

## CURRICULUM VITAE

### KAREN JODAS

*Director: Savannah Environmental (Pty) Ltd*

*Environmental Scientist (MSc, Pr.Sci.Nat)*

#### SKILLS BASE AND CORE COMPETENCIES

- Eleven (11) years experience in the environmental management and assessment field
- Nine (9) years experience in Project Management
- Project management of large environmental assessment & environmental management projects
- Experienced in the identification & assessment of potential environmental impacts & benefits
- Experienced in the development of practical & achievable mitigation measures & management plans, and evaluation of risk
- Experienced in the formulation of environmental strategy, policy & guidelines
- Working knowledge of environmental planning processes, policies, regulatory frameworks & legislation
- Experienced in the compilation and review of the reports in accordance with all relevant environmental legislation
- Wide range of experience for public and private sector projects - completed more than 50 environmental projects for a wide variety of Clients
- Experienced in undertaking public participation processes for a variety of projects
- Completed projects in all nine Provinces of South Africa, as well as Zambia and Lesotho
- *Specialisation:* Strategic environmental assessment and advice; Project Management and co-ordination of environmental projects; Environmental Management; Environmental Impact Assessment; Integration of environmental studies and environmental processes into larger engineering-based projects and ensuring compliance to legislation and guidelines; Hydrology and Water Management; General Ecology
- Registered Professional Natural Scientist (Registration No 400106/99)

#### TERTIARY EDUCATION

B.Sc Earth Sciences, majoring in Geography and Zoology, *Rhodes University, Grahamstown, 1993*

B.Sc Honours in Geography (in Environmental Water Management), *Rhodes University, Grahamstown, 1994*. Major subjects included Water Resources Management, Streams Ecology, Fluvial Geomorphology and Geographic Information Systems.

M.Sc in Geography (Geomorphology), *Rhodes University, Grahamstown, 1996*

Water Quality Management, *Potchefstroom University, 1998*

Environmental Law Course, *Aldo Leopold Institute, 2002*

#### EMPLOYMENT HISTORY

Nov 2006 – present: Savannah Environmental (Pty) Ltd: Director; Environmental Scientist

Oct 1997 – Oct 2005: Bohlweki Environmental (Pty) Ltd: Associate, Environmental Scientist

#### SELECTED RELEVANT PROJECT EXPERIENCE

- EIA and EMP for the proposed wind energy facility and associated infrastructure at a site within the Western Cape (Eskom Generation) – project management & report compilation
- Development of a comprehensive site-specific EMP for the construction and operation of the Eskom Braamhoek Integration Project, Free State and KwaZulu-Natal Provinces (Eskom Transmission) - project management & report compilation
- EIA and EMP for the proposed Steelpoort Integration Project, Mpumalanga & Limpopo Provinces (Eskom Transmission) – report compilation
- Environmental Scoping Study for a new coal-fired power station in the Lephalale area, Limpopo Province (Eskom Generation) – report compilation
- Detailed Environmental Scoping Study & public participation for the proposed Capacity Increase Project at Arnot Power Station, Mpumalanga Province (Eskom Generation) - report compilation
- Numerous EIAs for various electricity sector projects (generation, transmission & distribution) in all nine provinces of South Africa

## **CURRICULUM VITAE**

### **JO-ANNE THOMAS**

*Director: Savannah Environmental (Pty) Ltd*

*Environmental Scientist*

#### **SKILLS BASE AND CORE COMPETENCIES**

- Ten (10) years experience in the environmental field
- Experienced in project management for a range of projects
- Experienced in the identification and assessment of potential negative environmental impacts and benefits through the review and manipulation of data
- Experienced in the identification of practical and achievable mitigation and management measures and the development of appropriate management plans
- Experienced in the compilation and review of environmental reports in accordance with relevant environmental legislative requirements
- Experienced in the formulation of environmental policies, strategies and guidelines
- Experienced in undertaking public participation processes for a variety of projects
- Experienced in providing strategic environmental advice to a wide variety of clients both in the public and private sectors
- Working knowledge of environmental planning processes, policies, regulatory frameworks and legislation
- Registered Professional Natural Scientist (Registration No 400024/00)

#### **TERTIARY EDUCATION**

B.Sc Earth Sciences, *University of the Witwatersrand, Johannesburg, 1993*

B.Sc Honours in Botany, *University of the Witwatersrand, Johannesburg, 1994*

M.Sc in Botany, *University of the Witwatersrand, Johannesburg, 1996*

#### **EMPLOYMENT HISTORY**

Nov 2006 – present: Savannah Environmental (Pty) Ltd: Director; Environmental Scientist

Oct 1997 – Oct 2005: Bohlweki Environmental (Pty) Ltd: Environmental Scientist

#### **SELECTED RELEVANT PROJECT EXPERIENCE**

- EIA and EMP for the proposed Steelpoort Integration Project, Mpumalanga & Limpopo Provinces (for Eskom Transmission)) – project management & report compilation
- EIA and EMP for the proposed wind energy facility and associated infrastructure at a site within the Western Cape (for Eskom Generation)) – report compilation
- Development of a comprehensive site-specific EMP for the construction and operation of the Eskom Braamhoek Integration Project, Free State and KwaZulu-Natal Provinces - project management & report compilation
- EIA and EMP for the proposed Open Cycle Gas Turbine (OCGT) Power Station and associated 400 kV Transmission lines and substation at Atlantis, Western Cape Province - project management & report compilation
- Environmental Scoping Study for a new coal-fired power station in the Lephalale area, Limpopo Province – report compilation
- Detailed Environmental Scoping Study & public participation for the proposed Capacity Increase Project at Arnot Power Station, Mpumalanga Province
- Numerous EIAs for various electricity sector projects (generation, transmission & distribution) in all nine provinces of South Africa

## **CURRICULUM VITAE**

### **JOHN VON MAYER**

*Savannah Environmental (Pty) Ltd  
Environmental Consultant*

#### **SKILLS BASE AND CORE COMPETENCIES**

- 2 years experience in environmental field
- Experience with identification and assessment of environmental impacts
- Experience in environmental compliance and monitoring
- Strong competencies in the assessment of renewable energy generation projects
- Report writing and presentations including Basic Assessments, EIA reports and EMPs.
- Knowledge of environmental legislation and policies, planning process and regulatory frameworks
- Knowledge and experience of public participation process
- Understanding of social patterns, problems and forces

#### **TERTIARY EDUCATION**

*University of the Witwatersrand (BSc)*

*University of Witwatersrand (BSc Hons)*

*Majors in geology and geography. Honours level geography courses in Environmental Management, Air Pollution Meteorology, Climate Change, Sustainable Development, Geomorphology. Biodiversity Conservation, Environmental Policy.*

#### **EMPLOYMENT HISTORY**

March – June 2008 Metago Environmental Engineers: Junior Environmental Consultant

June 2008 – Present Savannah Environmental: Junior Environmental Consultant

#### **SELECTED RELEVANT PROJECT EXPERIENCE**

- EIAs for Eskom Power Transmission Line Projects in Limpopo Province (Mokopane Integration Project) and Gauteng Province (Kyalami Strengthening Project)
- EIA for Wind Energy Facility near Hopefield, Western Cape Province
- EIAs for Wind Energy Facilities near Cookhouse and Indwe and Molteno, Eastern Cape Province
- Basic Assessments for Wind Monitoring Masts in the Western, Eastern and Northern Cape
- Environmental Audits for Eskom Duvha Mine Water Recovery Project
- Regional Assessment projects for siting of Proposed Wind Energy Facilities
- Scoping Report for proposed Cookhouse Wind Energy Facility in the Eastern Cape

## ***CURRICULUM VITAE: D G Paterson***

### **ACADEMIC QUALIFICATIONS:**

- Matriculated: 1976, Dalziel High School, Motherwell, Scotland
- BSc (Hons) Geography, 1980, University of Strathclyde, Glasgow, Scotland
- MSc (Soil Science) *cum laude*, 1998, University of Pretoria

### **PROFESSIONAL CAREER:**

- 1981-1987: Soil Scientist: Soil and Irrigation Research Institute, Pretoria
- 1987-1992: Senior Soil Scientist: Soil and Irrigation Research Institute, Pretoria
- 1992-present: Senior Soil Scientist: ARC-Institute for Soil, Climate & Water

### **FIELDS OF SPECIALITY AND COMPETENCE:**

- Soil classification and mapping
- Soil interpretations
- Soil survey project management
- Environmental assessment
- Soil survey and land capability course presentation
- Ground penetrating radar

### **PUBLICATIONS (see attached list):**

- Three refereed articles (S.A. Journal of Plant and Soil)
- Nine Congress papers/posters
- S.A. Soil Classification (1991) (Member of working group)
- Seven 1:250 000 Land Type Maps
- Three Land Type Memoirs
- More than 100 soil survey reports and/or maps

### **COURSES COMPLETED:**

- Course in Project Management (University of Stellenbosch)
- Course in Junior Personnel Management (Dept of Agriculture)
- Course in Handling of Grievances and Complaints (Dept of Agriculture)
- Course in Marketing (ARC-ISCW)
- Course in National Qualifications Framework Assessment, ARC-CO
- Training Course in Ground Penetrating Radar (GSSI, USA)
- Introduction to ArcGIS 8, GIMS, 2004

### **PROFESSIONAL STATUS:**

- Registered Natural Scientist (SA National Council for Natural Scientific Professions)
- Member of South African Soil Classification Working Group
- Member of Soil Science Society of South Africa (1982-present)
- President of Soil Science Society of South Africa (2005-2007)
- Council Member of South African Soil Survey Association (2002-2003)
- Scientific Referee, S.A. Journal for Plant and Soil
- External Examiner, University of Pretoria and University of Witwatersrand

### **MISCELLANEOUS:**

Editor, Soil Science Society newsletter, 1993-present  
Member, Clapham High School (Pretoria) Governing Body 1998-2002  
Member, Northern Gauteng Football Referee's Association  
Member, Rosslyn Golf Club (Club Champion 2002)

## **PUBLICATIONS LIST:**

### ***Refereed Articles:***

**BÜHMANN, C., KIRSTEN, W.F.A., PATERSON, D.G. & SOBCZYK, M.E.**, 1993. Pedogenic differences between two adjacent basalt-derived profiles. 1. Textural and chemical characteristics. *S. Afr. J. Plant & Soil*, 10: 155-161

**BÜHMANN, C., KIRSTEN, W.F.A., PATERSON, D.G. & SOBCZYK, M.E.**, 1994. Pedogenic differences between two adjacent basalt-derived profiles. 2. Mineralogical characteristics. *S. Afr. J. Plant & Soil*, 11: 5-11

**PATERSON, D.G. & LAKER, M.C.**, 1999. Using ground penetrating radar to investigate spoil layers in rehabilitated mine soils. *S. Afr. J. Plant & Soil*, 16:131-134.

### ***Book:***

**SOIL CLASSIFICATION WORKING GROUP\***, 1991. Soil classification. A taxonomic system for South Africa. Institute for Soil, Climate & Water, Pretoria.

\* Co-author as member of Working Group

### ***Thesis:***

**PATERSON, D.G.**, 1998. The use of ground penetrating radar to investigate subsurface features in selected South African soils. Unpublished M Sc Thesis, University of Pretoria.

### ***Congress Papers:***

**PATERSON, D.G.**, 1987. The relationship between geology and soil type in the northern Kruger National Park. 14<sup>th</sup> Congress of the Soil Science Society of S.A. Nelspruit, 14-17 July 1987.

**PATERSON, D.G.**, 1990. A study of black and red clay soils on basalt in the northern Kruger National Park. 16<sup>th</sup> Congress of the Soil Science Society of S.A. Pretoria, 9-12 July 1990.

**PATERSON, D.G.**, 1992. The potential of ground penetrating radar as an aid to soil investigation. 17<sup>th</sup> Congress of the Soil Science Society of S.A. Stellenbosch, 28-30 Jan.1992.

**PATERSON, D.G.**, 1995. The complex soil mantle of South Africa. ARC Wise Land Use Symposium, Pretoria, 26-27 Oct. 1995

**PATERSON, D.G. & LAKER, M.C.**, 1998. Locating subsoil features with ground penetrating radar. 21<sup>st</sup> Congress of the Soil Science Society of S.A. Alpine Heath, 20-22 Jan. 1998.

**PATERSON, D.G.**, 2000. Mapping rehabilitated coal mine soils in South Africa using ground penetrating radar. Eighth International Conference on Ground Penetrating Radar, Gold Coast, Australia, 23-26 May 2000.

**PATERSON, D.G. & VAN DER WALT, M.**, 2003. The soils of South Africa from the Land Type Survey. 24<sup>th</sup> Congress of the Soil Science Society of S.A., Stellenbosch, 20-24 Jan. 2003

### ***Land Type Maps:***

**PATERSON, D.G.**, 1990. 1:250 000 scale land type map 2230 Messina. Dept. Agriculture, Pretoria.

**PATERSON, D.G. & HAARHOFF, D.**, 1989. 1:250 000 scale land type map 2326 Ellisras. Dept. Agriculture, Pretoria.

**PATERSON, D.G., PLATH, B.L. & SMITH, H.W.**, 1987. 1:250 000 scale land type map 2428 Nylstroom. Dept. Agriculture, Pretoria.

**PATERSON, D.G. & ROSS, P.G.**, 1989. 1:250 000 scale land type map 2330 Tzaneen. Dept. Agriculture, Pretoria.

**PLATH, B.L. & PATERSON, D.G.**, 1987. 1:250 000 scale land type map 2426 Thabazimbi. Dept. Agriculture, Pretoria.

#### ***Land Type Memoirs:***

**PATERSON, D.G., PLATH, B.L. & SMITH, H.W.**, 1988. Field Investigation. In: *Land types of the maps 2426 Thabazimbi & 2428 Nylstroom. Mem. Agric. Nat. Res. S. Afr.* No. 10. Dept. Agriculture, Pretoria.

**PATERSON, D.G., SCHOEMAN, J.L., TURNER, D.P., GEERS, B.C. & ROSS, P.G.**, 1989. Field Investigation. In: *Land types of the maps 2330 Tzaneen & 2430 Pilgrim's Rest. Mem. Agric. Nat. Res. S. Afr.* No. 12. Dept. Agriculture, Pretoria.

**PATERSON, D.G.**, 1999. 1:250 000 land type survey of the former Ciskei (Unpublished). ISCW Report GW/A/99/24.

**PATERSON, D.G.**, 1992. Ground penetrating radar applications in USA and South Africa. Report on an official study tour to USA, 13-29 July, 1991. ISCW Report GW/A/92/8

**PATERSON, D.G.**, 2000. Report on official overseas visit to GPR2000 Conference, Broadbeach, Australia, 23-26 May, 2000. ISCW Report GW/A/2000/40

ARC-ISCW Reports on:

- Ground penetrating radar investigations in: Kruger National Park; Enseleni, Natal; Weatherly, Maclear; Kleinkopje Mine
- Soil survey investigations at: Roodeplaat, Kathu, Steelpoort River, Palala River, Zeekoegat (Roodeplaat), Limpopo River, Lydenburg, Kendal, Clewer Sand (Witbank), Botha Sand (Witbank), Balmoral Colliery, Bafokeng (Rustenburg), Towoomba (Warmbaths), Hoeveld Stene (Middelburg), Quality Bricks (Witbank), Visagie Sand (Middelburg), Rosslyn, Coalbrook (Sasolburg), Stewart Coal (Delmas), Forzando Coal (Hendrina), Vaalgro (Vereeniging), Ratanda (Heidelberg), Elspark (Boksburg), Thorncliffe Mine (Steelpoort), Jan Smuts Quarry (Boksburg), Ennerdale (Phase I & II), Thokoza, North Riding, Natalspruit (Alberton), Arnot, Kroondal (Phase I & II), Ga-Rankuwa, Hartebeespoort Dam, Kosmos, Assen, Grasmere, Magalies Moot (Pretoria), Valpre (Paulpietersburg), Cargo Carriers (Sasolburg), Waterval (Rustenburg), Rayton, Bronkhorstspuit, Zwavelpoort (Pretoria), Pietersburg, Trojan Mine (Steelpoort), Platinum Highway (Rustenburg), Moutse, Centurion, Salique (Klaserie), Northam, Greenside Colliery (Witbank), South Deep Mine (Westonaria), Bank Colliery, Steelpoort Platinum, Gautrain Route (Pta/Jbg), Rietspruit Mine (Ogies), Potgietersrus Platinum, Atok Mine (Lebowa), Blue Ridge Mine (Groblersdal), Ngodwana, Estancia (Breyton), Twickenham Mine (Steelpoort), Marikana

## **CURRICULUM VITAE**

**Morné de Jager**

*M2 Environmental Connections cc*

*PO Box 2047*

*Garsfontein East*

*0060*

*Tel : 012 993 2165*

*Fax : 086 621 0292*

*Mobile : 082 565 4059*

*Founding member of the Closed Corporation*

### **SKILLS BASE AND CORE COMPETENCIES**

- Water monitoring programme design,
- Water Quality Analysis and Modelling,
- Environmental Auditing,
- Noise Monitoring, Modelling and Control,
- Biological Monitoring,
- Environmental Impact Assessment and Management,
- IT skills (software as well as hardware),
- Conflict resolution and stakeholder facilitation.

### **TERTIARY EDUCATION**

B.Ing (Chem) (University of Pretoria)

### **EMPLOYMENT HISTORY**

- Department of Water Affairs and Forestry (1998 – 2001; Pollution Control Officer)
- EcoSat (2001 – 2002; Environmental Monitoring, Control and Management)
- MENCO (2002 – current; See above)

### **SELECTED RELEVANT PROJECT EXPERIENCE**

- Noise Impact Assessment for Skychrome (Pty) Ltd (A Ferro-chrome mine),
- Noise Impact Assessment for Mooinooi Chrome Mine (Western Chrome Mines),
- Noise Impact Assessment for Buffelsfontein East and West (Western Chrome Mines),
- Noise Impact Assessment for Elandsdrift (Sylvania),
- Noise Impact Assessment for Jagdlust Chrome Mine (Eastern Chrome Mines),
- Noise Impact Assessment Apollo Brick (Pty) Ltd (Clay mine and brick manufacturer).

## CURRICULUM VITAE

### SHAWN JOHNSTON

*Sustainable Futures ZA*

*Process Facilitator*

#### **SKILLS BASE AND CORE COMPETENCIES**

- Facilitator, Mediator and Trainer
- Planning, Process Design and Conceptualising
- Facilitation, Public and Stakeholder Liaison
- Process Coordination, Problem Solving and Negotiation Skills

#### **TERTIARY EDUCATION**

- B.Tech Environmental Management – Cape Peninsula University of Technology, Cape Town
- National Diploma in Horticulture – Cape Technikon, Cape Town
- Certificate in Conflict Resolution and Environmental Mediation – Partnership Lifeskills Centre/Global FutureLinks – Washington DC, USA

#### **EMPLOYMENT HISTORY**

- Leadership South Programme
- FutureLinks South Africa
- Common Ground Consulting
- Sustainable Futures ZA

#### **SELECTED RELEVANT PROJECT EXPERIENCE**

- **LEAD FACILITATOR, OLIFANTS/DORING RIVER WATER USER ASSOCIATION CAPACITY BUILDING PROJECT. (Current)** Acting as the lead facilitator and co-ordinator of the Olifant/Doring Water User Association Capacity Building for commercial farmers and emerging black farmers.
- **ESKOM PROCESS FACILITATOR, ESKOM ANKERLIG CLOSED CYCLE GAS TURBINE CONVERSION PROJECT AND ASSOCIATED PROJECTS, ATLANTIS – CAPE TOWN (Current)** Responsible for facilitating the public participation process for the Eskom Ankerlig gas turbine conversion from OCGT to CCGT and associated EIA studies relating to Ankerlig Power Station in Atlantis, Cape Town.
- **ESKOM PUBLIC PARTICIPATION PROCESS, ESKOM WIND ENERGY FACILITY, WEST COAST OF SOUTH AFRICA (Current)** Responsible for facilitating the public participation process for the EIA process of the proposed Eskom Wind Energy Facility near Koekenaap in the Matzikama Municipality on the Cape West Coast.
- **PART-TIME LECTURER, WATER AND CONFLICT, INTEGRATED WATER RESOURCES MANAGEMENT PROGRAMME AT THE UNIVERSITY OF THE WESTERN CAPE WESTERN CAPE (UWC) (2006 - Current)** Assisted with establishing the first Water and Conflict Resolution module in the M.Sc Integrated Water Resources Management degree course.

## **CURRICULUM VITAE**

### **TONY BARBOUR**

*Environmental Consultant and Researcher*

#### **SKILLS BASE AND CORE COMPETENCIES**

- Eighteen (18) years experience in the field of environmental management
- Undertaken in the region of 20 SIAs throughout South Africa
- Author of the Guidelines for Social Impact Assessments for EIAs commissioned by the Department of Environmental Affairs and Development Planning (DEA&DP) in the Western Cape
- Developed SIA Guidelines for the Department of Water Affairs and Forestry
- Work experience in South Africa, Namibia, Botswana, Zambia, Lesotho and Swaziland

#### **TERTIARY EDUCATION**

BSc (Geology and Economics) Rhodes, 1984

BEcon (Hons) Rhodes, 1985

MSc (Environmental Science) University of Cape Town, 1992

#### **EMPLOYMENT HISTORY**

Private Consultant: November 2004-current.

University of Cape Town: August 1996-October 2004

Environmental Evaluation Unit (EEU), University of Cape Town. Senior Environmental Consultant and Researcher.

1991-1996: Ninham Shand Consulting (Cape Town). Senior Environmental Scientist.

1996-August 2000: Steffen, Robertson and Kirsten (SRK Consulting) – Associate Director, Manager Environmental Section, SRK Consulting, Cape Town.

Lecturing: 1990-current

- University of Cape Town: Environmental Economics, Social Impact Assessment, Strategic Environmental Assessment and Environmental Impact Assessment.
- Cape Technikon: Environmental Economics and Waste Management.
- Peninsula Technikon: Environmental Economics and Waste Management.

#### **SELECTED RELEVANT PROJECT EXPERIENCE**

- Social Assessment for Darling Wind Farm, Western Cape, South Africa (2001 – 2002)
- Portnet Saldanha, Western Cape, SA. EIA for the expansion of a bulk iron ore export facility at the Port of Saldanha (2000)
- Social Assessment for road up-grade between Gansbaai and Bredadorp, Southern Cape (2005).
- Social Assessment Zeekoevlei Golf Estate, Somerset West, Western Cape (2005)
- Social Assessment Silwersand Golf and Resort Estate, Robertson, Western Cape (2003).
- Social Assessment for Valkenberg East Site, Cape Town (2003)
- Development of Social Impact Assessment Guidelines for the Western Cape DEA&DP (2006)
- Social Assessment for Riversonderend Road By-pass (1991)
- Internal Review Consultant for Golder Associates on Namakwa Sands Heavy Mineral Mining EIA, Western Cape (current)
- Review of EIA for Zeekoevlei Golf Course Estate, Somerset West, Western Cape (2005);
- Review of EIA for Oostenberg Waste Transfer Station, Brackenfell, Western Cape (2004);
- Review of EIA for N7 Road Up-grade, Clanwilliam, Western Cape (2002)

## CURRICULUM VITAE

Andrew Jenkins

AVISENSE Consulting cc

Owner

### SKILLS BASE AND CORE COMPETENCIES

- >20 years as a bird specialist in EIA work in southern Africa, with particular emphasis on power line, wind farm and river impoundment projects, particular expertise in raptors, bustards and cranes, and particular experience in the environments of the Western Cape and Lesotho.
- >20 years as a research biologist, with particular emphasis on raptor (falcon) ecology and conservation and the biology and mitigation of collision mortality in large terrestrial birds.

### TERTIARY EDUCATION

**1989-1998:** MSc upgraded to PhD, Percy FitzPatrick Institute, University of Cape Town. Thesis title: *Behavioural ecology of Peregrine and Lanner Falcons in South Africa.*

**1988:** BSc Hons in Zoology, University of Natal, Pietermaritzburg (with distinction). Project title: *Bill morphology, feeding ecology and niche partitioning in six sympatric species of granivorous birds.*

**1984-1987:** BSc, University of Natal, Pietermaritzburg, majoring in Zoology and African & Experimental Zoology.

### EMPLOYMENT HISTORY

**September 2007-March 2009:** Employed as a research scientist by the Wildlife & Energy Interaction Group of the Endangered Wildlife Trust, tasked with (i) consolidating and strengthening existing research, and initiating new research initiatives, in the field of wildlife/power line interactions, and particularly in the mitigation of bird mortalities associated with electrical infrastructure, and (ii) doing in-depth EIA assessments for major proposed developments in energy infrastructure. Designed the WEIG research programme for 2008-2011, focusing on the mitigation of bird:power line collisions. Major EIA contracts completed during this time include avifaunal studies of Eskom Generation's proposed Wind Energy Facility in the Vredendal area, Western Cape, and Macquarie's proposed Hopefield Wind Energy Facility, Hopefield, Western Cape.

**March 2002-February 2007:** Employed as research scientist at FitzPatrick Institute, UCT from March 2002, managing the *Western Cape Raptor Research Programme*, and overseeing various raptor-based projects, including a collaboration with electricity supplier Eskom to reduce the incidence of line faults associated with large eagle nests on electricity transmission pylons in the Karoo, and a collaboration with the Critical Ecosystem Partnership Fund to investigate the value of the Black Harrier as a surrogate species in the conservation of lowland Fynbos and Renosterveld. Also conducted work on the suitability of Barn Owls as bio-control agents for rodents in a wheat-farming area, and the role of African Fish Eagles and other raptors as indicators of agrochemical contamination in an area of intensive viticulture, and organized and led a survey of the Taita Falcon population of the Mpumalanga escarpment. During this period, co-supervised one MSc thesis, three MSc Conservation Biology mini-theses, and two BSc Hons projects.

**November 1998-December 2000:** Employed as a postgraduate research fellow at the FitzPatrick Institute, UCT, working on various projects concerning the biology of predation. Also co-supervised the two Masters mini-theses in Conservation Biology, and oversaw the experiential training year of a Cape Technikon Nature Conservation student.



## **ABBREVIATED CURRICULUM VITAE 2010**

**NAME:** Johannes Nicolaas Francois Binneman

**DATE OF BIRTH:** 31 October 1953

**NATIONALITY:** South African

**ID. No.:** 531031 5127 08 2

**COMPANY ADDRESS:** Eastern Cape Heritage Consultants  
P.O. Box 689  
Jeffreys Bay, 6330  
Tel: 042 2960399  
Cell: 0728006322  
email: kobusreichert@yahoo.com  
email: J.Binneman@ru.ac.za

**QUALIFICATIONS:** M.A in Archaeology from the University of Stellenbosch (1982)  
D.Phil in Archaeology from the University of the Witwatersrand (1996).

**RESEARCH EXPERIENCE:** 29 Years of archaeological research in the Eastern Cape. This include the fields of Middle Stone Age, Later Stone Age, Iron Age, Rock Art and Historical Archaeology.

**PUBLICATIONS:** Include 40 academic and popular articles.

**OTHER:** Co-editor of the Southern African Field Archaeology (accredited)  
Member of Kwa-Zulu Natal Heritage Permit Committee

**MEMBER OF:** Association of South African Professional Archaeologists  
South African Society for Archaeologists  
Society for Africanist Archaeologists

**CONSULTANCY EXPERIENCE:** 27 Years

### **CONSULTANT PROJECTS - CLIENTS INCLUDE:**

Cape Provincial Administration (pre 1994)  
Atomic Energy Board  
South African National Roads Agency  
Pretoria Portland Cement  
Blue Circle Cement  
Eastern Cape Nature Conservation (pre April 2004)  
Department of Water Affairs  
Department of Environmental Affairs  
National Parks Board (now SANparks)  
Wilderness Foundation  
Gencor  
Portnet (National Port Authority)  
Coega Industrial Development Corporation  
ESKOM  
TELKOM  
CSIR  
Many small companies and land developers

## **FEW SELECTED PROJECTS** - completed 51 consultancies during 2009 (list available).

A phase 1 archaeological impact assessment of the greater Coega Industrial Development Zone (IDZ), Near Port Elizabeth, Nelson Mandela Bay Municipality, Eastern Cape Province

Phase 1 archaeological heritage impact assessments for the proposed upgrading of the R338 Klipplaat-Aberdeen road and 13 borrow pits in the Camdeboo Municipality, Cacadu District Municipality, Eastern Cape Province.

A phase 1 archaeological heritage impact assessment for the proposed Kouga wind energy project near Jeffreys Bay, Kouga Municipality, District Of Humansdorp, Eastern Cape

A phase 1 archaeological heritage impact assessment for the proposed rezoning and subdivision of farm 36 and 37, Theesecombe, Port Elizabeth, Nelson Mandela Bay Municipality, Eastern Cape Province, for the development of two residential nodes, lodge and nature reserve. CEN Integrated Environmental Management Unit. Port Elizabeth.

Archaeological heritage impact assessment for the proposed new entrance gate with associated infrastructure and the construction and upgrade of roads in the Mountain Zebra National Park, Cradock District.

Archaeological heritage impact assessment for the proposed construction of an overhead powerline to lkcf001 (frs 143) on the Farm Samekoms 392, Cradock District.

Archaeological heritage impact assessment for the proposed Gqunubie valley golf estate.

## **SELECTED ACADEMIC PUBLICATIONS (peer review published in accredited journals)**

Carrion, J.S., Brink, J.S., Scott, L. & **Binneman, J.N.F.** 2000. Palynology and palaeoenvironment of Pleistocene coprolites from an open-air site at Oyster Bay, Eastern Cape coast. *South African Journal of Science* 96:449-453.

**Binneman, J.N.F.** 2000. Results from two test excavations in the Baviaanskloof Mountains, Eastern Cape Province. *Southern African Field Archaeology* 9:81-92.

**Binneman, J.N.F.** 2001. An introduction to the Later Stone Age research project along the south-eastern Cape coast. *Southern African Field Archaeology* 10:75-87.

**Binneman, J.N.F.** 2004/5. Archaeological research along the south-eastern Cape coast Part 1: open-air shell middens. *Southern African Field Archaeology* 13/14:49-77.

Steyn, M., **Binneman, J.N.F.** & Loots, M. 2007. The Kouga Mummified remains. *South African Archaeological Bulletin* 65:3-8.

**Binneman, J.N.F.** 2006/7. Archaeological research along the south-eastern Cape coast Part 2, caves and shelters: Kabeljous River Shelter 1. *Southern African Field Archaeology* 15/16:57-74.

## **INTERNATIONAL CONFERENCES ATTENDED**

**2000** Southern African Association of Archaeologists, University of the Witwatersrand, 25-28 April, Johannesburg.

**2002** Society for Africanist Archaeologists, 18-21 May, University of Arizona, Tucson, USA.

**2002** South African Association of Archaeologists, 7-11 July, Cape Town.

**2004** South African Association of Archaeologists, 4-9 April, Kimberley.

**2004** Society for Africanist Archaeologists, 25-29 June, University of Bergen, Bergen, Norway.

**2005** Pan African Association for Archaeology and Related Studies from the 3<sup>rd</sup>-10<sup>th</sup> of July, University of Botswana, Gaborone.

**2006** Association of South African Professional Archaeologists, 10-13 April, Pretoria.

**2008** Association of South African Professional Archaeologists, 25-29 March, Cape Town.

## CURRICULUM VITAE

David Hoare

*David Hoare Consulting*

*Botanist / Ecologist*

### **SKILLS BASE AND CORE COMPETENCIES**

- Botanical researcher in projects involving the description of terrestrial and coastal ecosystems.
- Broad expertise in the ecology and conservation of grasslands, wetlands, fynbos and coastal ecosystems. Project expertise includes baseline biological surveys for the mining, forestry and utility industries, national vegetation mapping programmes for government and research organisations, natural resource management using satellite remote sensing and aerial photography, environmental management and project management (research projects).
- Botanical Specialist responsible for vegetation inventories, vegetation, habitat and land-use mapping, threatened plant species survey, alien species survey.
- Professional Natural Scientist: South African Council for Natural Scientific Professions (2005) Reg. no. 400221/05.
- Professional member: South African Institute of Ecologists and Environmental Scientists (2001

### **TERTIARY EDUCATION**

B.Sc (Botany and Zoology) Rhodes University;

B.Sc Honours (Botany) Rhodes University,

M.Sc. (Botany) University of Pretoria

PhD (in progress) – Nelson Mandela Metropolitan University, Port Elizabeth

### **SELECTED RELEVANT PROJECT EXPERIENCE**

- Ecological consultant since 1995. Author of 13 scientific publications, 6 technical scientific reports, 15 scientific conference presentations and over 130 specialist consulting reports. Attended 15 national and international congresses & 5 expert workshops, lectured vegetation science at 2 universities and referee for 2 international journals.
- Wide experience in botanical studies within grassland, savanna and fynbos, as well as riparian, coastal and wetland vegetation. Senior author on Thicket Biome chapter, second author on Grassland Biome chapter and co-author on three other chapters in recent publication on vegetation of South Africa (SANBI). Also compiled map of the Eastern Cape vegetation for the same publication.

# CURRICULUM VITAE

## Lourens Martinus du Plessis

*MetroGIS (Pty) Ltd.*

*Director*

### SKILLS BASE AND CORE COMPETENCIES

- Data Sourcing and Acquisition
- Data Capture
- Data Evaluation
- Data Conversion and Transfer
- GIS Database Development, Implementation and Maintenance
- Spatial Analysis (Visibility, Slope, Aspect, etc.)
- Digital Elevation Modeling
- Terrain Evaluation
- Image Processing
- Visual Impact Assessment and Impact Management
- Environmental Management
- Decision Support Systems Interface Development
- Project Management
- Map Production, Display, Queries and Reporting
- Environmental Sciences Expertise
- Process Development
- Arc/Info, ArcGIS, ArcView and PlanetGIS software
- Various GIS support software packages
- Range of Microsoft standard applications

### TERTIARY EDUCATION

Degree: BA (University of Pretoria) Geography and Anthropology (Majors), 1993  
Other Subjects: Archaeology, Philosophy and Political Science

### EMPLOYMENT HISTORY

**GisLAB CC** (Geographic Information Systems Laboratory - University of Pretoria)

Period: 4/1990 - 9/1997

Position: Member/Project Manager

**GISBS** (Geographic Information Systems Business Solutions - Q Data Consulting)

Period: 10/1997 - 10/1999

Position: Project Manager

**MetroGIS (Pty) Ltd.**

Period: 11/1999 - to date

Position: Director/Project Manager

### SELECTED RELEVANT PROJECT EXPERIENCE

- Proposed Atlantis Open Cycle Gas Turbine power station VIA
- Kynoch Gypsum Tailings dam extension VIA
- N1 Western Bypass Shell service station VIA
- Coega regional hazardous waste processing facility VIA
- Robinson Deep landfill extension VIA
- Hazardous waste blending platform VIA
- Mercury-Ferrum-Garona transmission line integration VIA
- Matimba B proposed coal-fired power station VIA
- Concentrating Solar Power (CSP) plant VIA
- Zeus to Mercury transmission line (comparative viewshed analyses)
- Mmamabula (Botswana) transmission line and power station viewshed analyses
- Petronet new multi-products pipeline VIA

**CURRICULUM VITAE**  
**IAIN PATON**

**P E R S O N A L   D E T A I L S**

**SURNAME:** Paton  
**FIRST NAMES:** Iain Bruce  
**ADDRESS:** PO Box 964, Knysna, 6570  
**RESIDENTIAL ADDRESS:** 5 Brooklyn Close, Hunters Estate, Knysna  
**HOME TELEPHONE:** 044-3840649  
**WORK TELEPHONE:** 044-3820502  
**CELLULAR:** 082-7827793  
**FAX:** 044-3820503  
**E-MAIL:** iain@outeniqua.co.za  
**DATE OF BIRTH:** 28 August 1973  
**PLACE OF BIRTH:** Harare, Zimbabwe  
**NATIONALITY:** South African – British Dual Citizen  
**SA I.D. NO.:** 7308286179080  
**MARITAL STATUS:** Married, three children.

**S E C O N D A R Y   E D U C A T I O N   ( 1 9 8 6 - 1 9 9 0 )**

Woodridge College, Port Elizabeth, South Africa

1990: Matriculation exemption, all subjects on Higher Grade

**T E R T I A R Y   E D U C A T I O N   ( 1 9 9 1 - 1 9 9 4 )**

Rhodes University, Grahamstown, South Africa

1993: Bachelor of Science Degree in Geology and Economics

1994: Bachelor of Science with Honours Degree in Geology

**W O R K   E X P E R I E N C E**

**Western Areas Gold Mining Co. Ltd. (JCI Ltd), South Africa: 1995-97**

- ♦ Mine Geologist - 1995 - 1996
- ♦ Senior Geologist - 1996 - 1997

**Halliburton Energy Services (Drilling Systems), Aberdeen, Scotland: 1997-98**

- ♦ Logging Geologist - 1997 - 1998

**Progex: Knysna, South Africa: 2001-2006**

- ♦ Construction Site Manager – 2001-2006

**Sivakhula Lab cc: Knysna, South Africa: 2006-2008**

- ♦ Engineering Geologist & Managing Member (since 2007)

**Outeniqua Geotechnical Services cc (Formerly Sivakhula Lab cc): Knysna, South Africa: 2008-Present**

- ♦ Engineering Geologist & Managing Member

**Professional Affiliations:**

2007 – Professional Natural Scientist (South African Council for Natural and Scientific Professions)

2008 – Associate member of SAICE (South African Institute of Civil Engineering)

2009 – Member of SAIEG (South African Institute of Engineering & Environmental Geologists)