied research.

16. Have you ever been denied access to museum specimens? (yes/no/I don't know, if yes reason: text answer)
17. Do you find the access request procedure overly onerous? (yes/no/uncertain)

Survey questions relating to Objective 3: perceptions of NSCs current performance in serving the needs of applied research:

18. How do South African NSCs perform in providing services compared to other countries? (Rate performance from 1 to 5: very poor – below average – average – above average – excellent)
19. Are the collections you use for your research maintained properly? The physical curation of specimens are to an acceptable standard (few collections, some collections, all collections)
20. Are the collections you use for your research maintained properly? The data associated with the specimens are accurate, up to date and usable (Few collections, some collections, all collections)
21. In your opinion are NSCs funded appropriately? (yes/no/uncertain)
22. In your opinion are NSCs staffed appropriately? (yes/no/uncertain)
23. Overall, how happy are you with the services offered by NSCs? (Rate from 1 to 5: not at all – slightly – moderately – very – extremely, comments:)

Survey questions relating to Objective 4: how performance is judged and what future expectations for performance are:

24. What are the most important roles of NSCs? (Choose up to 4: collection care and conservation, documenting biodiversity, collecting new specimens, supporting biological surveys, preservation of molecular samples, providing accurate datasets, making data openly accessible, making specimens digitally accessible, conducting applied research, conducting basic research, training students, availability of taxonomic expertise, contributing to science policy, educating the public, other (please specify))
25. How do NSCs perform in the following areas? (Rate performance from 1 to 5: very poor – below average – average – above average – excellent):

- collection care and conservation,
- documenting biodiversity,
- collecting new specimens,
- supporting biological surveys,
- preservation of molecular samples,
- providing accurate datasets,
- making data openly accessible,
- making specimens digitally accessible,

- conducting applied research, conducting basic research,
- training students,
- availability of taxonomic expertise,
- contributing to science policy,
- educating the public.

26. In which areas/services should NSCs improve on most? (*open ended text answer*)

Annexure 2 – Research Consent Form

An online survey on user perceptions of natural science collections in South Africa

Please read and complete this form carefully. If you are willing to participate in this study, tick the appropriate boxes, sign with your full name and date the declaration at the end. If you do not understand anything and would like more information, please contact Shanelle Ribeiro (shanelle@nscf.org.za).

Note:

1. All information about participants will be treated in strict confidence and participants will not be named in any written work arising from this study.
2. Any data collected will be used solely for research purposes and will be erased on completion of the research.

I confirm that:

- I have read and understand the information contained in the Survey Research Proposal Page for the above study. I have had the opportunity to consider the information, ask questions and have had these answered satisfactorily.
- I understand that my participation is voluntary and that I am free to withdraw from this study at any time without giving any reason and without any consequences to me.
- I understand that all information about me and my organisation will be treated in strict confidence and that participants and organisations will not be named in any written work arising from this study.
- I understand that any data collected will be used solely for research purposes and personal data of survey participant will be erased on completion of the research.
- I freely give my consent to participate in this research study and have been given a copy of this form for my own information.

Name and surname:

Date: