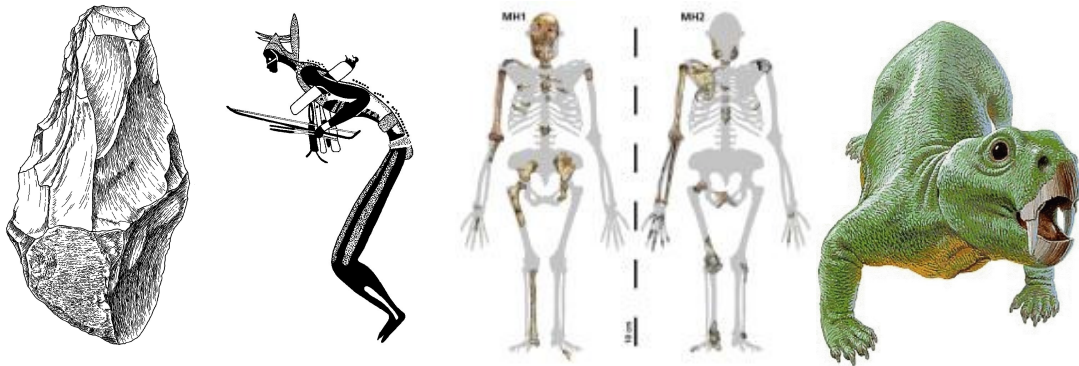


DRAFT 2.3

---

**The South African  
Policy  
for  
Archaeology and Palaeontology**



---

*“South Africa: the cradle of culture, technology, art, humanity and life on earth”*

---



## **Executive Summary**

South Africa is the custodian of an archaeological and palaeontological record that is of unparalleled richness and that details the story of life on earth and the story of humanity. Unfortunately our divided history has meant that this richness is not widely appreciated within South Africa and it does not provide the unifying source of national pride that it should. A long-standing failure adequately to support local research and local researchers means that South Africa has failed to achieve its rightful preeminent world status in these disciplines. High profile discoveries obscure the fact that a lack of strategic planning and systemic neglect has led to the situation where we do not have adequate human capacity in South Africa properly to study, manage or benefit from this globally important heritage.

Human capacity constraints are the most serious threats facing the disciplines of archaeology and palaeontology today. This policy seeks to resolve this. Inter-institutional centres of excellence should be established that will protect scarce skills and act as training hubs for a new generation of archaeologists and palaeontologists. University curricula should be expanded and improved so as to forge a generation of world-class researchers, museum curators and heritage practitioners. Over the short and medium term 150 new priority positions should be created in universities, museums and heritage agencies so as to bring South Africa up to international norms of employment in these disciplines. The new generation should position South Africa as a world leader in archaeological and palaeontological research, collection management and site management.

Historic problems in infrastructure should be addressed. In particular, investment should be made in storage facilities for collections, museum displays and in developing a national network of sites to create vibrant and lasting public engagement with archaeology and palaeontology in South Africa. A special development agency should be established to drive these site developments. The new public sites should be used to give hands-on local education and to propel the growth of South African tourism. A fully integrated national and provincial network of heritage agencies should be established and capacitated to manage and conserve our heritage for future generations.

Schools programmes should be developed to attract learners into archaeology and palaeontology and a national information bureau should be established to inform all South Africans about important new discoveries in these disciplines. In this way South Africans will be empowered to understand the true significance of African origins and our African heritage.

## *Contents*

List of acronyms	2
The value of archaeology and palaeontology	3
Facing up to a difficult past	4
The need for intervention	6
Towards a consultative solution	7
Engaging with the future of the past	9
Transform the minds of our youth	9
Capacitate our universities	11
Empower our museums	14
Resource our heritage agencies	17
Build a critical mass of researchers	22
Reap the benefits through tourism	26
Funding principles	29
Conclusions	29

## *List of Acronyms*

ASAPA – Association of Southern African Professional Archaeologists  
DAC – Department of Arts and Culture  
DEA – Department of Environmental Affairs  
DoE – Department of Education  
DoT – Department of Tourism  
DST – Department of Science and Technology  
DWA – Department of Water Affairs  
NHC – National Heritage Council  
NHRA - The National Heritage Resources Act (Act 25 of 1999)  
NRF – National Research Foundation  
PAST – Palaeontological Scientific Trust  
PHRAs – Provincial Heritage Resources Agencies  
PSSA – The Palaeontological Society of Southern Africa  
SAHRA – South African Heritage Resources Agency  
SARADA – Southern African Rock Art Digital Archive

## *The Value of Archaeology and Palaeontology*

Archaeology and palaeontology (including palaeoanthropology) are the scientific disciplines that tell us the story of life on earth, including the story of “us”. This is a complex tale, one with thousands of chapters, and many pages of it are only now starting to be revealed.

South Africa holds the key to progress in our understanding of many parts of the story of life on earth; we have much of the best evidence in the world for how plant and animal life developed, how hominids evolved, how modern humans originated and how human culture began and grew to become the modern societies we know today.

Work on South African archaeology and palaeontology is therefore of crucial international importance because it provides proof of shared human origins, the mutual roots that bind all people within a common humanity. It tells us of the time before humans in which we can witness the effects of a series of mass extinctions on biodiversity and also the development of plant and animal species. In this story there is a message for all: that our continued survival as a species requires us to develop more sustainable ways of living amongst our natural resources and environments.

Our success as a species is also dependent on the fact that we are a social species and therefore need one another to survive. By building social barriers based on differences we undermine our ability to function effectively as a species and as individuals. This is what makes our shared past so important: the fact that we all share a common genetic ancestor unites us in our common humanity and provides the basis upon which we can build a united society, forged around similarities rather than differences and on tolerance and understanding rather than on prejudice and mistrust.

South Africa’s unique strategic and geographic advantage as a global information provider on the development of life and humanity on earth stands alongside our geographic advantage in astronomy and the southern oceans and can position South Africa as an international driver of sustainable global futures.

## *Facing up to a Difficult Past*

To understand why South Africa, given its unique geographic advantage in archaeology and palaeontology, has not attained its natural position as a global leader in these disciplines, we need to consider South Africa's recent past. The relationship between the Apartheid government and archaeology-palaeontology was complex. It is a matter of record that many archaeologists and palaeontologists spoke out strongly against Apartheid, or were active in the struggle against it. However, the nature of the relationship between these disciplines and Apartheid has left certain legacies which impact on the policy proposed here. Arguably, the most significant of these legacies lies in the relationship between archaeology and South African society.

The 1960s were a period of rapid economic growth in South Africa. In the late-1960s and early-1970s the Apartheid state invested heavily in museums and universities, as a means of presenting a modern face to the world. Many new jobs were created in both archaeology and palaeontology and a basic infrastructure was put in place that has endured. This was also the period of the growing influence of New Archaeology, a body of theory derived mainly from North America. The paradox of why the Apartheid state invested in disciplines ostensibly focussed on African origins and African heritage was resolved by New Archaeology. Among other things, this body of theory argued that archaeology was an objective science and therefore that it should neither concern the politics of the day, nor address the issues of contemporary society. Historians of the discipline have noted how the archaeology of the southern African Iron Age, as elaborated around this time, was shrouded in a technical language and used technical approaches that made it impenetrable outside the confines of the discipline. It was around this time, too, that professional archaeology distanced itself from its amateur constituency who were considered to lack scientific rigour.

This distancing of archaeology from society arguably set in place a pattern which, with a few exceptions, has endured to the present. South Africa is one of the few nations in the world that does not have a strong emphasis upon archaeology and palaeontology in schools and these disciplines poorly reported on in newspapers and on TV/Radio. There are few large museum displays showcasing important national archaeological and palaeontological objects and, at those that exist, visitor numbers are extremely low by international standards. There is no network of national heritage sites developed to a high standard for the purposes of tourism and education. Significant academic debates in fields like Public Archaeology and Indigenous

Archaeology have had little purchase locally. South Africa lags behind many other countries in debates and policies around ethics, the rights and responsibilities of archaeologists and descendent/affected communities, as well as around ownership and control of cultural heritage and human remains.

A final, significant legacy of Apartheid lies in the way in which it isolated local archaeologists and palaeontologists. Progressively through the 1980s, South Africans were cut-off from colleagues in the rest of Africa, and from the traditional disciplinary centres of power in the northern hemisphere. South African archaeologists, for example, were banned at this time from attending meetings of the World Archaeological Congress. With reintegration into the global community after 1994, an older colonial knowledge politics has placed local researchers in a particular, dependent relationship with researchers from outside Africa. This is not to say that significant developments have not taken place after 1994. However, questions and challenges remain around breaking the older geography of colonial research networks and activating south-south and African collaborative networks. It is now imperative that South African researchers be given the means to drive their own significant, long-term research projects, rather than merely acting as local anchors for international teams.

In terms of public engagement, the period since 1994 has been a period of catch-up, a united drive to repair the damage done by the wasted years. Since 1997, new school curricula have given proper prominence to archaeology and palaeontology and excellent new study materials have been created. One constraint on the effectiveness of these changes has been a failure to build concomitant skills capacity for teachers who are expected to pass on archaeological and palaeontological knowledge without prior training. In spite of these shortcomings, the inclusion of archaeology and palaeontology in curricula has had positive knock-on effects in tertiary education, with a greater number and diversity of students wanting to study these subjects.

Progress at tertiary level has, however, been sabotaged by the broad perpetuation of historical budgeting practices within universities. This means that there has been no increase in university teaching or research staff in either archaeology or palaeontology and that a small staff complement, in an inadequate number of departments, has faced almost impossible demands. This situation is mirrored in museums and heritage agencies where historical budgeting practices have also hampered the proper expansion of professional staff numbers in archaeology and palaeontology to achieve international norms. Historical inadequacies in the

curation, conservation and storage of collections have therefore not been addressed. Indeed, museum and university staff levels in archaeology and palaeontology have actually declined since 1994.

This failure at an institutional level to overcome budgeting prejudice against archaeology and palaeontology has meant that South Africa has not seen the kind of expansion in research, human capital development, curatorial capacity, infrastructure, public engagement and an archaeo-palaeo-tourism sector that should redress the past dereliction of these strategically important disciplines.

### *The Need for Intervention*

Sixteen years into South Africa's democratic era, a series of piecemeal interventions in archaeology and palaeontology has failed to overcome the legacy of neglect inherited from Apartheid times. If South Africa is to achieve its natural position as a world leader in these disciplines, in which it has unique geographic advantage and that are of international interest and significance, then coordinated centralised intervention is necessary. The primary needs and therefore our goals are to:

- **transform the minds of our youth** so as to instil a sense of pride and value in African heritage and **to engage all sectors of our society** with local archaeological and palaeontological resources together with information on new discoveries so that all may appreciate the special place of South Africa in the story of life and humanity on earth;
- **capacitate our universities** to produce a new generation of world-class archaeologists and palaeontologists with a cutting-edge spectrum of research, technical, curatorial and managerial skills;
- **empower our museums** to curate our world-renowned collections and to display our archaeological and palaeontological treasures in ways that inform us and make us proud;
- **resource our heritage agencies** so that they can attain international standards of heritage management and ensure that our archaeological and palaeontological heritage is well managed, used for the benefit of all and that its values are protected for future generations;

- **build a critical mass of researchers** to drive knowledge production, to conduct applied research and to inspire the world with their discoveries;
- **reap the benefits** of local and international interest in archaeology and palaeontology by building a network of site displays and interpretative centres which are managed in a socially responsible and sustainable manner so as to **make South Africa the destination of choice for archaeo- and palaeo-tourism.**

### *Towards a Consultative Solution*

Realising the need for a co-ordinated intervention, the Department of Science and Technology called together a group of professional archaeologists and palaeontologists in 2004 to prepare a strategy document aimed at guiding government on how to improve research, collections management and training in these disciplines. The document became known as the *African Origins Platform* and aspects of it were implemented from 2007 by the Department of Science and Technology (DST) through the provision of funding via the National Research Foundation (NRF) and the Palaeontological Scientific Trust (PAST). A number of research projects and postgraduate students were successfully funded and this helped to expand knowledge and human capacity in tangible ways. Common criticisms of the intervention were that it did not address many of the underlying problems detailed within the *African Origins Platform* document. Examples are that it did not address: the fundamental institutional staff weaknesses in South African training centres; the lack of a critical mass of world-class researchers; poor collection storage facilities and curation practices; limited central facilities for dating, isotope analysis and digital imaging; a lack of support for public outreach programmes and a paucity of archaeo-palaeotourism infrastructure.

During 2009 and 2010 DST therefore called a new round of meetings with archaeologists and palaeontologists to consider the strengths and weaknesses of the *African Origins Platform* and to chart a programme of enhanced intervention. These meetings agreed on the need to reformulate the *African Origins Platform* document and to add material to it in order to create:



- a) **A Policy document** setting out the rationale for intervention in the disciplines of archaeology and palaeontology; the overarching principles that should be followed and a set of realistic objectives (by end September 2010)
- b) **A Strategy document** setting out, in detail and with justification, the specific actions that must be taken to achieve the objectives identified in the policy (by end November 2010)
- c) **An Implementation plan** giving a list of actions approved for implementation, with timeframes, milestones, measurable targets and annual budgets. This plan will activate the strategies identified in the strategy document (by end December 2010)

A representative spectrum of archaeologists and palaeontologists from universities, museums and the heritage sector was then invited to aid in the creation of these documents. These specialists were divided into six working groups and were charged with the writing of advisory reports, describing the current state of the disciplines and making a set of policy and strategy recommendations in the areas of:

- a) **legislation;**
- b) **research;**
- c) **sites and collections management;**
- d) **public engagement and accountability;**
- e) **archaeo- and palaeo-tourism;**
- f) **human capital development and curriculum planning.**

Issues of funding and infrastructure were seen as cross-cutting and so were considered by all groups. Each working group contained both archaeologists and palaeontologists. The members of these groups then elected one archaeologist and one palaeontologist to consolidate their six advisory reports, in consultation with the NRF, DST and an independent advisor. The present document is the first outcome of this process.

A consolidated summary of the state of the disciplines of archaeology and palaeontology as identified by the working groups is provided below and the implications incorporated into a single, coherent, cogent policy for South African archaeology and palaeontology. It is intended that this policy, with triennial evaluations, will guide all strategies and interventions in the coming decades.

All aspects of the process of constructing this policy were transparent and consultative; in addition to the inputs of the working groups, drafts of all documents were circulated to archaeologists and palaeontologists throughout South Africa for comment and correction, through the respective professional associations.

### *Engaging with the Future of the Past*

Under the six major goals, the working groups identified the following key issues, constraints, strengths and opportunities and made the recommendations listed here:

*1) Transform the minds of our youth so as to instil a sense of pride and value in African heritage and to engage all sectors of our society with local archaeological and palaeontological resources together with information on new discoveries so that all may appreciate the special place of South Africa in the story of life and humanity on earth*

**Context:** One of the objectives of the NHRA is to empower civil society to nurture and conserve heritage resources so that they may be bequeathed to future generations. However, a stubbornly enduring legacy of the Apartheid era is that the remarkable richness and wonder of South Africa's fossil and archaeological heritage is not matched by a corresponding public passion and appreciation for it.

The task at hand is for us to undo that part of South Africa's history which has served to downplay the importance of African origins and African heritage and which actively disconnected people from this heritage through legalised displacements and the obliteration of the traces of their community pasts. Several barriers prevent many South Africans from engaging more fully with their archaeological and palaeontological heritage. Many of the most important sites are not open to the public or are not presented in a way that is accessible to a wide audience. With a few important exceptions, the South African media continues the historical neglect of these disciplines. South Africa is one of the few countries in the world where one does not see regular reports on archaeology and palaeontology in the media. Television documentaries are rarely commissioned on these subjects, even when new local discoveries make international headlines. Many museums have failed to become peoples' museums, in the sense that they have not become places to which people choose to go to learn

about their past and to take pride in their heritage. In the absence of strong national programmes of public engagement, the legacy of Christian National Education has ensured that the presentation of scientific facts concerning the evolutionary history of life and humanity remains uncomfortable to a significant section of South African society.

Programmes of public engagement in archaeology and palaeontology since 1994 have tended to be fragmented and undertaken on a small-scale by individual institutions. This has not created the major transformation in public perceptions that is needed. A more active and integrated national engagement in these disciplines is required, one that plans medium- and long-term societal interventions to undo the Apartheid legacy and to put in place a sustainable programme of interventions beyond singular events such as Museum or Heritage Day. Currently also, outreach and public programmes are primarily aimed at those institutions within the research of a large centre and exclude rural areas. In reality opportunities for accessing such information are minimal.

### **Recommendations**

The key issues needing to be addressed:

- poor public understanding of the significance of South African archaeology and palaeontology;
- limited media engagement;
- few and poor site and museum displays;
- poor teacher training in archaeology and palaeontology;
- a lack of support programmes to engage learners of all ages with archaeology and palaeontology.

To address these issues will require co-ordinated central intervention by a series of national and provincial government departments. The first level to be addressed is schools. One or more NGOs should be engaged to run training workshops for teachers in which a wide range of quality classroom materials, including replicas of significant South African archaeological and palaeontological objects should be made available. These same NGOs, along with museums, should be employed to develop a national programme of hands-on interactive learner experiences to be run at schools in all provinces, to hold events at science festivals and at public archaeology and palaeontology sites as well as to produce travelling exhibitions.

Postgraduate students and researchers should be incentivised to contribute to these public programmes.

To reach beyond the classroom, a National Communications Bureau for Science, with a dedicated Archaeology and Palaeontology desk, should be established. The task of the Archaeology and Palaeontology desk will be to produce regular news reports in all media, including digital media such as Facebook and Twitter, giving scientifically accurate information in a popular format on discoveries and important archaeological and palaeontological research findings. It should also commission documentaries and television series on South Africa's pre-colonial past.

For the next ten years, one museum should be selected each year and funded to bring its archaeological and palaeontological displays up to international standards, showcasing original fossils and archaeological objects, interpretive recreations and interactive multimedia. Attached to this infrastructural development should be support for the development and roll-out of new public engagement programmes and materials for archaeology and palaeontology at that museum.

2) *Capacitate our universities to produce a new generation of world-class archaeologists and palaeontologists with a cutting-edge spectrum of research, technical, curatorial and managerial skills*

**Context:** South Africa has fewer university teaching departments and lower levels of staffing in these departments than in any comparable nation. There is also a skewed staffing demographic. There is presently a group of university staff over 60, who were employed during the disciplinary expansion of the 1970s, and now are close to or past retirement age. A second cohort mostly employed since 1994 are under 45. There is almost no 'in between generation' because of the dereliction of both disciplines during the 1980s, a time in which people either left South Africa to find employment elsewhere or were forced to take jobs in other disciplines. South Africa thus faces the combined problems of a historic paucity of jobs in these disciplines, a structural gap in skills replacement and a weakness in succession planning.

Inconceivably, some positions and even some departments (e.g. University of Stellenbosch) have been closed since 1994, a sign that, if not directly challenged, historical budgeting practices may continue. The resultant decline in capacity has reached a point where, unless there is an urgent national intervention, the ability to teach and train in important sections of archaeology and palaeontology will be lost. This situation is further exacerbated the development of new areas of specialisation (such as technical conservation, digital imaging and stakeholder driven heritage management) within both archaeology and palaeontology. This means that to forge a new generation of university lecturers we will now have to send people overseas for training, if South Africa is to attain the specialist skills it needs.

Both at universities and museums there have been serious cuts in entry-level positions; these are the posts from which today's discipline leaders, supervisors and mentors began their career profiles. Closing these positions has made it very difficult for young graduates to find a place in either discipline. In recent years, when senior positions have come up, these same young South African graduates have then been passed over in favour of foreigners because of their lack of experience. This is a vicious circle that must be broken. It is strangling the rejuvenation of the disciplines.

The decline in positions and comparatively low salaries has also been a disincentive for top young students to choose archaeology and palaeontology as career paths. Universities have endeavoured to ensure a good supply of well-trained graduates, but the best students are lost to business and government where salaries and career opportunities are more favourable. The result is an ageing and demographically non-representative cohort of scientists with insufficient renewal and little or no succession planning. The lack of a transformed teaching staff, and paucity of young local role models, has exacerbated the problem of attracting the best students to these disciplines.

Current South African tertiary training programmes do not prepare students adequately with the range of applied skills needed in the museum, heritage and commercial sectors. Local training programmes in archaeological and palaeontological heritage resource management, conservation, public engagement, disciplinary ethics, heritage databases, collection curation, and other applied training must be improved and promoted.

### **Recommendations**

The key issues needing to be addressed are:

- a paucity of archaeology and palaeontology staff and university courses;
- a paucity of high quality students entering these disciplines;
- a lack of entry level positions to allow South Africans to develop a career profile in these disciplines;
- a failure to address the historic underfunding of archaeology and palaeontology in universities;
- insufficient succession planning and equity redress.

In the short term, to attain normal international state staffing levels, South Africa should aim to double the number of university positions for academic and technical staff in archaeology and palaeontology over the next five years. This will involve the creation of about 75 new academic and technical positions. The best way to achieve this is through encouraging universities to place special emphasis upon archaeology and palaeontology and to adjust their historic budgeting practices so as to dedicate an increased percentage of their existing resources to these disciplines. They should be supported in the development of these disciplines by the provision of government funding for centres of excellence and research chairs. Corporate and international funding support should also be harnessed by using the national research and development tax incentives. National government should work directly with universities to lobby local corporate funders and international funding agencies to endow university teaching positions in these disciplines. Each university must use these opportunities to build up a well-rounded core of specialised staff able to offer comprehensive training programmes in archaeology and palaeontology.

To attract quality staff, archaeology and palaeontology should be classified as critical and scarce skills. This would signal the national importance of these disciplines and it would facilitate access to bursaries and scholarships to support student training. To retain quality staff, universities should be encouraged to meet their widely stated target of benchmarking archaeological and palaeontological salaries at 75% of the equivalent commercial salary level. To grow our own specialists, an integrated national system of staff development fellowships, mentorships and internships should be established in collaboration with museums and heritage agencies. Skills transfer funding should be made available to allow for overlap positions prior to senior retirements. This will ensure continuity and retention of scarce skills.

To attract more and better students to archaeology and palaeontology, dedicated bursaries should be provided in these two fields every year at least for the next ten years. This will provide the stable training opportunities needed to ensure the production of a new generation of South African scholars in these fields. The bursaries will be administered by the NRF and clearly marked and promoted as dedicated to these disciplines. ASAPA and the PSSA will provide assistance to advertise these bursaries to as many school leavers as possible in order to ensure that strong applications are received from all sectors of South African society. Applications will be open to all sections of archaeology and palaeontology. Additional student bursary funding should be attached to research project funding.

In terms of curricula: archaeology and palaeontology should retain their current high profile in all future school curricula. Universities should develop more applied skills training programmes and workshops in fields such as conservation, heritage management, the application of digital technology and collection curation. Unit Standards were developed for SAQA to enable people without university degrees to use the skills they had developed in the workplace to meet entry requirements and to obtain recognition for their technical experience. These Unit Standards were registered, but Units have never been offered by universities or other service providers to activate this empowerment process. Universities need to address this failure.

3) *Empower our museums to curate our world-renowned collections and to display our archaeological and palaeontological treasures in ways that inform us and make us proud*

**Context:** South Africa has many archaeological and palaeontological collections that are of high international significance. Museums have shed research and curation staff over the past two decades in favour of positions in management, administration and education. This has left many research and curation departments so under-staffed and so under-skilled that they are now unable to research, catalogue, inventory and curate collections to international standards. In terms of the NHRA, institutions storing collections undertake to curate the material in perpetuity. There is thus a need for South Africa to take a long-term perspective and to plan for the perpetual provision of infrastructure in which to store, manage archaeological and palaeontological materials and to provide the human capacity needed to ensure best practice curation. Ongoing research projects and development mitigation work

produce additional materials every year and long-term expansion planning is therefore crucial for old and new collection facilities.

The current state of South Africa's archaeological and palaeontological collection facilities is variable, with a few good examples, but the majority have too little storage, too little working space and lacking essential curation and conservation materials as well as equipment.

Unfortunately, collections are often perceived as 'necessary' evils that soak up space, money, require constant care and give little benefit. However, collections are the basic resource that supports fundamental research, displays, public programmes and training and institutions should be incentivised to look after and to utilize collections appropriately. Indeed, the collections are the fuel that will drive the future research of both disciplines.

Curatorial capacity varies much between museums, but there is a common problem that museum curatorial posts carry extremely low salaries when benchmarked against comparable positions in universities. This has led to weak applications for these positions and either to the appointment of staff without the necessary competencies or to a failure to appoint. Attraction and retention of good staff has therefore proven difficult.

Current South African tertiary training programmes do not prepare students adequately for museological work, including cataloguing, inventory and conservation. Anyone wishing to receive specialised training in these fields is forced to study outside of South Africa. Local training programmes must be developed.

### **Recommendations**

The key issues needing to be addressed with regards to museum collections and display are:

- a failure by institutions to recognise the importance of collection management and conservation;
- a shortage of jobs;
- a skills shortage and lack of opportunities to upskill;
- poor salaries and remuneration;
- insufficient succession planning and equity redress;
- a lack of funding;
- poor infrastructure.



Many of the problems facing collections can be solved by improving staffing levels within the relevant sections of museums. To achieve this, archaeological and palaeontological collections should be granted national priority status to ensure that staffing requests by these disciplines gain priority consideration in national, provincial and institutional funding decisions. To attain international staffing levels in our museum, we will need to increase the number of museum positions in archaeology and palaeontology by at least 40.

An increase in capacity should be approached strategically to ensure that different museums have mutually supporting clusters of specialist expertise. Each cluster should comprise a set of skills in related fields so that each museum becomes a specialised centre of research and technical analysis. Within this cluster of skills there must be technical and research staff with specialized training in collections management, curation and conservation. This drive to create clusters of excellence within museums is the best way to divide investment and funding responsibilities between the provinces, whilst at the same time creating national synergies and economies of scale. This will achieve far more than a network of individuals working in isolation.

This process should be used, not only to build on existing strengths, but also to work towards the development of a comprehensive set of specialised skills in South African archaeology and palaeontology. To achieve this successfully a national convention of museums and universities should be held and all parties should agree upon a strategic plan whereby each centre will focus on developing a particular set of specialised skills. The private sector should be encouraged to play its part in supporting the development of this national skills system by utilising the tax incentive schemes available for research and development.

Improving staff conditions of service is also important to make sure that personnel are retained and continuity ensured. A higher value must be ascribed to museum positions and they must be graded more highly because of the skills required. Museums should follow the lead of universities in benchmarking archaeological and palaeontological salaries at 75% of the equivalent commercial salary level. Museums should also participate in an integrated national system of staff development fellowships, partnering with universities to create training opportunities and by offering specialist internships positions for university graduates. Skills transfer funding should be made available to allow for overlap positions prior to senior retirements. This will ensure continuity and the retention of scarce skills.

Annual budgetary provision is needed for collection infrastructure development and renewal. Annual calls for applications should be sent to all institutions holding collections each year and monies allocated on a competitive basis. To identify areas of need and to set priorities for resolving current collection curation problems, an audit of archaeological and palaeontological collections should be undertaken as a matter of urgency. This should list all entities where material is curated, the size, content, condition of the collections held as well as plans to digitise and display the collections. This must be an evaluative audit that identifies problems in collection curation, recommends solutions and determines a ranking of spending priorities. It would be useful for this survey to be done by a similar team to that which has been involved in the recent audit report on South Africa's natural science collections. Part of the review remit should be to canvas collection holders on what should define a national set of minimum standards for the curation of collections and protocols for access to collections.

Funds should be made available for the creation and maintenance of viable regional nodes of archaeological and palaeontological infrastructure, ideally at an existing provincial or national museum. In three provinces this will require the establishment of a new provincial museum; international funding partners should be approached to assist with these developments. In addition, to harness resources at all levels, museums should receive higher priority in provincial funding allocations and archaeology and palaeontology should receive higher priority in museum internal budgeting processes.

*4) Resource our heritage agencies so that they can attain international standards of heritage management and ensure that our archaeological and palaeontological heritage is well managed, used for the benefit of all and that its values are protected for future generations*

**Context:** South Africa's palaeontological and archaeological heritage resources are regulated by many pieces of legislation and sets of regulations, the most important of which are the National Heritage Resources Act (Act 25 of 1999), National Heritage Council Act (Act 11 of 1999), Cultural Institutions Act (Act 119 of 1998) and the World Heritage Convention Act (Act 49 of 1999). In addition the statutory environment for heritage management is affected by environmental and conservation legislation including the National Environmental

Management Act (Act 107 of 1998), National Environmental Management: Protected Areas Act (Act 5 of 2003), as well as the Minerals and Petroleum Resources Development Act (Act 28 of 2002). In addition, provincial acts and ordinances as well as local by-laws may be applicable to heritage at provincial and local level.

The legislative framework protecting South Africa's heritage resources has been in operation for more than a decade. Whilst it is widely accepted that it is amongst the most progressive in the world, it has unfortunately resulted neither in the desired level of heritage protection nor in the proper development of the heritage sector. Part of the reason for this is that the legal framework in this sector is discontinuous and fragmented and does not provide for integrated governance of archaeological and palaeontological heritage. There is considerable confusion as to which authority is responsible for which aspects of archaeology and palaeontology. Currently, DoE, DAC, DST, DWA, DEA, DoT, SAHRA and the NHC all have obligations – sometimes overlapping – at national level; provincial and municipal authorities also have responsibilities, but the division of powers between these and national authorities is often unclear. This fragmented legal system causes overlaps in responsibilities, derogation of duties to others, duplication of effort, time delays and legal uncertainty. Heritage practitioners, developers, consultants, researchers and students struggle to establish who has jurisdiction and responsibility for the management and protection of which heritage resources.

The NHRA promotes a three-tier system for heritage resources management, in which national heritage resources are the responsibility of SAHRA, provincial heritage resources are the responsibility of PHRAs and other heritage resources are the responsibility of local authorities. In this system, responsibility is only devolved once sufficient archaeological and palaeontological competence is put in place. However, since 1999, only two PHRAs (KwaZulu-Natal and Western Cape) have been deemed to have appropriate competence in archaeology, none in palaeontology, and no municipalities have been deemed competent in either field. SAHRA therefore remains responsible for most of the nation's archaeological and palaeontological heritage resources, but without the staff or funding levels to undertake this task properly. The requirement by DEA that environmental impact assessments contain heritage impact assessments, coupled with massive urban development during the last decade (and to a lesser extent the requirement for mining Environmental Management Programme Reports), has produced an explosion in the number of archaeological impact assessments requiring review by SAHRA. This has made the staff of SAHRA deskbound and has meant

that work on compliance has not been matched by adequate monitoring, inspection and enforcement of the law. SAHRA has become a compliance agency, but is unable to be a proactive champion of South African heritage.

At provincial level, the lack of heritage management capacity seriously jeopardises South Africa's ability to protect and manage its heritage. Some provinces have started to review and approve the heritage component of impact assessments, without receiving authority from SAHRA and without possessing the necessary competence. Most provinces appear unaware of the urgent need to fund the appointment of archaeologists and palaeontologists to their PHRAs. The lack of archaeological and palaeontological competence at provincial heritage agency level is presently the most serious threat to the future of archaeological and palaeontological resources in South Africa.

The lack of strategic heritage management planning and budgeting at both national and provincial levels has resulted in a failure to create appropriately staffed heritage management authorities at all levels. As a result, the functioning authorities are overwhelmed and incapable of fulfilling their duties as envisaged in the NHRA. The lack of capacity and enforcement means that good legislation has not been matched by compliance because of inadequate or absent monitoring and this is, in turn, fostering a culture of non-compliance.

South Africa's archaeological and palaeontological wealth is such that the effective management and curation of all sites is a vast undertaking. Heritage agencies do not have the staff or resources to do the work required of them. This is exacerbated by the fact that, in most cases, we do not have adequate national or provincial inventories of sites.

In terms of public access to sites: since 1994 only a handful of sites have been opened to the public, presented in accordance with international standards and in a manner that is sustainable. To create better public engagement with archaeology and palaeontology and to sustain archaeo- and palaeo-tourism, many more sites need to be developed for visitors. No institution has currently risen to the challenge of leading and coordinating this urgently needed development work. In most African countries this task would fall to a heritage agency, but SAHRA has positioned itself as a compliance agency rather than as a development body with site management responsibilities. National departments, municipalities, universities and museums have therefore funded the development of some sites, usually as stand-alone commercial developments, but, in the absence of substantial

national marketing for heritage tourism and without the development of defined tourism routes integrating these new sites, most have proven not to be self-sustainable in direct commercial terms. In the absence of a management authority to support and sustain them in the short-term, many have collapsed.

As important as the investment in site infrastructure is investment in good management by appropriately skilled heritage managers. Unfortunately, most posts offered in site management carry very low salaries when measured against the high level of skills required. Site managers also have to work and live in remote rural areas, often without any extra compensation for being far away from their homes. It is therefore difficult, sometimes impossible, to attract and retain adequately skilled personnel. A higher value must be ascribed to these positions and they must be graded more highly because of the skills required. This sector is one in which we should have seen massive expansion of jobs since 1994; it should be offering a range of excellent positions for recent graduates.

### **Recommendations**

The key issues needing to be addressed are:

- failures in the implementation of the NHRA;
- failures in the activation and capacitation of the PHRAs;
- a lack of archaeological and palaeontological capacity at all levels;
- poor coordination of the activities of different national and provincial departments;
- the lack of a heritage ‘champion’ to resolve problems in this sector.

South African legislation covering archaeology and palaeontology is progressive and strong in principle. The problems for this sector lie not in the legislation, but in its successful implementation. The NHRA was not properly costed and there was no implementation plan for the Act, setting out the practical steps as to how it should be implemented and who should fund the different requirements of the Act. To establish how best to improve the implementation of the NHRA, an independent review should be commissioned. This review should assess the implementation of all aspects of the NHRA and other acts related to the heritage sector and it should aim to identify gaps, weaknesses and overlaps in roles, rights and responsibilities. Specific problems for which this review must find solutions include: how to integrate the heritage management sector; how to address the failure to activate PHRAs and to capacitate them with professional archaeological and palaeontological expertise as

required; how to ensure effective monitoring of compliance with the Act and how to ensure the enforcement of the Act; how to implement a strategy to ensure co-operation and integration of legal bodies responsible for heritage protection. The review needs to provide a clear understanding of why the sector continues to be poorly funded, who should fund what and to set out and cost, impartially, the realistic requirements of the heritage management sector. It is vital that this review is conducted by someone who is truly independent, rooted neither in government nor the heritage sector.

To follow up the findings of the review, an independent ministerial task team should be appointed to act as a heritage champion and to oversee the implementation of the recommendations of the review. This task team should comprise members of ASAPA and the PSSA as well as senior civil servants from heritage agencies and the government departments responsible for archaeology and palaeontology. Practitioners in archaeology and palaeontology should comprise the core of the team as it will be their duty to raise a set of issues that need to be resolved by the civil servants. The function of the task team should be to resolve major problems as they arise in the heritage sector.

To attain international norms in state staffing in heritage management and to operate an effective national heritage management system requires the creation of at least two archaeological positions in each PHRA. In addition one palaeontologist needs to be employed in each PHRA to monitor palaeontological heritage assessments and to manage provincial palaeontological sites. There are insufficient numbers of archaeologists and palaeontologists at provincial level to allow for the constituting of impartial provincial permit committees. Therefore, permitting is better kept at national SAHRA level under a national permit committee made up of an appropriately diverse range of disciplinary specialisations. A total of at least nine new positions for archaeologists and palaeontologists should be established at national level within SAHRA.

All tiers of government need to make budgetary provision in order to fulfil their respective legislative obligations in sustaining this integrated national management system. An international funding partner should also be approached to support the development of this enhanced management framework. In order to retain staff, heritage agencies should benchmark their salaries at 75% of the equivalent commercial salary level so as to retain skilled staff.

SAHRA should develop partnerships with one or more universities to develop applied training programmes in heritage management and site conservation. Both SAHRA and the PHRAs should participate in an integrated national system of staff development fellowships and should offer internship positions for university graduates.

**5) *Build a critical mass of researchers to drive knowledge production, to conduct applied research and to inspire the world with their discoveries***

**Context:** the majority of research into South Africa's archaeological and palaeontological heritage takes place at the five universities that have archaeology and palaeontology departments, and the national and provincial museums that house the majority of important archaeological and palaeontological collections. There are presently less than 75 research active<sup>1</sup> palaeontologists and archaeologists employed in the state and private sectors in South Africa. This is a small fraction of the number employed per head of population in comparable nations such as Australia, Mexico and India and it is far below critical mass. And yet the palaeontological and archaeological resources of South Africa are of unparalleled universal value. There are too few researchers to constitute a critical mass of local researchers and there is insufficient multi-institutional planning and collaboration. This is the primary reason why South Africa is failing to attain its natural position as a world leader in research in these disciplines.

An effect of this is that there is often only one researcher in the country working in a particular specialist field. Institutions have successively failed to recognise the strategic national value of these specialist research skills and poor institutional level succession planning has meant that single retirements or emigrations have led to the collapse of an entire specialisation within South Africa. This fragility of specialised research skills needs to be addressed at a national level.

A significant proportion of research is also undertaken by foreign institutions, sometimes in collaboration with South African researchers. To an extent this is healthy as it ensures that research undertaken in South Africa gains outside funding, is closely linked to international

---

<sup>1</sup> Research active is defined here as someone producing the equivalent of one or more DoE accredited papers per year between 2008 and 2010.

research trends and follows international standards. It is, however, important to have South African scientists playing a leading role, rather than (as has often been the tendency) simply acting as local anchors for research initiated and driven by international scientists. We should not allow other nations to mine and derive the benefits of our heritage resources, but should rather focus on building mutually advantageous international research partnerships. The reason for the structural dominance of international researchers is that they have had access to far more long-term sustainable funding sources for research projects than South Africans. South African research funding has tended to be made available with little lead-up time, for a limited duration and in small amounts. This has created rushed applications for short-term opportunistic research projects. It has not allowed for the development of ambitious groundbreaking South African research projects. If we address these funding provision shortfalls, we can provide the conditions for South Africans to become the world research leader in these disciplines.

Areas of applied research have been seriously neglected within South Africa when compared with other comparable nations. Applied research includes fields such as heritage conservation, heritage management practices, heritage ethics, public engagement as well as archaeological and palaeontological collection management. One reason for the neglect of these fields of research is that an older generation of researchers has failed to acknowledge the value of applied research. However, our failure in these areas has had a direct impact on the quality of archaeological and palaeontological practice in South Africa. For example, as a direct result, we have no professionally trained and accredited archaeological or palaeontological conservators. We must address this failing. Other countries in Africa have stronger track-records in applied research and this is one area in which South Africa can usefully work more closely and develop partnerships with colleagues and projects in other parts of Africa.

Peculiar to South Africa, and of particular concern, has been the recent focus within museums on education to the detriment of the research responsibilities of museums. This has been disastrous, as it has led to the collapse or diminution of almost all museum departments of archaeology and palaeontology. Many collections of globally-significant research value are inadequately curated, are no longer readily accessible and are deteriorating. These collections should form the basis for future national research and their security and appropriate curation is fundamental to this.



The research capacity of museums must be restored and museum research productivity must be properly incentivised.

Palaeontological and archaeological research, whether at universities or museums, is dependent on technical assistance. At least one technician is needed per researcher to help to collect and then to prepare and process field materials so that they are ready for specialist analysis. The quality of research is very often dependent upon the quality of technical work. However, most institutions are unwilling or unable to invest in well-paid, full-time positions for technicians. No dedicated training programmes currently exist in South Africa either for technicians or for collection managers.

### **Recommendations**

The key issues needing to be addressed are:

- continued historical underfunding of research and technical positions;
- inadequate funding of research projects;
- inadequate remuneration;
- a lack of emphasis upon the need for applied research;
- poor collection management;
- a skills shortage in many specialised technical areas;
- insufficient succession planning and equity redress;
- limited infrastructural support for national laboratories in isotope analysis, dating, conservation and digital imaging/archiving.

To address present research capacity weaknesses we need to bring more researchers into these disciplines and to provide them with the conditions they need to increase the volume and quality of their research. The need to conduct ever developing and more complex scientific research requires the establishment of vibrant centres of excellence in diverse areas of archaeology and palaeontology and the funding of research chairs attached to these centres. These centres are best split between groups of universities where they can play a key role in training a new generation of scientists, but each should have direct links to researchers at museums.

Each research centre needs to be provided with sufficient salary funding to allow it to sustain positions in specific technical areas of specialisation that are key to South African research such as micro-palaeontology, invertebrate palaeontology, palaeoentomology, palaeobotany,

palynology, isotope analysis, digital imaging/archiving, archaeological dating, archaeological conservation, pollen analysis, charcoal analysis, residue analysis, bone analysis and microfauna analysis. Presently South Africa has either one or no specialist in each of these fields. These key specialist skills must be secured long-term and careful succession planning put in place for each position. Together with existing university and museum-funded positions, these new posts will create a critical mass of skills and researchers within South Africa.

In terms of research project funding: given the huge national research potential in archaeology and palaeontology, we cannot expect to cover all areas of research at one time. We should therefore first secure our existing research institutions and areas of research strength and secondly develop new skill sets in a strategic manner based on these existing areas of strength. In the past, there has been inadequate funding for archaeology and palaeontology in South Africa and many major research findings have therefore been made by international teams based outside of South Africa. To address this, the NRF should be provided with research funding in ten year cycles, ring-fenced specifically for archaeological and palaeontological research. This will allow for a carefully planned and executed allocation of resources.

Two thirds of this should be given per year to focus area funding and made available in five year funding cycles with the option to extend funding for up to ten years. This kind of dependable medium-term funding will allow the development of ambitious South African research projects. It is best to let researchers drive future research directions rather than to prescribe topics for research. This will generate the most dynamic research environment and create the maximum intellectual vibrancy. Focus area funding is the best means of boosting research within South African universities and museums and building a new generation of world-class researchers. The remaining one third should be dedicated to applied research in fields such as heritage conservation, heritage management practices, heritage ethics, public engagement as well as archaeological and palaeontological collections' management. All research funding should have training and outreach components.

In addition, there are several areas in which centralised infrastructural support is necessary in order to facilitate research:

- dating and isotope analysis;

- technical and preventative conservation;
- digital technology, digital imaging and digital archives.

Centralised scientific laboratories specialising in each of these technical services need to be established and supported. Each is fundamental to a broad range of research interests in both archaeology and palaeontology. These laboratories should be attached to research centres wherever possible. A number of existing laboratories such as the Isotope Laboratory at the University of Cape Town, the Accelerator at iThemba labs in Johannesburg and the SARADA Digital Laboratory at Wits University should be utilised. A new facility specialising in the technical conservation of archaeological and palaeontological sites and collections needs to be established.

**6) *Reap the benefits of local and international interest in archaeology and palaeontology by building a network of site displays and interpretative centres which are managed in a socially responsible and sustainable manner so as to **make South Africa the destination of choice for archaeo- and palaeo-tourism*****

**Context:** until now, South African tourism has been dominated by an emphasis upon natural heritage but the international importance and interest in South African cultural heritage makes its potential as important as natural heritage tourism. Heritage tourism is well-positioned to be a significant national revenue generator, a source of rural employment and a driver of job creation and poverty alleviation. Heritage tourism is still in its infancy in South Africa and it requires major infrastructural and human capacity development if it is to fulfil its true potential. There has been a tendency to use the concepts of heritage tourism and public engagement interchangeably. Whilst they overlap, their objectives are very different. Heritage tourism is broadly seen as a commercial enterprise whilst public engagement involves planned intervention, mostly subsidised, to engage as wide a public as possible with archaeology and palaeontology.

The commercial expectations of heritage tourism are problematic. Whilst archaeological and palaeontological sites can contribute enormously to rural tourism and rural poverty alleviation, helping to sustain jobs in hotels, restaurants, shops and many other services, the sites themselves are seldom profitable. In most countries, high quality archaeological and

palaeontological site presentations are therefore subsidised by governments who recognise the broader benefits to society. This has the advantage that governments can then use these subsidies to leverage free access for education groups, researchers and so on.

The model upon which a network of heritage tourist sites should be developed in South Africa therefore needs to be a sophisticated one; it cannot be left entirely in the hands of the private sector and cannot be based solely on once-off development grants. Central planning will be necessary to ensure the creation of integrated tourist routes. Some provinces and municipalities have attempted piecemeal interventions, but this kind of localised development is not proving to be successful. Many sites are closing after a year or two, because they were not linked to other attractions and were not marketed properly. Long-term sustainability planning for each site and careful consideration of public-private partnerships will be needed. Minimum standards of management, presentation and conservation must be enforced at every site to ensure that the values of the site are sustained for future generations. The safety and integrity of sites must be achieved as far as possible without compromising the visitor experience. Provision must also be made for the training of archaeological and palaeontological heritage tourism managers and guides.

### **Recommendations**

The key issues needing to be addressed are:

- few sites open to the public;
- poor quality of site displays and site interpretation;
- poor marketing;
- lack of site conservation and management plans;
- poor integration of cultural heritage into nature tourism;
- lack of coordination of development work;
- vandalism and damage to sites;
- lack of availability of expertise and professional support;
- lack of trained guides in the heritage field.

It is therefore suggested that a centralised Heritage Business Development Agency be created. Having a centralised agency will make it easier to develop and manage heritage tourism. If correctly instituted, many of the practical problems will be minimised. This agency should

not be a 'stand alone' institution, but should work closely with SAHRA, other institutions and government departments. The agency should:

- raise and manage financial resources for heritage tourism and site development;
- build up a register of heritage sites open for tourism that comply with SAHRA standards and guidelines and advise on improving these standards and guidelines;
- build up a register of sites not open for tourism, but with tourism potential;
- allocate and manage monies for site development once management-conservation planning, custodian training and full site recording has been completed;
- assist third tier institutions, local authorities and private individuals with the provision of expertise for the development of heritage sites;
- help to develop new, holistic tourism routes;
- act as a monitoring agency to ensure that site management plans are implemented;
- assist with the training of staff;
- assist, in conjunction with the relevant higher education institutions and training authorities, in the setting up of heritage tourism training programmes;
- assist with the process of marketing and publicising sites;
- assist with the development of school curricula regarding heritage;
- use public sites to help to make knowledge about archaeology and palaeontology accessible to all South Africans;
- ensure that coordination between different institutions, departments, communities and other bodies takes place in all heritage tourism developments.

To be able to market heritage tourism we must acknowledge that, in most cases, it will not be one site alone that will attract visitors. Chains of sites must therefore be developed along existing tourism routes or as new routes. Attention must be given to creating 'holistic' routes covering a range of different aspects of cultural and natural heritage. Heritage tourism has the potential to take people away from the overcrowded 'honey-pot' tourist destinations of Cape Town, Kruger National Park and Durban and into rural South Africa where development and job opportunities are most needed. The aim should be to use heritage tourism to hold visitors in these areas for several nights. The larger the percentage of tourist time that we can seize for cultural heritage tourism, the greater the positive impact will be in spreading the benefits of South African tourism to marginalised rural economies and to underprivileged communities.

## *Funding Principles*

All tiers of government should play their legislated roles in providing the financial investment needed to implement this policy. Government funding should be used as the driver and instigator of human capital and infrastructural development, but intensive efforts should be made to attract matching funds from other sources. Organisations coordinating private sector support, such as PAST, should therefore become key partners in the execution of this policy.

Institutions engaged in attracting international support for developments in South Africa, such as the NRF and the Department of Foreign Affairs, should be asked to help in sourcing potential overseas governmental and non-governmental support for the implementation of different sections of this policy. Partnerships should be sought with international donor agencies, particularly for infrastructural development.

Universities, museum and heritage agencies, as the major beneficiaries of investment in archaeology and palaeontology, should be asked to demonstrate their own commitment by shifting internal funding priorities and by giving archaeology and palaeontology preference in institutional applications for funding from agencies such as the National Lottery.

Private donors and local corporations should be enticed to make major contributions to the realisation of the vision set out in this policy. Government tax incentives for supporting research and development should be used as a financial incentive for them to do this.

## *Conclusions*

In implementing this policy a national vision will be realised for the future of archaeology and palaeontology in South Africa. The nation will activate its geographic advantage. A series of strategic interventions by all tiers of government in partnership with local corporate and international sponsors will place South Africa at the forefront of these internationally significant disciplines. South Africa will become a driver of sustainable global futures. South Africans will find a unity in their common origins and a shared national pride in the global importance of African archaeological and palaeontological heritage.