

CURRICULUM VITAE

JO-ANNE THOMAS

Profession : Environmental Consultant

Specialisation : Environmental Management; Strategic environmental advice; Environmental compliance advice & monitoring; Environmental Impact Assessments; Policy, strategy & guideline formulation; Project Management; General Ecology

Years experience : Eleven (11) years in the environmental field

KEY RESPONSIBILITIES

Provide technical input for projects in the environmental management field, specialising in Strategic Environmental Advice, Environmental Impact Assessment studies, environmental permitting, public participation, Environmental Management Plans and Programmes, environmental policy, strategy and guideline formulation, and integrated environmental management. Key focus on integration of the specialist environmental studies and findings into larger engineering-based projects, strategic assessment, and providing practical and achievable environmental management solutions and mitigation measures. Responsibilities for environmental studies include project management; review and manipulation of data; identification and assessment of potential negative environmental impacts and benefits; review of specialist studies; and the identification of mitigation measures. Compilation of the reports for environmental studies is in accordance with all relevant environmental legislation.

Undertaking of numerous environmental management studies has resulted in a good working knowledge of environmental legislation and policy requirements. Recent projects have been undertaken for both the public- and private-sector, including compliance advice and monitoring, electricity generation and transmission projects, various types of linear developments (such as National Road, local roads and power lines), waste management projects (landfills), mining rights and permits, policy, strategy and guideline development, as well as general environmental planning, development and management.

SKILLS BASE AND CORE COMPETENCIES

- Project management for a range of projects
- *Identification and assessment of potential negative environmental impacts and benefits through the review and manipulation of data and specialist studies*
- *Identification of practical and achievable mitigation and management measures and the development of appropriate management plans*
- Compilation of environmental reports in accordance with relevant environmental legislative requirements

- External and peer review of environmental reports & compliance monitoring
- Formulation of environmental policies, strategies and guidelines
- Public participation processes for a variety of projects
- 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

EDUCATION AND PROFESSIONAL STATUS

Degrees:

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*

Courses:

Environmental Impact Assessment, *Potchefstroom University, 1998*

Environmental Law, *Morgan University, 2001*

Professional Society Affiliations:

Professional Natural Scientist (Registration No 400024/00).

EMPLOYMENT

Current: Director of Savannah Environmental (Pty) Ltd. Independent specialist environmental consultant

October 1997-November 2005: Bohlweki Environmental (Pty) Ltd: Senior Environmental Scientist; Environmental Management and Project Management

January to July 1997: *Junior Science Teacher, Sutherland High School, Pretoria*

PROJECT EXPERIENCE

Current projects include:

Electricity Sector Projects

- Project manager for the EIA and EMP for the proposed Mokopane Integration Project, Limpopo Province (for Eskom Transmission)
- Project manager for the proposed transmission lines from the Koeberg-2 Nuclear Power Station site, Western Cape Province (for Eskom Transmission)
- Project manager for the proposed Tshwane strengthening project, Phase 1, Gauteng

Province (for Eskom Transmission)

- Project manager for the EIA and EMP for the proposed Kyalami Strengthening Project, Gauteng Province (for Eskom Transmission)
- Project manager for the EIA and EMP for the proposed Steelpoort Integration Project, Limpopo Province (for Eskom Transmission)
- Project manager for the EIA and EMP for the proposed conversion of the existing Open Cycle Gas Turbine (OCGT) Ankerlig Power Station (located in Atlantis Industria) to a Combined Cycle Gas Turbine (CCGT) power station, and the associated 400 kV transmission power line between Ankerlig Power Station and the Omega Substation (for Eskom Generation)
- EIA and EMP for the proposed conversion of the existing Open Cycle Gas Turbine (OCGT) Gourikwa Power Station (located near Mossel Bay) to a Combined Cycle Gas Turbine (CCGT) power station, and the associated 400 kV transmission power line between Gourikwa Power Station and the Proteus Substation (for Eskom Generation)

- EIA and EMP for the proposed wind energy facility and associated infrastructure at a site within the Western Cape (for Eskom Generation)
- EIA and EMP for the proposed wind energy facility and associated infrastructure at a site near Hopefield, Western Cape Province (for Umoya Energy)
- Basic Assessment for proposed wind monitoring masts on a site near Beaufort West, Western Cape Province (for Umoya Energy)
- Basic Assessment for proposed wind monitoring masts on a site near Laingsburg, Western Cape Province (for Umoya Energy)

Compliance Monitoring

- Audit of environmental compliance for Salberg Concrete Products
- ECO compliance monitoring for the construction of the De Hoop Dam and the diversion of the R555, Limpopo Province
- ECO compliance monitoring for the Mine Water Recovery Project at Duvha Power Station, Mpumalanga Province
- Compilation of an Environmental Management Plan and ECO compliance monitoring for existing and future development at Tiffindell Ski, Eastern Cape Province
- ECO compliance monitoring for construction of the Nelson Mandela Bay 2010 Soccer Stadium

Environmental Management Tools

- Review the effectiveness and efficiency of the environmental impact management (EIA) system in South Africa on behalf of the Department of Environmental Affairs and Tourism
- Development of a comprehensive site-specific EMP for the construction and operation of the Eskom Braamhoek Integration Project, Free State and KwaZulu-Natal Provinces
- Compilation of Provincial Guidelines for off-road routes within the Western Cape Province
- Water use permit applications for water use at Tiffindell Ski Resort, Eastern Cape Province
- Water use permit applications for various properties within the Olifants West Game Reserve,

Limpopo Province

- Environmental Risk Analysis for Salbro Property Holdings, Gauteng Province
- Project integration and compilation of a Strategy for Sustainable Development for Gauteng Province
- Advice regarding environmental compliance of existing and future development at Tiffindell Ski, Eastern Cape Province
- Advice regarding environmental compliance at Salberg factory, Gauteng Province

Peer Review

- Review of EIAs submitted in terms of the ECA for the Northern Cape Department of Tourism, Environment and Conservation, including:
 - * EIA for a new wastewater treatment works in Warrenton
 - * EIA for chicken layer houses in Kimberley
 - * EIAs for the upgrading of petrol stations in Kimberley
 - * EIA for a new up-market residential development in Kathu
 - * EIA for residential development in Kimberley
- Review of EIA and EMP for the proposed Waterfall Wedge development, Gauteng Province

Infrastructure Projects

- Project manager for the EIA and EMP for the proposed bridge across the Ngotwane River located on the border of South Africa and Botswana

Mining Sector Projects

- Environmental Impact Assessment and Environmental Management Programme in terms of the MPRDA for the proposed Elitheni Coal Mine near Indwe, Eastern Cape Province
- Environmental Management Programmes for three borrow pits associated with the proposed Groot Letaba River Development Project, Limpopo Province

Water resources projects

- Project manager for the EIA and EMP for the proposed modification of the existing Hartebeestfontein Water Care Works, Gauteng Province (for ERWAT)
- Project manager for the EIA and EMP for the proposed expansion of the existing Welgedacht Water Care Works, Gauteng Province (for ERWAT)

Projects undertaken on behalf of Bohlweki Environmental include:

Specialist projects

- Development of an Environmental Policy for the Ekurhuleni Metropolitan Municipality
- Development of an Integrated Environmental Policy for the City of Tshwane Metropolitan Municipality Environmental Opportunities and Constraints Assessment for the Wonderboom Airport
- Review of the State of the Environment Report for the North West Province

Transport sector projects

- Environmental Impact Assessment and Environmental Management Plan for the proposed N2 Wild Coast Toll Road between East London (Eastern Cape) and Durban (KwaZulu-Natal)
- Environmental input to the Denneboom Local Integrated Transport Plan
- Environmental input to the Ekurhuleni transportation corridors study
- Environmental Impact Assessment for the proposed Platinum Highway from Warmbaths via Pretoria to Skilpadhek (on the South Africa-Botswana border), including obtaining all environmental permits required.
- Environmental Scoping Study and public participation process for the upgrading of Provincial Main Road 100 between the intersection with Main Road 521 and Ndwedwe
- Environmental Management Plan for repairs of portions of the N3 and N1, Gauteng
- Environmental Scoping Study and public participation process for the Kingsway Relief Road in Maseru, Lesotho

Electricity Sector projects

- Project manager for the undertaking of an EIA and compilation of an EMP for the proposed Open Cycle Gas Turbine (OCGT) Power Station and associated 400 kV Transmission lines and substation at Atlantis, Western Cape Province
- Environmental Scoping Study for a new coal-fired power station in the Lephalale area, Limpopo Province
- Project manager for the undertaking of Environmental Scoping Study and compilation of an Environmental Management Plan for various 132 kV Sub-Transmission lines and substations within the Mpumalanga Province
- Project manager for the undertaking of an EIA for the proposed 765 kV Transmission line between the existing Hydra Substation (near De Aar) and the proposed Gamma Substation (near Victoria West), Northern Cape Province
- Detailed Environmental Scoping Study and public participation for the proposed Capacity Increase Project at Arnot Power Station, Mpumalanga Province
- Project manager for the undertaking of an Environmental Scoping Study and EMP for the proposed 132 kV sub-Transmission line between the GaRankuwa and Dinaledi substations, North West Province
- EIA & public participation for the proposed new Ikaros Substation and associated 400 kV Transmission line infrastructure, North West Province
- Environmental Scoping Study public participation for the Establishment of Eskom Infrastructure for Power Supply to the C-Cut Development at Premier Mine, Cullinan, Gauteng Province
- EIA & public participation for the proposed 3rd 400 kV Transmission line between the Poseidon and Grassridge Substations in the Eastern Cape Province
- EIA & public participation for the proposed new 400 kV Transmission line between Matimba Substation (near Lephalale) and Witkop Substation (near Polokwane), Limpopo Province

- Detailed Environmental Scoping Study and public participation for the Breyten Strengthening Project: proposed new Breyten Substation and associated 88 kV Distribution line, Mpumalanga Province
- Public Participation Process for the proposed Return-to-Service of the Camden Power Station, Mpumalanga Province
- Environmental Impact Study and public participation for the proposed 2nd 400 kV Transmission line between the Grassridge Substation and the Poseidon Substation in the Eastern Cape.
- Environmental Pre-Scoping Study for the proposed Concentrating Solar Plant, in the Northern Cape Province
- Environmental Impact Assessment public participation for the proposed new nine 132 kV power lines between the Grassridge Substation and the Coega Industrial Development Zone, Eastern Cape Province

Pipelines

- Environmental Impact Assessment for the proposed Petronet New Multi-Products Pipeline (NMPP) between Durban and Gauteng Province
- Exemption application for the construction of a gas pipeline between Majuba Mine and Majuba Power Station, Mpumalanga Province.
- Exemption application for the construction of an emergency water supply pipeline from Mamelodi to Ekandustria via Cullinan, Gauteng Province.
- Environmental Scoping Study for the installation of a new water supply pipeline from Centurion to Diepsloot, Gauteng Province.

EIAs for Technology projects

- Environmental Impact Assessment for the proposed Alternative Fuels and Resources Project at Alpha's ULCO Plant near Kimberley in the Northern Cape Province
- Environmental Impact Assessment for the proposed Alternative Fuels and Resources Project at Dudfield Plant, North West Province
- Environmental Impact Assessment for the proposed Blending Platform to be established within the Gauteng Province
- Investigation of possible alternative Scrap tyre collection and disposal strategies in Gauteng, South Africa

Mining sector projects

- Environmental Management Programme Report (EMPR) for the proposed small-scale kaolin clay mine near Ndwedwe, KwaZulu-Natal Province
- Environmental Management Programme Report (EMPR) for prospecting activities within the Premier Mine Game Farm, Cullinan for De Beers Consolidated Mines Limited
- Environmental Management Plan for the Proposed C-Cut Development at Premier Mine, Cullinan
- Environmental Management Programme Report for the Proposed C-Cut Development at Premier Mine, Cullinan
- Environmental Impact Assessment and public participation process for the Proposed C-Cut Development at Premier Mine, Cullinan

Development projects

- A detailed Environmental Scoping Study and public participation process for the Thaba ya Batswana Development on portions of the Farm Rietvlei 101 IR, Gauteng
- Environmental Scoping Report and public participation process for the development of a Community Safety Centre in Khutsong-South, Carletonville

Water resources projects

- A detailed Environmental Impact Assessment of new regional water care infrastructure in the DD5A sub-drainage district in Eastern Gauteng (adjacent to the Blesbokspruit Ramsar Site) for the East Rand Water Care Company (ERWAT)

CURRICULUM VITAE
RAVISHA AJODHAPERSADH

Profession : Environmental Consultant
Specialisation : Environmental Management
Years experience : Three

KEY RESPONSIBILITIES

- Providing consulting services to clients for Environmental-related matters.
- Conducting Environmental Impact Assessment (EIA) processes.
- Preparation of EIA reports.

SKILLS BASE AND CORE COMPETENCIES

- Report Writing
- Site Investigation
- Environmental Auditing
- Co-ordination and management of project teams
- Co-ordinating and conducting Public Involvement processes.
- Preparing maps (using GIS)
- Administrative tasks (minutes of meetings)
- Research

EDUCATION AND PROFESSIONAL STATUS

Degrees:

- B Soc Sci (Environmental Management) obtained from the University of Natal in 2005.
- (Hons) (BSc) (Environmental Management) obtained from the University of South Africa in 2010.

Courses:

- Attended an EIA training course conducted by Dekra Norisko in 2008.
- Attended a Wetlands Course by the WESSA and the Department of Water Affairs and Forestry in 2008.

Professional Society Affiliations:

None

EMPLOYMENT

1. June 2007 – April 2009

Name of Employer: Nemai Consulting

Position: Environmental Consultant

2. May 2009 – August 2009

Name of Employer: Environmental Impact Management Services

Position: Environmental Control Officer

3. September 2009 – Present

Name of Employer: Savannah Environmental

Position: Environmental Consultant

PROJECT EXPERIENCE

1. Undertook the Basic Assessment Process for the Proposed Wind Monitoring Mast, near Britannia Bay, Western Cape Province.
2. Undertook the Basic Assessment Process for the Proposed Amakhala Emoyeni Wind Monitoring Masts, between Bedford and Cookhouse, Eastern Cape Province.
3. Undertook the Basic Assessment Process for the Proposed Wind Monitoring Masts, near Vredenburg, Western Cape Province.
4. Prepared **Scoping Report** for the Proposed Flagging Trees Wind Energy Facility, near Middelburg, Eastern Cape Province.
5. Prepared **EIA** for the Proposed Suurplaat Wind Energy Facility, near Sutherland Western and Northern Cape Provinces.
6. Prepared **EIA** for the Proposed West Coast One Wind Energy Facility, near Vredenburg Western Cape Province.
7. Prepared **EIA** for the Proposed Rheboksfontein Wind Energy Facility, near Darling Western Cape Province.
8. Prepared Scoping Report for the Proposed Uyekraal Wind Energy Facility, near Vredenburg Western Cape Province.
9. **Environmental Control Officer** undertaking environmental monitoring for the Waterval Water Care Works on behalf of ERWAT.
10. **Environmental Control Officer** for Transnet's New Multi-Product Pipeline, duties include environmental auditing, preparing daily reports, weekly reports and monthly reports.
11. Prepared EIA reports on the Bus Rapid Transit System, for the City of Johannesburg (2008-2009).
3. Prepared **Environmental Management Plans** (EMP) for road upgrades in the Inner City and Soweto, for the Johannesburg Development Agency (2008 – 2009).
4. Assisted in conducting the EIA for the Neptune-Poseidon 300KV Transmission Lines, for Eskom (2008-2009).
5. Conducted the **public participation process** for the Fischer-Tropsch Wax Expansion

Project, for Sasol (Ltd) (2007-2008).

6. Implemented and managed the Klipspruit River and Wetlands Cleanup, for the Gauteng Department of Agriculture Conservation and Environment. Responsibilities included managing 87 employees, preparation of annual, quarterly and monthly reports, and hosting monthly community and stakeholder meetings (2007 – 2008).
7. Implemented and managed the Bertrams Environmental Education Programme, for the Johannesburg Development Agency. Responsible for the project operations, report writing, event co-ordination, training and capacity building of employees, conducting waste audits and stakeholder engagement (2007- 2008).
8. Implemented and managed the Rehabilitation of illegal dumpsites: **Waste Education Programme** in Soweto, for Pikitup. Duties entailed training and managing the waste awareness team, conducting site visits, dumpsite rehabilitation monitoring and mapping on GIS (2009).
9. Conducted a **feasibility study** for the development of a recycling centre in Alexandra, Jhb for Pikitup. Duties entailed extensive research, conducting a survey, waste audit, analyzing social and environmental dimension of the proposed project and compiling the report. (2008-2009).
10. Assisted in the **Development and Implementation of the Integrated Environmental Management Series**, for the Department of Water Affairs and Forestry (DWAF). Project included developing training manuals, user friendly documents, presentations and launching an environmental decision support system for DWAF (2007- 2009).
11. Undertook the **public participation** for the Sasol's Integrated Waste Management Programme (2008). Key responsibilities included co-ordination of an Open day event, preparation of presentations, invitations, minute taking and technical aspects of the events and compiling a Public Participation report (2007).

CURRICULUM VITAE
LOURENS MARTINUS DU PLESSIS

MetroGIS (Pty) Ltd

Visual Assessment and Geographic Information Systems Specialist

SKILLS BASE AND CORE COMPETENCIES

- More than 17 years experience in the application of Geographical Information Systems (GIS) in Environmental Planning and Management.
- Extensive practical knowledge in spatial analysis, environmental modelling and digital mapping.
- Experience in applying GIS in EIAs, State of the Environment Reports and Environmental Management Plans.

TERTIARY EDUCATION

- BA (University of Pretoria) Geography and Anthropology (Honours), 1993

EMPLOYMENT HISTORY

1999-present: MetroGIS, Director

1997-1999: GISBS, Project Manager

1990-1997: GisLAB c, Project Manager / Member

SELECTED RELEVANT PROJECT EXPERIENCE

- Visual Impact Assessments and Viewshed Analysis for various types of developments, including telecommunications structures, mining activities and tourism accommodation in National Parks and other environmentally sensitive areas. Some recent and current projects include:
 - * Proposed Altantis Open Cycle Gas Turbine power station.
 - * Matimba B proposed coal-fired power station.
 - * Zues to Mercury transmission line (comparative viewshed analysis)
 - *Mercury-Ferrum-Garone transmission line intergration
 - *Mmamambula (Botswana) transmission line and power station viewshed analysis Kynoch Gypsum Tailings dam extension
 - *N1 Western Bypass Shell service station
 - *Coega regional hazardous waste processing facility.
 - *Robinson Deep landfill extension
 - Concentrating Solar Power (CSP) plant
- EIAs for the utilisation of GIS based systems to determine and manage environmental impacts. Various projects in South Africa.

CURRICULUM VITAE

CELESTE BOOTH

Archaeologist and Curator

Member of Association of South African Professional Archaeologists (ASAPA)

SKILLS BASE AND CORE COMPETENCIES

- 4 years archaeological research in the Western Cape
- 2 years archaeological research in the Eastern Cape.
- Specialising in the fields of Middle Stone Age, Later Stone Age and Rock Art.

TERTIARY EDUCATION

- B. Administration (University of Port Elizabeth/Nelson Mandela Metropolitan University)
- BSc Honours Archaeology (University of Cape Town)
- Final year MPhil Archaeology (University of Cape Town)

EMPLOYMENT HISTORY

Curator, Department of Archaeology, Albany Museum

SELECTED RELAVANT PROJECT EXPERIENCE ON HERITAGE ASSESSMENTS

- Kirkwood – Limestone quarries
- Cradock – Ethanol plant
- Khomga – quarry for granite mining
- Kenton-on-Sea – residential development
- Richmond Hill, Port Elizabeth – urban development
- Fish River Mouth, Peddie – limestone quarry
- Kei River Mouth – Hotel and resort development
- Grahamstown – quarry for calcrete
- Paterson – quarry for granite mining
- Mount Steward – quarry for granite mining
- Port Elizabeth – powerline
- East London – quarry for sand mining
- Butterwoth – quarry for dolerite mining
- Kidd's Beach – quarry for granite mining
- Gonubie – quarry for sand mining
- King Williams Town – quarry for granite mining
- King William's Town – quarry for granite mining
- Toise – quarry for granite mining
- Catchcart – quarry for dolerite mining
- Thornhill, Port Elizabeth – quarry for sand mining

- **January 2010-June 2010:**

- Glen Hurd, Port Elizabeth – road and bridge development
- Colchester – road development
- Port Elizabeth – wind farm development
- Paterson – 2 sand quarries
- Port Elizabeth – housing development
- Port Elizabeth – housing development
- Victoria West – quarry
- Fort Beaufort – quarry
- Wesley-Hamburg – wind farm development (desktop study)

CURRICULUM VITAE

TONY BARBOUR

Environmental Consultant and Researcher

SKILLS BASE AND CORE COMPETENCIES

- More than 18 years experience in the field of environmental management.
- Undertaken 20 Social Impact Assessments (SIA) for EIAs commissioned by the Department of Environmental Affairs and Development Planning (DEA&DP).
- Developed SIA guidelines for DWAF.
- Worked experience in South Africa, Botswana, Namibia, 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 – present

UCT: August 1996- October 2004. Environmental Evaluation Unit, Senior Environmental Consultant and Researcher.

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

1996-2000; SRK Consulting, Associate Director, Cape Town

1990- Current: Lecturer, UCT and Cape Technikon, Environmental Economics, SIA, SEA, EIA and Waste Management.

SELECTED RELAVANT PROJECT EXPERIENCE

- SIA for the Darling Wind Farm, Western Capr (2001-2002).
- Portnet Saldanha, EIA for the expansion of a bulk iron ore exporting facility at the Port of Saldhana (2000).
- SIA for road upgrade between Gansbaai and Bredadorp (2005)
- SIA for Zeekoevlei Golf Estate, Somerset West (2005)
- SIA for Silwersand Golf and Resort Estate, Robertson, Western Cape (2003)
- Internal Review consultant for Golder Associates on Namakwa Sands Heavy Mineral Mining EIA (current).
- Review of EIA for Zeekoevlei Golf Course Estate, Somerset West (2005)
- Review of EIA for Oostenberg Waste Transfer Station, Brackenfell, Western Cape (2004)
- Review of EIA for N7 Road upgrade, Clanwilliam, Western Cape (2002).

CURRICULUM VITAE

MORNE DE JAGER

M2 Environmental Connections cc

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

IAIN PATON

Geologist

SKILLS BASE AND CORE COMPETENCIES

Engineering and Geology.

TERTIARY EDUCATION

Rhodes University, Grahamstown, South Africa

- 1993: Bachelor of Science Degree in Geology and Economics
- 1994: Bachelor of Science with Honours Degree in Geology

WORK EXPERIENCE

- 1995 to 1996 Mine Geologist – Western Areas Gold Mine (JCI Limited), Johannesburg
- 1996 to 1997 Senior Geologist – Western Areas Gold Mine (JCI Limited), Johannesburg
- 1997 to 1998 Logging Geologist - Halliburton Energy Services (Drilling Systems), Aberdeen, Scotland
- 2000 - 2006 Construction Site Manager – Progex, Knysna
- 2006 to 2008 Engineering Geologist & Member - Siyakhula Lab cc, Knysna Civil Laboratory & Geotechnical Services
- 2008 to date Engineering Geologist & Member - Outeniqua Geotechnical Services cc (Formerly Siyakhula Lab cc), Knysna

CURRICULUM VITAE

GARRY PATERSON

Soil Scientist at ARC

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

CURRICULUM VITAE

DAVID HOARE

Ecologist

SKILLS BASE AND CORE COMPETENCIES

Ecological consultant since 1995. Author of over 200 specialist ecological consulting reports. Wide experience in botanical studies within grassland, savanna and fynbos, as well as riparian, coastal and wetland vegetation.

Main areas of specialization:

- Vegetation ecology, primarily in grasslands, thicket, coastal systems, wetlands
- Plant biodiversity and threatened species specialist
- Remote sensing, analysis and mapping of vegetation
- Specialist consultant for environmental management projects

TERTIARY EDUCATION

- Matric - Graeme College, Grahamstown, 1984
- B.Sc (majors: Botany, Zoology) - Rhodes University, 1991-1993
- B.Sc (Hons) (Botany) - Rhodes University, 1994 with distinction
- M.Sc (Botany) - University of Pretoria, 1995-1997 with distinction
- PhD (in progress) – Nelson Mandela Metropolitan University, Port Elizabeth, "Patterns and determinants of plant biodiversity in temperate, mesic grasslands of South Africa" under supervision of Prof. Richard Cowling

EMPLOYMENT HISTORY

- 1 February 1998 – 30 November 2004, Researcher, Agricultural Research Council, Range and Forage Institute, Private Bag X05, Lynn East, 0039. Duties: project management, general vegetation ecology, remote sensing image processing.
- 1 December 2004 – present, Member, David Hoare Consulting cc no. 2001/034446/23. Consultant, specialist consultant contracted to a number of existing companies and organisations.
- 1 January 2009 – 30 June 2009, Lecturer, University of Pretoria, Botany Dept.

SELECTED RELEVANT PROJECT EXPERIENCE

- Vegetation pattern in Pilanesberg National Park using digital photogrammetric data preparation techniques, 1 August – present.
- VegMap digital mapping and description of vegetation units of Eastern Cape for new national vegetation map (Dept. of Environmental Affairs and Tourism/National Botanical Institute) and contributions to text and vegetation descriptions in accompanying booklet.
- Classification and mapping of the savanna biome of South Africa using remote sensing techniques, 1 February 1998 – 20 November 1999.

- Natural resource survey of nodes O R Tambo and Maputoland, using remote sensing techniques, 1 November 2001 – December 2003.
- Field data collection for National Land Cover Change Project, Dec 2003 – March 2004.
- Vegetation survey of KwaMhlanaga Landcare site, March 2004.
- Scale physiognomic survey of Suikerbosrand Nature Reserve, 1 March 1998 – 1 April 1998.
- Natural resource survey of Mpumalanga, South Africa, using remote sensing techniques, 1 November 1998 – 2000.
- Vegetation of the corridor of the proposed ESKOM powerline from Port Elizabeth to Bedford. September 2000.

National land cover change mapping and monitoring – development of guidelines, protocols and recommendations for a national mapping project, 1 June 2000 – 30 November 2000.

CURRICULUM VITAE
ANDREW ROBERT JENKINS

Researcher and Scientist

SKILLS BASE AND CORE COMPETENCIES

- Over 20 years' experience in the field of avian impact assessment in South Africa.

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.
- **1983:** Matriculated at St. Stithian's College, Randburg.

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.
- **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.
- **January 2003-Present:** Retained by various agencies to do EIA work as an avian specialist for development projects in the Greater Cape Town area, and more broadly in the Western Cape. Set up *AVISENSE* Consulting in April 2009.
- **January 1989-Present:** Conducted long-term field study of Peregrine Falcons on the Cape Peninsula, including monitoring of breeding performance and demography of a colour-marked population. Still ongoing.
- **January 2003-2004:** Retained to design and oversee monitoring of impacts on avifauna of the Eskom Demonstration Wind Farm facility at Klipheuwel, W Cape.
- **April 2001-2004:** Produced initial scoping report and conducted subsequent monitoring of

the potential impact of the proposed Darling National Demonstration Wind Farm facility on the local avifauna.

- **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.
- **November 1998:** Subcontracted by the Environmental Evaluation Unit, UCT, to conduct the avian component of a site evaluation for the proposed extension of the Namakwa Sands heavy mineral sands mine area near Lutzville on the Cape west coast.
- **September 1996, August 1997, August 2000:** Part of ornithological team subcontracted by Afridev Consultants to survey the birds of the Katse Basin, Lesotho: phase 1A of the Lesotho Highlands Water Scheme.
- **August 1995:** Part of ornithological team subcontracted by Afridev Consultants to survey the birds of the Mohale Basin, Lesotho: phase 1B of the Lesotho Highlands Water Scheme.
- **July 1992 & December/January 1993:** Contributor to "Environmental survey to determine priority areas for conservation, community use and development in the West Coast urban structure plan". Assessed avian diversity in proposed priority areas in a study coordinated by the National Botanical Institute.
- **June 1991:** Assisted with bird component of "Baseline biological study of phase 1a of the Lesotho Highlands water scheme", coordinated by Loxton Venn environmental consultants.
- **December 1989:** Assisted with environmental impact assessment of the West Coast Heavy Mineral Sands Project at *Brand se Baai*, subcontracted by UCT's Environmental Evaluation Unit.

SELECTED RELAVANT PROJECT EXPERIENCE

- Major EIA contracts completed during this time include a contribution to the Strategic Environmental Assessment for energy development in the western Cape Peninsula, and 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.
- Involved in all the bird impact studies completed to date for proposed wind farms in South Africa, from the Darling and Eskom Klipheuwel facilities in 2003, to the Hopefield facility in 2009.
- Established track record as a published research ornithologist, spanning >20 years, including the development of a management plan for large eagles nesting on transmission pylons, and recent pioneering work on the effects of power line collisions on populations of threatened large terrestrial birds.

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 co-ordination, 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 Future Links- Washington DC, USA

EMPLOYMENT HISTORY

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

SELECTED RELEVANT PROJECT EXPERIENCE

- Public Consultation & Facilitation for the Proposed Wag'nbiekiespan Solar Energy Facility, Free State Province
- Public Consultation & Facilitation for the proposed Kathu Solar Energy Facility, Northern Cape
- Public Consultation & Facilitation for the proposed Sishen Solar Energy Facility, Northern Cape
- Public Consultation & Facilitation for the proposed Pofadder Solar Thermal Plant, Northern Cape
- Public Consultation & Facilitation for the proposed Suurplaat Wind Energy Facility, near Sutherland, Northern Cape Province