



## Communication from the NSCF Hub

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Remember this???

### The NSCF is officially one year old!!!

It was on the 17 October 2017 that the NSCF was officially launched at Alpine Heath in the Drakensberg. Many of you were at the launch and the first Forum and contributed to the great success of this event. The past year has just flown by as we have dealt with challenges and obstacles and achievements and breakthroughs. The last year has had ups and downs – but it's important to reflect on where we were a year ago and how far we have come since then.

We have gone from a NSCF staff of one (me!) to 12, soon to be 19. We have a NSCF Hub Team – with Co-ordinators for the Curation / Collection Management and Data Working Groups, a Project Manager and an Admin Officer. We also have two Data Technicians, and we are in the process of finalising the recruitment of another four Data Technicians, and a Data Quality Specialist to join the Hub Team. We have appointed six Research Assistants at various institutions to help with imaging of plant specimens and data capture. We are also working on recruitment of five Curation Technicians to help with integrating orphan collections.

We have finalised the Collaboration Agreements with 10 institutions, and through these agreements there have been purchases of a whole range of items including microscopes, computers, cabinets, compactors, containers, freezers, climate control systems, fire detection and suppression systems and curation consumables.

We awarded four MSc bursaries, two postdoctoral grants, travel grants for two local and three international researchers to work on the collections, and five travel grants for staff from institutions to attend the Society for the Preservation of Natural History Collections and TDWG Conference in New Zealand.

Leaders from all the participating institutions and the Hub Team attended two intense change management / leadership sessions. This has really helped us to think differently about what the NSCF is, what the role of the Hub Team is, and new ways of thinking about leadership, organisational development, the social injustices in our country and institutions, and Africanising science.

The Co-ordinating Committee and the Curation / Collection Management Working Group and Data Working Group have met twice in 2018 and have made huge advances in terms of developing guidelines and an Access Policy. There have also been regional meetings for curation and collection management. All of these groups are promoting networking and collaboration, and are contributing to establishing a united community for the natural science collections.

For the first time ever, we are consolidating the outputs from all the participating institutions for reporting to the Department of Science & Technology. The figures are staggering – and provide a convincing argument for the importance of the collections for research on our biodiversity and palaeontology, and for providing identification and outreach services. Two reports have been submitted to DST in 2018.

The NSCF has a website, a Facebook page and a regular newsletter (and a secret logo).

There are many other activities and projects that are in progress including a project to identify the macrofungi in the National Collection of Fungi at the ARC, the dung beetle collection at the University of Pretoria is being packed up to be moved to Iziko Museum, we are in the process of awarding contracts for imaging of type specimens for vertebrates, and we are finalising the assessment of catalogue books / accession registers for digitising. Staff from the institutions and the Hub involved in these activities and others that are being worked on, know that none of them have been easy or straight forward – every step forward takes time and energy, masses of problem solving, patience and perseverance. So well done to all of you and thanks a million!! We have done far more than just surviving our first year.

Michelle Hamer

### From Audrey: Collections Management Working Group Update



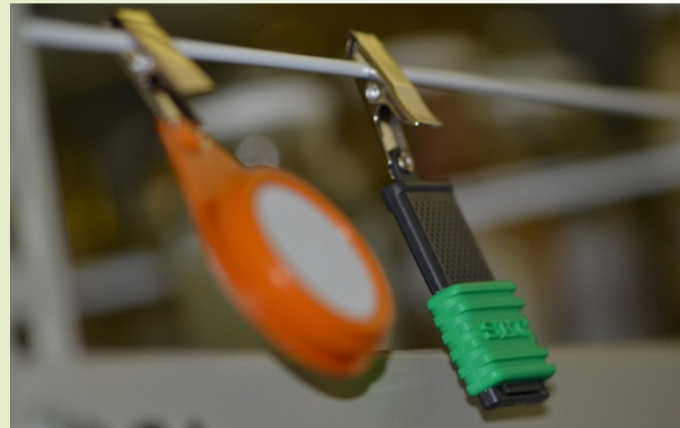
Working Group members at the ESI, Wits

The Gauteng region recently held their regional meeting, hosted by the Wits ESI and we felt like kids in a candy store and thoroughly enjoyed the collection tour and engagements, with the next one planned for November. We also had Lauretta Mahlangu visit the NSCF hub team offices for google docs training and practice and she has since been able to make contributions in the shared WG documents.

Meanwhile in EC, SAIAB received their protective personal clothing, lab coats and overalls! The overalls are flame and acid resistant and more info on them is available in this link <http://www.simplyworkwear.co.za/products/overalls/sasol-spec-2pc-flame-acid> for people interested in buying them. They also had their air monitoring conducted and they await the results in 3 months' time. I encourage other institutions to follow suite, or at the very least assess their current status.



Staff at SAIAB wearing the air vapour monitor badges



Air monitor vapour badges



SAIAB staff wearing PPE overalls, which are flame & acid free



SAIAB staff wearing their new lab coats

### From Ian: Capacity building for data management in South Africa

Science revolves around data, and scientists are generating data at an unprecedented rate. This is true of the biodiversity sector too, where museum specimen data are being digitized voluminously around the world, and those data shared online through platforms such as GBIF, iDigBio, and the Atlas of Living Australia. Surprisingly though, scientists are seldom trained in the specific skills needed to manage data well, and often work things out as they go. Spreadsheets are by far the favourite data management tools for most people working with data because they are simple to use, have an almost non-existent learning curve, and impose no rules at all on how data should be structured or captured. Unfortunately this same flexibility can be disastrous for data management practice, and can cause a myriad problems down the line when data need to be integrated, reshaped, and analysed. This is true of small student projects through to large data generating efforts such as the NSCF and FBIP.

The lack of skills and available training in good data management practice has been acknowledged across a wide range of scenarios and platforms. Employers in the biodiversity sector seeking data managers struggle to find appropriately skilled and experienced staff. The Data Intensive Research Initiative of South Africa (DIRISA), driven by the NRF, has acknowledged the lack of these skills as the primary obstacle to leveraging the benefits of big data for the country. Data management in large science projects often requires specific people to be appointed to deal with data management, because the effort required to ensure that data are interoperable and of sufficient quality is a full time job.

Through the NSCF we hope to address the skills shortage to some extent by providing training and workshop opportunities, and the NSCF will be developing data standards which will help the task of data quality management. However the issue is deeper, and we as a community need to be thinking of how we might entrench good data management practice in our day to day work, and make it a fundamental part of the training we receive through universities and on the job. In an ideal future we would all be fully capable with databases, big data systems, and have moved beyond our spreadsheets.

### From Shanelle: Institutional outputs for Quarter 2

Partner institutions submitted online reports for the second quarter of 2018/19, and once again made it possible for the NSCF to demonstrate the importance and relevance of the collections. Thanks to those of you who pulled through and submitted your reports despite a tight deadline.

Orphan collections: Number of specimens incorporated	781
New specimens accessioned	5,703
Number of DNA samples added	51
Number of tissue samples added	96
Number of DNA samples supplied for research purposes	198
Data provided to external users: number requests	83
Data provided to external users: number of records	290,441
Number of specimens imaged	4,362
Number of specimens sent out on loan for research purposes	8,785
Number of visitors using collection (national)	536
Number of visitors using collection (international)	65
Number of new species described	23
Number of papers published based on collection	22
Number of specimens identified: external stakeholders	1,764
Number of outreach activities held that involve natural science collections	82
Number of attendees / learners exposed to the activity	8,301

Totals of outputs reported by NSCF partner institutions for the period 1 July to 30 September 2018

### NSCF at the South African Museums Association Conference 2018



Dr Helen James talks about the role of the NSCF in supporting museum collections, at the recent South African Museums Association Conference in Grahamstown. Thank you Dr James for representing the NSCF at this important event!

### Some interesting reading

Excerpt from a SciBlogs blog entry by Nic Rawlence:

Increasing the social media profile of taxonomy through Facebook, Twitter and Instagram would also be vital to this facelift. Te Papa's Carlos Lehnbach, Cambridge University Zoology Museum's Jack Ashby, and CSIRO's Bryan Lessard (aka @BrytheFlyGuy) do a fantastic job of putting taxonomy in front of the media. Any scientist can have a go at increasing the profile.

[Read More](#)



Make taxonomy great again

By Nic Rawlence • 26/10/2018 • 6



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Collections management working group Twitter handle: @NscfMan