

# Natural Science Collections Facility

## Progress report – July 2017

<b>NATURAL SCIENCE COLLECTIONS FACILITY: BUSINESS PLAN 2016/17-2018/19</b>				
	STRATEGIC OBJECTIVE	3 year Outcome / Objective	DELIVERABLES	Progress 1 March- 30 June 2017
<b>1</b>	<i>Collections (=research infrastructure) secured and accessible physically and virtually for research</i>	i. Inventory of collections on the NSCF website	Website, with details of all publically accessible natural science collections	TORs for web developer developed and advertised Existing list of all collections, size and scope circulated to institutions for updating.
		ii. Collections that are at high risk / high priority secured/ collection facilities upgraded	6 orphan collections integrated into major collections; upgrade of storage environments for priority collections	Four orphan collections requiring incorporation and receiving institution identified, 2 more to be identified after assessment. Planned incorporation: UKZN – Killick herbarium – 2018/19; SAIAB – AM fish - current; ARC – ELM fungi and Eicker collection (UP); National Museum: Visser Herps.
		iii. A virtual museum for global use by researchers and broader society initiated	Website with information and images for South Africa's species (5000 specimens digitised); scanned versions of catalogues, field notes and other documents relating to collections	TORs for website developers developed and advertised. Post of Analyst Developer to develop system for virtual museum advertised.
		iv. Tissue and DNA collections accessible for research	Basic facilities for storage of tissues and DNA linked to voucher specimens	Assessment of freezer needs completed. Plans for renovation of existing lab at National Herbarium to establish a DNA extraction facility and DNA / tissue collection for plants finalised.
		v. Common standards, procedures and monitoring programme for collections across institutions	Common set of documents for standards, procedures covering curation and access; monitoring process for implementation	To b initiated in October 2017

2	<b><i>Data from specimens in collections accessible and used for managing collections, research and decision-making</i></b>	i. Standards, processes and workflows for data capture, <b>verification</b> , upgrading and integration across institutions	Set of documents finalised and adopted by participating institutions	To be initiated in August 2017
		ii. Verification and upgrading of specimen data for vertebrates (mammals, birds, reptiles, fish, amphibians), fungi and two plant families	Estimated 600,000 records updated, corrected and accessible	Agreement on starting with reptile and amphibian data sets. Discussion of 2 plant families to focus on. Agreement on fungi and fossil priority datasets.
3	<b><i>Research on collections and associated data addresses issues of national and global relevance</i></b>	i. Large, collaborative and multidisciplinary flagship research project based on the collections and associated data: proposal	Project proposal and plan developed	To be initiated in 2018
		ii. Accelerated description of new species where these are required for improving scientific quality of collection / strategically important research activities	Minimum of 60 new species described	Monitoring and reporting template for new species developed and circulated for ongoing population by participating institutions.
		iii. Increased use of collections for research and capacity development	Minimum of 6 international scientists using collections (in addition to the current number of 100 per year)	Call for applications for travel grants compiled and submitted to SANBI CFO for approval of process.
		iv. Upgraded research equipment and facilities at selected collection institutions	Equipment purchased and used by researchers	Priorities discussed and agreed on by the Coordinating Committee. Quotations for various items obtained by participating institutions.

4	<i>Collections and associated research provides services to identify biological specimens for a range of stakeholders including in the agriculture, health, environmental management and academic sectors</i>	i. Systems for monitoring identification services provided and for measuring impacts of this service	Database of specimens identified; purpose of identification; estimated 15000 specimens identified for agriculture, health, environmental management, researchers	Monitoring and reporting template developed and circulated to participating institutions for population.
5	<i>Increased public engagement and understanding in relation to the collections and discoveries based on these to inspire learners, students and citizen scientists and increase appreciation for South Africa's unique biodiversity assets.</i>	i. NSCF website, with pages relevant for public, with relevant information and links to virtual museum	Website established and accessible; updated on at least weekly basis; used by broader society	TORs for website development developed and advertised.
		ii. Outreach activities	8 events that promote collections; 4 school programmes using collections; 2 exhibits promoting collections; 2 popular articles on collections / NSCF / SA biodiversity	Exhibition area included as part of the new NSCF Hub building. NSCF presented at the ZSSA/ESSA conference and at the international Society for the Protection of Natural History Collections (SPNHC) in Denver, Colorado (June, 2017). Brochure for the NSCF developed and printed.
		iii. Develop and implement a branding and marketing strategy for the NSCF and collections	Marketing and branding plan documented, with activities, products, timeframes and costing; activities initiated in line with plan	TORs developed and advertised for branding for website.
<b>ENABLING STRATEGIES</b>				
6	<b>Transform the current fragmented natural science collections landscape by establishing the NSCF with participatory planning, implementation, monitoring and reporting processes and systems.</b>	i. NSCF staff appointed: Project Manager; Co-ordinators for Curation; Data; Capacity Development; and Outreach and Communication; Administrative Assistant	Functioning Co-ordinating Hub	Project manager post advertised twice. Working group Co-ordinator posts x 3 advertised - selection process imminent.

		ii. Documentation for governance and operations of NSCF Co-ordinating Hub (TORs, guidelines, processes)	Finalised and approved documents that clarify operations of the NSCF Co-ordinating Hub, supported by Steering Committee, Co-ordinating Committee	Governance structures and TORs document developed, circulated for comment, discussed by Co-ordinating Committee and revised. Co-ordinating Committee established and functional (2 meetings - February and May).
<b>6.1.</b>	Establishing the Co-ordinating Hub and governance structures and mechanisms for planning, implementation, monitoring and reporting for the NSCF	ii. Steering Committee, with TORs for NSCF, meeting at least once per annum	Steering Committee support and agreement on Strategic Objectives, Deliverables and Budget	Steering Committee composition and TORs included in Governance and TORs document. Membership to be confirmed and first meeting scheduled for September.
		iii. Co-ordinating Committee (managers or representatives from each participating institution) established; TORs developed; meeting at least quarterly basis to finalise objectives, activities, targets and resources, to monitor progress and provide information for reporting	TORs and operational plan finalised; minutes from meetings; objectives included in institution Annual Performance Plans (APPs)	Co-ordinating Committee established and functional (2 meetings - February and May). MoU template drafted and signed by one institution. Collaboration Agreement drafted and signed by one institution.
		iv. Five Working Groups, with Terms of Reference (TORs), meeting at least quarterly, detailed implementation plans and reports on progress against targets.	Objectives, activities and targets for each Working Group documented, with implementation plan; targets met	Working Group TORs developed. Membership with representatives of participating institutions finalised. First meeting of Data WG scheduled for 16 August.
		vi. NSCF Co-ordinating Hub offices established (interim for 2 years, with only moveable assets purchased); initiation of the construction of the NSCF Co-ordinating Hub building	Co-ordinating Hub staff accommodated on temporary basis; design, authorisations and procurement for construction of new building at SANBI	Design for new building finalised.
	<b>Transformation of natural science collections: focus on changing culture to ensure that all staff support the NSCF and work towards a national rather than individual agenda</b>	vii. NSCF Forum (every second year), for all collection institution staff to develop a new culture	NSCF Forum held to launch NSCF; all staff understand the aim and objectives	Dates finalised, venue booked, programme drafted. Scheduled for 17-20 October, in the KZN Drakensberg (Alpine Heath Resort). This Forum will serve as the official launch of the NSCF. Presentations on the NSCF and discussion sessions done for all staff at National Herbarium, KZN Herbarium, Compton Herbarium, Bolus Herbarium, Bews

				Herbarium, Ditsong Museum, Iziko Museum, KZN Museum, Durban Natural Science Museum, East London Museum, Port Elizabeth Museum, Amatole Museum, Albany Museum, SAIAB, ARC-PPRI Biosystematics.
		viii. Change management / leadership coaching for managers to support the development of a new culture	Managers from participating intuitions understand changes required for implementation of NSCF and achieving targets	TORs for change management consultants developed and advertised.
		ix. Common standards and job descriptions for staff in collection institutions to professionalise collections posts	Common post titles, job descriptions and performance standards for staff in collection institutions	Capacity Development WG to deal with this. WG membership confirmed, and includes managers of institutions.
<b>2</b>	<b>Capacity development</b>	i. Support for postgraduate students researching the natural science collections.	New postgraduate students using collections /data for their projects	4 MSc bursaries awarded for students working on collection material. This was done through an open call, and applications were assessed by three members of the Co-ordinating Committee
		iii. Capacity development for collections and data management staff: grants for young staff in collections to attend the international Society for the Protection of Natural History Collections (SPNHC) conference or the Taxonomic Data Working Group conference	International networking for young staff; additional skills and innovations for collections and data management to which young staff exposed	Call developed for staff to travel to international conference related to collection management / curation. Only one application received and this was not considered to be in line with the scope of the call.