

## **Curriculum Vitae**

<b>Position:</b>	Director / Heritage Consultant
<b>Name of Firm:</b>	eThembeni Cultural Heritage Management
<b>Name:</b>	Leonard Outram van Schalkwyk
<b>Profession:</b>	Archaeologist; Heritage Practitioner
<b>Date of birth:</b>	7 July 1959
<b>Position in firm:</b>	Director
<b>Years with Firm:</b>	19
<b>Professional Membership and Association:</b>	Association of Professional Heritage Practitioners – Accredited Member since 2016 South African Association of Archaeologists: 1984 – 1998. Association of Southern African Professional Archaeologists (ASAPA): 1998 – present. ASAPA Council Member - Cultural Resources Management Portfolio (CRM): 2011 – 2019. ASAPA CRM Section - listed as Principal Investigator since 1998. Amafa aKwaZulu-Natali accredited heritage practitioner since 2001. SAHRA Archaeological Permit Advisory Committee (2004/5). South African member of International Scientific Committee for Archaeological Management, elected by ICOMOS-SA Executive (1999 - 2000). Provincial Representative: South African World Heritage Convention Committee (1998 - 2000). Southern African Museums Association (1984 -1999).
<b>Specialisation :</b>	CRM Accreditation: Principal Investigator: Later Stone Age and Iron Age archaeology; Ancestral Graves Management.
<b>Academic qualifications :</b>	BA Hons. Archaeology(Stell) 1982; MA Archaeology (UCT) 1992
<b>Specified Skills:</b>	<b>Cultural Heritage Impact Assessment. *</b>

\* [as required by the National Environmental Management Act 107 of 1998 as amended (NEMA), in compliance with Section 38 of the National Heritage Resources Act 25 of 1999 as amended (NHRA), other relevant SADEC national heritage legislations and UNESCO/ICOMOS and IMF/WB/IFC standards and guidelines for international best practice.]

### **Key Qualifications and Relevant Experience**

I have 36 years of professional experience as a practising archaeologist and heritage resource practitioner in South Africa, Lesotho, Namibia, Botswana and Mozambique. My research interests have focussed on the Iron Age of southern Africa, while my management specialisations are heritage impact assessments, community liaison and ancestral grave management. I have successfully run a heritage management consultancy as a going business concern for the past 19 years. My key heritage management, tourist guide training and research initiatives include:

- Principal Investigator - survey and excavation of heritage resources in Richards Bay Minerals' concession areas, KwaZulu-Natal, including oral history recording programme with traditional wisdom keepers to ensure appropriate mitigation. Procedures regarding discovery, retrieval and re-interment of human remains were satisfactorily negotiated.
- Member of the Ministerial Monuments Task Group committee to formulate the KwaZulu-Natal Heritage Act No 10 of 1997.
- Implementation of the cultural resources management plan for the uKhahlamba Drakensberg Park (CURE), focussing on rock art management.
- ICOMOS (SA) observer for uKhahlamba Drakensberg Park World Heritage Site assessment.
- Maloti / Drakensberg Transfrontier Conservation and Development Area project feasibility assessment for the Global Environment Facility of the World Bank (GEF). Worked both in Lesotho and South Africa.
- Mnweni Valley cultural landscape management, northern uKhahlamba / Drakensberg - cultural tourist guide training, development of integrated land use and cultural heritage management plan, co-ordination of displays for interpretive centre.
- Reichenau Mission, southern uKhahlamba/Drakensberg - cultural tourist guide training; permaculture design workshop, compilation of infrastructural development plan with local community, including establishment of a community Trust, upgrade of access roads, building restoration, skills training and empowerment. SA Catholic Bishops Conference.

- Specialist report on coastal zone management of KwaZulu-Natal for Environmental Evaluation Unit of the University of Cape Town.
- Lead consultant - cultural resources assessment of uThukela Water Scheme for Department of Water Affairs and Forestry and Institute of Natural Resources.
- Fencing and stabilisation of excavated deposits at Border Cave, Ingwavuma district, KZN.
- Excavation of middens at King Shaka's KwaBulawayo iKhanda in collaboration with Gavin Whitelaw (Natal Museum).
- Co-Director, Isandlwana Archaeological Project, with Glasgow University Archaeology Research Division
- Cultural heritage management of greater Chobe Conservation area in Botswana – Department of Parks and Wildlife. Production of policy document for submission to World Wildlife Fund.
- Archaeological Impact Assessment Riversdale Coal, Tete, Mozambique for Golder and Associates.
  - Heritage Practitioner – DAC Legacy Project - Oliver Tambo Homestead and Memorial Site development at Inkantolo, and Khananda Hill Memorial Site, Bizana, Eastern Cape – for the Independent Development Trust and National Department of Arts and Culture.
  - DAC Legacy Project – JL Dube Homestead and Ohlange Institute Heritage Site development - for the Independent Development Trust and National Department of Arts and Culture.

I have completed more than 1500 heritage impact assessments and specialist studies throughout southern Africa including the Republic, Lesotho, Namibia, Botswana and Mozambique. My most current heritage management projects are all listed on SAHRIS (<http://www.sahra.org.za>).

### **Dams, Water and Sewerage Supply Projects**

Kingsburgh sewer	Environmental Planning and Design
Veary/Jacaranda Road sewer	WSP Environment & Planning
Ozwathini bulk water supply	Ibhongo Consulting cc
Richmond Water Pipeline, Pure Water Rising Main from Mtubatuba Water Treatment Works to Mtubatuba Heights Reservoir.	
Construction of New Water Mains on the Western Shores and a Water Reservoir near St Lucia, Eastern Shores, Isimangaliso Wetland Park, KZN	ACER (Africa)
Pholela Dam, Himeville, KZN	Pholela Irrigation Board
Sikoto Dam, Appelsbosch / Noodsberg, KZN	Alletson Ecologicals
King Williamstown Bulk Regional Sewage Scheme: Phases 2 - 7, and Ugie dam sites, Eastern Cape	Terreco (Pty) Ltd
Assagay Trunk Water Pipeline and Umdloti Waste Water Pipeline, La Mercy, KZN and Mount Ayliff - Ntsizwa Weirs Water Supply Scheme, Eastern Cape	Arcus GIBB
Eshowe Bulk Water Supply Project, KZN	WSP Environment & Energy
Mvutshane Dam, Mapumulo, KZN.	
Exhumation and reinterment of 54 graves within FSL. 2013-2014. Amafa approved.	Umgeni Water
River sand mining on a Portion 10 of the Farm Rensburg No 797, Estcourt; Street Spirit Trading 54 (Pty) Ltd Colliery, Glencoe, KZN and DR08473, DR08111 and Ntinga borrow pit upgrades, Mbizana, Eastern Cape	Terratest (Pty) Ltd
River sand mining, Portion of Inanda Location No 4675, Pinetown Magisterial District, KZN	Inhlabathi Quarrying and Trading cc
Ludeke Dam, Bizana, Eastern Cape.	
Exhumation and reinterment of 24 graves within FSL. 2012–2014. SAHRA approved.	Umgeni Water.
Transnet pipeline river crossing, uMvoti River, KZN	BKS (Pty) Ltd
Thukela Hydro Electric Power Scheme, KZN	ACER (Africa)
Ludeke Dam borrow pit and ancestral graves exhumation (n=24), Bizana, Eastern Cape	MBB Consulting Engineers for Umgeni Water
Mvutshane Dam – HIA and ancestral graves management	Umgeni Water
Mzimvubu Water Project EIA: Proposed dams on the Tsintsa River, Eastern Cape	Iliso Consulting (Pty) Ltd for DWAF
Communities affected by Paris Dam: negotiation of appropriate mitigation for exhumation and reinterment of 48 ancestral graves.	DWAF/Polela Water Board

### **Residential, commercial and mixed-use projects**

Expansion of Alumicor Facility, Pietermaritzburg  
Amber Lakes housing development  
Felixton petrol filling station  
Umgeni Business Park

WSP Environment & Energy  
Terratest (Pty) Ltd  
SiVEST Environmental Division

Guy Nicolson Consulting cc

Gates residential development, Hilton Estate, KZN  
Umlazi Uganda housing development, KZN  
Tulele housing development, Shakaskraal, KZN  
Glenwood North-East Sector Phase 2 housing development,  
Pietermaritzburg, KZN

Environmental Planning and Design  
EThekweni Metropolitan Municipality  
Indiflora cc

JEC Environmental Services

Hull Valley housing development, Craigieburn; Ekwandeni  
housing development, Hammarsdale; Emapheleni housing  
development, Clermont, KZN

NDG-Africa

Msunduzi Waterfront Development, Pietermaritzburg, KZN  
Izinga Phase 3 residential development and Lungisisa Indlela  
Village, Umhlanga; and Zimbali Lakes residential development,  
Ballito, KZN

Ocean Spray Investments (Pty) Ltd

SiVEST Environmental Division

Mpola Phase 3 housing development, Pinetown, KZN  
Driefontein Gardens Estate development, Shakas Rock, KZN  
Groutville Priority 1 Phase 2 and Chris Hani residential  
developments, Darnall, KZN

SRK Consulting

Dewanig Investments cc

Bhanoyi Country Estate, Rietvlei, KZN

KwaDukuza Municipality

Amaotana housing development, Verulam, KZN

Bhanoyi Property Holdings (Pty) Ltd

Housing, commercial and industrial development, Ixopo, KZN

2G Environmental Management

Ashburton housing development, Pietermaritzburg, KZN

The Craigie Burn Land Trust

Oro Management cc

Compensation Flats Industrial and Business Park Development,  
Compensation; Inyaninga Mixed Use Development, Tongaat; and  
uShukela Highway Business and Office Park Development.

Tongaat Hulett Developments

### **Roads and bridges**

Mkhambathi road upgrade, Eastern Cape

Arcus GIBB

N3TC Route Location Initiative: Warden to Keeversfontein – De  
Beers Pass Section, Free State Province

Cave Klapwijk and Associates for SANRAL

N2 Pondoland Toll Route

CCA Environmental Consultants for  
SANRAL

Proposed N2–Mvezo Village link road and bridge, Eastern Cape  
National Road 2 Section 26 from Mt Edgecombe Interchange to  
Tongaat Toll Plaza; Improvements to Umgeni Road  
Interchange on National Route 2, Section 25, KZN

SSI for Chris Hani DM

Road Upgrade and Borrow Pits, Rehabilitation of N2 between  
Ngcweleni River and Brookes Nek, Umzimvubu Local  
Municipality, Eastern Cape

Terratest (Pty) Ltd for SANRAL

Construction and Upgrading of Ingquza Hill to Mangwanini;

Terreco (Pty) Ltd for SANRAL

Mpophomeni; and Matheko River to Msikaba AA Access

WSP Environment & Energy for Alfred Nzo  
DM

Roads; Vialiti road upgrades, Mthatha, Eastern Cape

Afzelia Environmental Consultants

Mnini (Bonnyrigg) Interchange on National Route 2 Section 24  
(Km 1.8), Ethekewini Metropolitan Municipality, KZN

Arcus GIBB for eThekweni Municipality

Trade Zone Watson Highway Link Road, La Mercy, KZN

### **Power lines and substations**

Patensie-Kareedouw, Idutywa-Gatyana, Mafini-Tombo,

Arcus GIBB for Eskom Transmission E/C

Melkspruit-Riebeeck, Ruigtevallei-Dreunberg 132kV transmission  
infrastructure, Eastern Cape

Rosedale-Libode 132kV infrastructure

Indwe Environmental Consulting

Grassridge(Coega)-Victoria West 765kV Transmission Line

ACER (Africa) for Eskom

Majuba-Nhlazatshe-Richards Bay 400kV Transmission Line

Iliso Consulting (Pty) Ltd for Eskom

Majuba-Nhlazatshe-Richards Bay 400kV Transmission Line

Stemele Bosch Africa (Pty) Ltd for Eskom

Majuba-Ingula-Venus 400kV Transmission Line

Cave Klapwijk and Associates for Eskom

Msinga Pomeroy 132kV Power line and Substation, KZN

Stemele Bosch Africa (Pty) Ltd for Eskom

Venus-Sigma-Hector-(Ariadne) 765kV Transmission Isundu S/S

ACER (Africa) for Eskom

Kareedouw – Patensie 400kV Transmission Line

GIBB Science and Technology for Eskom

Thyspunt /Oyster Bay – Humansdorp and Tsitsikama S/S +

GIBB Science and Technology for Eskom

132/400kV Transmission lines

### **Mining and Borrow Pits**

Aggregate mining on unregistered state land, AA 17 (Goso), Ngcobo Local Municipality, Eastern Cape

River sand mining on a Portion 10 of the Farm Rensburg No 797, Estcourt; Street Spirit Trading 54 (Pty) Ltd Colliery, Glencoe, KZN and DR08473, DR08111 and Ntinga borrow pit upgrades, Mbizana, Eastern Cape

River sand mining, Portion of Inanda Location No 4675, Pinetown Magisterial District, KZN

Two borrow pits, Ugie, Eastern Cape

Zonderwater Coal Mine – heritage baseline studies

Ludeke Dam borrow pit and ancestral graves exhumation (n=24), Bizana, Eastern Cape

### **Residential, commercial and mixed-use projects**

Expansion of Alumicor Facility, Pietermaritzburg

Amber Lakes housing development

Felixton petrol filling station

mgeni Business Park

Gates residential development, Hilton Estate, KZN

Umlazi Uganda housing development, KZN

Tulele housing development, Shakaskraal, KZN

Glenwood North-East Sector Phase 2 housing development, Pietermaritzburg, KZN

Hull Valley housing development, Craigieburn; Ekwandeni housing development, Hammarsdale; Emapheleni housing development, Clermont, KZN

Msunduzi Waterfront Development, Pietermaritzburg, KZN

Izinga Phase 3 residential development and Lungisisa Indlela Village, Umhlanga; and Zimbali Lakes residential development, Ballito, KZN

Mpola Phase 3 housing development, Pinetown, KZN

Driefontein Gardens Estate development, Shakas Rock, KZN

Groutville Priority 1 Phase 2 and Chris Hani residential developments, Darnall, KZN

Bhanoyi Country Estate, Rietvlei, KZN

Amaotana housing development, Verulam, KZN

Housing, commercial and industrial development, Ixopo, KZN

Ashburton housing development, Pietermaritzburg, KZN

Compensation Flats Industrial and Business Park Development,

Compensation; Inyaninga Mixed Use Development, Tongaat;

uShukela Highway Business and Office Park Development;

Tinley Manor and Westbrook Residential Developments

### **Other**

Heritage resource monitoring, Zulti South Mineral Lease Area

Richmond Cemetery Site

Edendale Private Hospital, Pietermaritzburg, KZN

Estcourt and Nkandla Correctional Facilities, KZN

Rocky Brae broiler farm, Baynesfield, KZN

SAPS shooting range, Ulundi, KZN

1000 ha Makhathini Sugar Cane Project, KZN

Long-Haul Fibre Infrastructure Network, Gauteng, Mpumalanga, Free State and KZN

Forensic science laboratory, Pinetown, KZN

Raymond's Airfield, Darnall, KZN

Amajuba District Municipality cemetery sites; and Public cemetery, Newcastle, KZN

Maphumulo Prison, KZN

### **Strategic Environmental Assessments (SEA's) and Local Development Plans (LDP's)**

Newcastle LM SEA

Ilembe DM EMF

Ugu DM EMF

Mdumbe DM EMF

Regional Cultural Tourism Route Identification R66/R68, KZN

JP Mbete and Sons Trading and Projects cc

Terratest (Pty) Ltd

Inhlabathi Quarrying and Trading cc

Terreco (Pty) Ltd

EcolInfo for Exxaro Mining

MBB Consulting Engineers for Umgeni Water

WSP Environment & Energy

Terratest (Pty) Ltd

SiVEST Environmental Division

Guy Nicolson Consulting cc

Environmental Planning and Design

EThekweni Metropolitan Municipality

Indiflora cc

JEC Environmental Services

NDG-Africa

Ocean Spray Investments (Pty) Ltd

SiVEST Environmental Division

SRK Consulting

Dewanig Investments cc

KwaDukuza Municipality

Bhanoyi Property Holdings (Pty) Ltd

2G Environmental Management

The Craigie Burn Land Trust

Oro Management cc

Tongaat Hulett Developments

Richards Bay Mining

Arcus GIBB

Edenvision Medical Holdings (Pty) Ltd

Vuka Planning Africa Inc

Ludloko Developments cc

NDG-Africa

Phatisa Equity (Pty) Ltd

Netronix

SiVEST Environmental Division

Robanting Services cc

Udidi Project Development Company

Department of Public Works Pretoria

Izibuko se Afrika

SSI

Mott MacDonald International

Institute of Natural Resources

COGTA, KZN

Transfrontier SEA Thermal Coal Mines – Botswana/RSA  
Mkhambati Nature Reserve and local communities LDP  
Sodwana Bay Tourism Node and Beach Rehabilitation LDP  
St Lucia town precinct, boardwalks and beach access LDP

Mott MacDonald International  
Eastern Cape Parks  
Acer(Africa) and Isimangaliso Wetland Park Authority  
Acer(Africa) and Isimangaliso Wetland Park Authority

### **Ancestral graves management**

- Communities affected by Paris Dam – DWAF/Polela Water Board: negotiation of appropriate mitigation for exhumation and reinterment of 48 ancestral graves. 1996-7.
- Inyaninga Hindu Cemetery. Dube Trade Port. Institute of Natural Resources (UKZN) for ACCSA. 2010.
- Graves and Burial Grounds Policy for Tongaat Hulett Developments, KZN. 2012.
- Embo Community Trust - Cotswold Downs Grave Mediation for Keith Wakefield / Luke Bales Developments. 2010-2017. LRDA.
- Grave Mediation Process: Eagles Eyre Estate, Camperdown, KZN for Intense Heat Investments (Pty) Ltd. 2011-2012. Amafa approved.
- Kwandengezi residential and infrastructure development. Graves mediation. Aurecon for eThekweni Municipality. 2012–2015.
- Mbonambi family graves - negotiation of appropriate mitigation for exhumation and reinterment of two ancestral graves at Dlambula School, Umgababa/Mnini. Department of Public Works and Ithala Bank. 2014.
- Identification of 550 graves in Zulti South Mineral Lease Area and community negotiations for graves management. Richards Bay Mining (Rio Tinto). 2011-2016. Amafa approved. Ongoing.
- Ludeke Dam, Bizana, Eastern Cape for Umgeni Water. Exhumation and reinterment of 24 graves within FSL. 2012–2014. SAHRA approved.
- Mvutshane Dam, Mapumulo, KZN for Umgeni Water. Exhumation and reinterment of 54 graves within FSL. 2013-2014. Amafa approved. Completed. December 2014.
- Proposed Fuleni Coal Mine for Jacana Environmental / Ibutho Coal. Terminated due to community resistance. 2014.
- Grave mediation. Mlaba Traditional Authority. Ukhuko Mine. For Zululand Anthracite Collieries. 2015.
- Ariadne-St Faiths-Eros Powerlines. Grave mediations (n=125). Mokgope Consulting / Eskom. 2016 – 2018.
- Ozwathini Reservoir. Negotiation of appropriate mitigation for exhumation and reinterment of four ancestral graves. Umgeni Water. 2017.

### **Community liaison**

- Nxamalala and Bhengu Traditional Authorities - investigated declaration of archaeological conservancy in lower uThukela River Basin.
- Mpungose Traditional Authority - negotiated extended boundaries of Ondini Historical Reserve.
- Mngomezulu Traditional Authority - negotiated management of Border Cave archaeological site.
- Bhekeshowe Traditional Authority - investigated feasibility of developing King Shaka's KwaBulawayo site as a tourist destination.
- Mangwebuthanani Traditional Authority - negotiated establishment of Isandlwana Historical Reserve.
- Mbonambi and Sokhulu communities - negotiated mitigation and future practice regarding exposure of human remains by Richards Bay Minerals' mining activities on ancestral lands.
- Khovokeni and Mvutshane communities at Kosi Bay - investigated feasibility of declaring Tsonga fish traps as significant cultural landscape;
- Amangwane and Amazizi Traditional Authorities - Mweni Valley cultural landscape management plan for inclusion into the uKhahlamba / Drakensberg World Heritage Site.
- Amangwane and AmaZizi Traditional Authorities – establishment of Cultural Centres and Cultural Guide training / Rock Art Custodians in the Mweni Area of the Okhahlamba/Drakensberg World Heritage Site.
- KwaNdengezi *in situ* housing and infrastructure upgrade - negotiation of appropriate mitigation for exhumation and reinterment of 30 ancestral graves. eThekweni Metropolitan Municipality.
- Dube and Mkhwanazi communities – management of 550 graves in Zulti South Mineral Lease Area for Richards Bay Mining.
- Dodoma Avenue/Kennedy Road Hindu Burial Site. Clare Estate Development Forum and eThekweni Metro (2013 - present).
- Consultation and liaison with the Gamnkwa Khoisan Council regarding HIA's and archaeological research conducted within in their perceived ancestral territories between the van Staadens River and the Bloukranz River. (2010 – to present).

## **Collaborative Research and Archaeological Site Management**

- University of Manitoba, Canada – Ndongondwane Early Iron Age research Project 1994 – 2004 with Professor Haskel Greenfield.
- University of Calgary, Canada – Cattle Transhumance and Isotope Study 2005 -2008 with Dr Elizabeth Arnold.
- University of Witwatersrand – Acacia Project – Site Management and Stabilisation of Sibudu Cave, Tongaat. 2007 – 2013 with Professor Lyn Wadley.
- University of Toronto, Canada – Grassridge MSA Site reconnaissance 2014. with Dr. Ben Collins.
- University of Manitoba, Canada – Zulu Ethnographic and Ethnoarchaeology Ceramic Project. 2009 – 2013 with Professor Kent Fowler.
- University of Manitoba, Canada – Ceramics and Geochemistry Study of the eMakhosini Basin 2014 – 2015 with Professor Kent Fowler (ongoing).
- University of Manitoba, Canada – Cattle Transhumance and Isotope Study of the eMakhosini Basin and Sphere of Influence. 2015 – 2017 with Professor Kent Fowler (ongoing).
- University of Cape Town – Indigenous Small Livestock Project 2013 – 2015 with Professor Judy Sealey and Louisa Hutton.
- University of Witwatersrand – Border Cave in the 21<sup>st</sup> C - Site Management and Stabilisation of Border Cave MSA Project Excavations with Dr. Lucinda Backwell and Professor Lyn Wadley 20014 – 2017 (ongoing).
- Evolutionary Studies Institute, University of the Witwatersrand - MSA Site Reconnaissance, lower Mtamvuna, Izotsha and Umzimkulu Valleys, 2016 with Drs. Paloma de la Peña and Aurore Val.
- University of Witwatersrand - Klasies River Mouth Cave MSA Excavations. 2016. Cave lighting and logistics for Prof. Sarah Wurz.
- University of Cape Town – 500 Year Project – Dingane’s Capital, Mgungungdlovu with Professor Carolyn Hamilton. 2014 – 2017.
- Isimangaliso Wetland Park Authority - Cultural Heritage Resources Management Plan for the Isimangaliso Wetland Park. Current.
- Cultural Heritage Management Plan – Babanango Game Reserve for Emacakwini Community Trust and Zulu Rock Conservation Management Team. Current.
- Polihali Dam CRM Project. Cultural Team Leader. Mokhotlong, Lesotho for PGS Heritage and LHDA. Current.

## **Employment Record**

### **December 2000 to present**

Director at eThembeni Cultural Heritage, an independent consultancy specialising in heritage impact assessments, ancestral grave management, cultural resource management plans and integrated environmental management.

### **November 1996 to December 2000**

Assistant Director (Research, Professional Services and Compliance) of Amafa aKwaZulu-Natali, in charge of ten professional and administrative staff, including archaeologists, anthropologists, architects, compliance and database managers.

### **November 1992 to October 1996**

Archaeologist with the KwaZulu Monuments Council; Principal Professional Officer-(Research Division), in charge of six professional and administrative staff. Responsible for Museum and Interpretive Centre Coordination in the previous KwaZulu Homeland.

### **February 1986 to October 1992**

Professional Officer and O.i.C at Ondini Museum in Ulundi with KwaZulu Monuments Council. Responsible for supervising archaeological excavations and reconstruction of King Cetshwayo's Ondini Royal Residence; management of the Historical Reserve and Nguni cattle herd; development of the Ondini Museum and its tourist facility, and regional site interpretation. Responsible for 30 General-Assistant and administrative staff members.

### **July 1983 to January 1986**

Field Director of an Early Iron Age archaeological research project in the lower uThukela Valley under the aegis of the KwaZulu Bureau of Natural Resources. Solely responsible for 15 General-Assistants, all excavations and curation/reporting; procurement, logistics, wage payments and balance sheets/stock returns.

### December 1978 to June 1983

Deployed as a Ranger/Naturalist in the Kruger National Park under Messrs. Piet van Wyk, Johan Vehoef, Irene Grobelaar, and Richard Garstang..

### December 1977 to February 1978

Field Research Assistant in Hluhluwe/iMfolozi Game Reserve under Regional Ecologist, Roger Porter.

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LANGUAGES	Speaking	Reading	Writing
English	Excellent	Excellent	Excellent
Afrikaans	Good	Excellent	Good
Zulu	Good	Basic	Poor

### Conference papers

- 2015 'Grief, at what cost? Ancestral land displacement and alienation – What about our graves?'  
(African Heritage Challenges Conference. University of Cambridge, United Kingdom).
- 2014 'Graves and Ancestors – Managing for the Intangibles of Tangible Cultural Heritage'.  
(Society of Petroleum Engineers International – HSE Conference, Maputo, Mozambique).
- \*2004 'Rescue excavation of an Iron Age Shell midden, Shrimp Lane, Salt Rock, KwaZulu-Natal'.  
(Southern African Association of Archaeologists biennial conference, Kimberley).
- 1996' The Early Iron Age site of Ndongondwane, KwaZulu-Natal, South Africa. Preliminary report on the 1995 excavations'.  
(Southern African Association of Archaeologists biennial conference, Bloemfontein).
- \*1995 'Archaeology, *amasiko*, and cultural resource management: a dialogical approach. A case-study from Richards Bay Minerals' mining concession areas in northern KwaZulu-Natal'.  
(South African Museums Association regional conference, Hermannsburg).
- 1994 Settlement shifts and socio-economic transformations in early farming communities in the lower Thukela Basin, Zululand. A Revisionist Model.  
(Conference on the growth of farming-communities from the Equator southwards, Newnham College, University of Cambridge, United Kingdom).
- 1994 'Border Cave: who really cares? The site management of a priceless cultural resource' and 'People, pots and pits: women's space in the Early Iron Age'.  
(Southern African Association of Archaeologists biennial conference, Pietermaritzburg).

### Publications

- 2008 co-author with Haskel J. Greenfield Early Iron Age Regional Settlement and Demographic Patterns along the Eastern seaboard of South Africa: a view from the lower Thukela Valley. In. *Animals and People: Archaeozoological Papers in Honour of Ina Plug. BAR International Series* 1849: 131-151. Oxford.
2005. Greenfield, H. J., Fowler, K. D. & van Schalkwyk, L. O. Where are the gardens? Early Iron Age horticulture in the Thukela River Basin of South Africa. *World Archaeology* 37, 307-328.
- 2004 co-author with Kent D. Fowler and Haskel J. Greenfield. The effects of burrowing activity on archaeological sites: Ndongondwane, South Africa. *Geoarchaeology* 19(5): 441-470.
- \*2003 co-author with Haskel J. Greenfield. Intra-settlement social and economic organisation of Early Iron Age farming communities in southern Africa: a view from Ndongondwane. *Azania* 38: 121-137.
- \*2000 co-author with Haskel J. Greenfield & Tina L. Jongsma. Surface and subsurface reconnaissance at Ndongondwane: preliminary results of the 1995-97 field seasons. *Southern African Field Archaeology* 9: 5-16.
- 2000 co-author with Kent D. Fowler & Haskel J. Greenfield. The identification and significance of ceramic ecofacts from Early Iron Age Ndongondwane, South Africa. *Southern African Field Archaeology* 9: 32-42.
- 1999 The archaeological excavations of Ondini, the Royal Capital of King Cetshwayo ka Mpande: 1873-1879. *One World Archaeology Series*. The Constructed Past: Experimental Archaeology, Education and the Public (15). UNESCO.
- \*1997 Mining Yields up Ancient Past. *Titania*. Richards Bay Minerals.

- co-author with Haskel J. Greenfield and Tina L. Jongsma. Preliminary results of the 1995 research at the Early Iron Age site of Ndongondwane, KwaZulu-Natal, South Africa. **Nyame Akuma** 47: 42-52.
- \*1997 co-author with Haskel J. Greenfield and Tina L. Jongsma. The Early Iron Age site of Ndongondwane, KwaZulu-Natal Province, South Africa. **Southern African Field Archaeology** (6)2.
- \*1996 Settlement Shifts and Socio-Economic Transformations in Early Farming Communities in the lower Thukela Basin, Zululand. A Revisionist Model. Proceedings of the conference on the growth of farming communities from the Equator southwards. **Azania** (XXVIII).
- 1996 A new relevance for old monuments: the Isandlwana model. **Southern African Museums Association Bulletin** (21).
- 1996 co-author with Jo Walker. Monuments and cultural heritage conservation in KwaZulu-Natal. **Restorica** (29).
- \*1994 Rediscovering the Iron Age. **Titania**. Richards Bay Minerals.
- \*1994 Wosi - an Early Iron Age village in the lower Thukela Basin, Zululand. **Natal Museum Journal of Humanities** (6): 65-117.
- 1994 Mamba Confluence - a preliminary report on an Early Iron Age industrial centre in the lower Thukela Basin, Zululand. **Natal Museum Journal of Humanities** (6): 119-152.
- \*1994 Tracking-down old miners and beachcombers - Brown mussels and iron working long, long ago. **Titania**. Richards Bay Minerals.
- 1993 Fort Ivuna and the Battle of Ndunu Hill. **Journal of the Natal Institute of Architects** (18): 8-9.
- \*1989 Exploding a Myth - Natal's First Farmers. **Condenser**. Hulett-Tonga Corporation, Durban.
- \* indicate archaeological retrieval and curation of human remains

#### The Following Persons May Be Contacted To Attest To My Professional Standing:

Prof. John Parkington (retd). University of Cape Town	<a href="mailto:john.parkington@uct.ac.za">john.parkington@uct.ac.za</a>
Prof. Lyn Wadley (retd). University of the Witwatersrand	<a href="mailto:lyn.wadley@wits.ac.za">lyn.wadley@wits.ac.za</a>
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#### Certification

I, the undersigned, certify that to the best of my knowledge and belief, these data correctly describe me, my qualifications, and my experience.



Leonard Outram van Schalkwyk.

May 2019.

May, 2019