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 : Seventeen (17) 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 advice and monitoring
- Formulation of environmental policies, strategies and guidelines
- Strategic and regional assessments; pre-feasibility & site selection
- 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

2006 - 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:

Wind Energy Projects

- Project manager for the EIA undertaken for the Kleinsee wind energy facility and associated infrastructure, Northern Cape (for Eskom)
- Project manager for the EIA undertaken for the Aberdeen wind energy facility and associated infrastructure, Eastern Cape (for Eskom)
- Project manager for the EIA undertaken for the Project Blue wind energy facility and associated infrastructure, Northern Cape (for Diamond Wind)
- Project manager for the EIA undertaken for the Swellendam wind energy facility and associated infrastructure, Western Cape (for IE Swellendam)
- Project manager for the EIA undertaken for the Moorreesburg wind energy facility and associated infrastructure, Western Cape (for IE Moorreesburg)
- Project manager for the EIA undertaken for the proposed Spitskop East wind energy facility,
 Eastern Cape Province (for Renewable Energy Resources Southern Africa)
- Project manager for the EIA undertaken for the proposed EXXARO West Coast wind energy facility and associated infrastructure at a site within the Western Cape (for EXXARO Resources)
- Project manager for the EIA undertaken for the proposed Oyster Bay wind energy facility,
 Eastern Cape Province (for Renewable Energy Resources Southern Africa)
- 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)
- Project manager for the proposed Klipheuwel/Dassiesfontein wind energy facility and associated infrastructure at a site within the Overberg area of the Western Cape (for BioTherm Energy)

- Project manager for the proposed Suurplaat wind energy facility and associated infrastructure at a site within the Western Cape (for Moyeng Energy)
- Project manager for the proposed West Coast One wind energy facility and associated infrastructure at a site within the Western Cape (for Moyeng Energy)
- Project manager for the proposed Rheboksfontein wind energy facility and associated infrastructure at a site within the Western Cape (for Moyeng Energy)

Solar Energy Projects

- Project manager for the EIA and EMP for two PV sites within the Western and Northern Cape Provinces (for INCA Energy)
- Project manager for the Basic Assessment and EMP for PV site within the Northern Cape Province (for INCA Energy)
- Project manager for the Basic Assessment and EMP for a PV site near Rustenburg, North-West Province (for Momentous Energy)Project manager for the EIA and EMP for the proposed Project Ilanga (125MW CSP facility) near Upington, Northern Cape Province (for Ilangethu Energy)
- Project manager for the EIA and EMP for two PV sites within the Northern Cape Province (for MedEnergy Global)
- Project manager for the Basic Assessment and EMP for PV sites within 4 ACSA airports within South Africa (for ACSA PV)
- Project manager for the EIA and EMP for the proposed Waterberg PV plant, Limpopo Province (for Thupela Energy)

Coal-fired Power Station Projects

- Project manager for the EIA undertaken for the proposed Independent power Producer (IPP)
 Coal-fired Power Station and associated infrastructure near Lephalale within the Waterberg
 District Municipality of the Limpopo Province
- Project manager for the EIA undertaken for the proposed Umbani Coal-fired Power Station and associated infrastructure near Kriel, Mpumalanga Province
- Project manager for the EIA undertaken for the proposed Ruukki Coal-fired Power Station and associated infrastructure near Ogies, Mpumalanga Province

Gas-fired Power Station Projects

- 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)
- Project manager for the 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)

Power lines

- 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)

Compliance Advice and Due Diligence

- First annual Environmental and Social Monitoring Report for the Upington Airport 10MW PV Plant, Northern Cape Province
- Compliance advice for Financial Close of the Ilanga CSP Facility, Northern Cape Province
- Compliance advice for Financial Close of West Coast One Wind Energy Facility, Western Cape Province
- Compliance advice for Financial Close of Tsitsikamma Wind Energy Facility, Eastern Cape Province
- Compliance advice for Financial Close of Upington Solar Facility, Northern Cape Province
- Environmental Due Diligence of a wind energy facility in the Western Cape on behalf of EDPR Renewables
- Environmental Due Diligence of a wind energy facility on the West Coast of the Western Cape on behalf of ILF&S

CURRICULUM VITAE JOHN VON MAYER

Profession : Senior Environmental Consultant
Specialisation : Environmental Impact Assessment

Years experience : 7 years

KEY RESPONSIBILITIES

- · Project management and compilation of EIAs and EMPs in application for Environmental
- Authorisations for large scale infrastructure energy sector projects.
- Public participation processes and stakeholder consultation and mediation.
- Government authorities consultation.

SKILLS BASE AND CORE COMPETENCIES

- Environmental Authorisations and Licensing
- Environmental Monitoring and Auditing

EDUCATION AND PROFESSIONAL STATUS

Degrees:

• BSc (Hons) degree in Geography and Environmental Science

Courses:

- SAIGS Geological Core Logging and Soil Profiling Course
- "Standout, Speak Out and Win" public speaking seminar and course

Professional Society Affiliations:

• The South African Council for Natural Scientific Professions: Professional Natural Scientist Pr.Sci.Nat: Registration Number: 4/336/11

EMPLOYMENT HISTORY

- December 2014 current: Senior Environmental Consultant at Savannah Environmental
- June 2012 December 2014: Senior Environmental Scientist at Mills and Otten Environmental
- June 2008 June 2012: Environmental Consultant at Savannah Environmental

PROJECT EXPERIENCE

ENVIRONMENTAL IMPACT ASSESSMENTS

- Environmental Impact Assessment for the Hopefield Wind Energy Facility, Western Cape Province (Umoya Energy)
- Environmental Impact Assessment for a Wind Energy Facility near Cookhouse, Eastern Cape Province (African Clean Energy Developments)
- Environmental Impact Assessments for the Amakhala Emoyeni Wind Energy Facilities near Bedford, Eastern Cape Province (Windlab Systems)
- Environmental Impact Assessments and Environmental Management Plans for Wind Energy Facilities near Indwe and Sterkstroom, Eastern Cape Province (Rainmaker Energy Projects)
- Environmental Impact Assessment and Management Plan for Happy Valley Wind Energy Facility near Humansdorp , Eastern Cape Province (Renewable Energy Investments South Africa)
- Environmental Impact Assessment and Management Plan for 200km of Eskom Transmission Lines in Limpopo Province: Mokopane Integration Project (Eskom Transmission)

- Environmental Impact Assessment and Management Plan for Tsitsikamma Community Wind Energy Facility in the Eastern Cape Province (Exxaro Resources and Watt Energy)
- Environmental Impact Assessment and Management Plan for a Photo-Voltaic Solar Energy Facility near Vredendal in the Western Cape province (INCA Energy)
- Environmental Impact Assessment for Pofadder Renewable Energy Facility (Mainstream Renewable Power)
- Environmental Impact Assessment and Management Plan for Kyalami Strengthening Project 400kV power lines (Eskom Transmission)
- Environmental Impact Assessment for Moorreesburg Wind Farm (INCA Energy)
- Environmental Impact Assessment for Pofadder Renewable Energy facility (Mainstream Renewable Power)
- Environmental Impact Assessment for the Kareebosch Wind Energy facility (G7)
- Various applications for amendments to environmental authorizations for renewable energy facilities throughout South Africa.
- Environmental Impact Assessment for Castle Wind Farm near De Aar (juwi)
- Basic Assessments for power line projects throughout the Western, Eastern and Northern Cape provinces.

ENVIRONMENTAL COMPLIANCE AUDITING AND ECO

- Provision of Environmental Consulting Services for the Implementation and Compliance Monitoring of the Cookhouse Wind Energy Facility Environmental Authorisation And Environmental Management Plan (African Clean Energy Developments)
- Environmental Post Construction Audits for Wind Monitoring Masts near Cookhouse and Oyster Bay (African Clean Energy Developments and Renewable Energy Systems)

WATER USE LICENCES

• Water Use Licences for access roads within Cookhouse Wind Energy Facility (African Clean Energy Developments)

CURRICULUM VITAE JACO JANSEN

Profession : Soil Science Consultant and Environmental Assessment Practitioner

Specialisation : EIAs, Soil erosion management

Years of experience : 1

KEY RESPONSIBILITIES

Professional execution of consulting

- Services for a variety of projects, both as a specialists and as an EAP;
- Project reporting;
- Impact assessment reporting;
- Compilation of management plans;
- Compliance monitoring;
- In-house soil science awareness training to personnel;
- Participation in field surveys;
- Development of project proposals for procuring new work/projects.

SKILLS BASE AND CORE COMPETENCIES

- Soil Science specialities
- Environmental Impact and Monitoring
- Liaising with client, relevant authorities and departments
- EIA Reporting

EDUCATION AND PROFESSIONAL STATUS

Degrees:

BSc (Hons) Geology: University of the North West (2014)

BSc Geology & Chemistry: University of the North West in (2013)

Courses:

GIS: University of the North West (2014)

Project Management: University of the North West (2014)

Professional Society Affiliations:

Geological Society of South Africa

EMPLOYMENT

09 February 2015 - current:

Savannah Environmental (Pty) Ltd: Soil Science Consultant and Environmental Assessment Practitioner

PROJECT EXPERIENCE

Projects include:

Environmental Impact Assessment (EIA & BA).

- Mkuze Biomass Power Plant, KwaZulu-Natal (for Electrawinds).
- Eureka and Aletta Wind Energy Facilities, Copperton area, Northern Cape (for BioTherm Energy).
- Beaufort West Solar Energy Site, Western Cape (for Energuys).
- Moorreesburg Wind Farm (INCA Energy)
- Grootdrink Solar, Upington area, Northern Cape (for Africoast).

CURRICULUM VITAE JACO VAN DER WALT

Profession : Archaeologist

Specialisation : Cultural Resource Management and Iron Age Archaeology

Work experience : 10 years

SKILLS BASE AND CORE COMPETENCIES

• Archaeological Impact Assessments

- Heritage Impact Assessments
- Heritage Management Plans
- Archaeological research projects
- Cultural resource management
- Phase II cultural resource management projects: archaeological excavations
- Grave relocation
- Project Management

TERTIARY EDUCATION

- 2001, BA Archaeology (Cultural Heritage Tourism), University of Pretoria (SA)
- 2002, BA Archaeology (Hons), University of Witwatersrand (SA)
- Present, Masters Archaeology, University of Witwatersrand (SA)

EMPLOYMENT HISTORY

- 2011 Present: Founder and owner of Heritage Contracts and Archaeological Consulting CC.
 2007 2010: CRM Archaeologist, Managed the Heritage Contracts Unit at the University of the Witwatersrand
- 2005 2007: CRM Archaeologist, Director of Matakoma Heritage Consultants
- 2004: Technical Assistant, Department of Anatomy University of Pretoria
- 2003: Archaeologist, Mapungubwe World Heritage Site Archaeological Rehabilitation Project
- 2001 2002: CRM Archaeologists, For R & R Cultural Resource Consultants, Polokwane
- 2000: Museum Assistant, Fort Klapperkop, Pretoria

SELECTED RELEVANT PROJECT EXPERIENCE

- Archaeological Impact Assessment for the Chronimet Underground Mine, Opencast mine, process plant, Amandelbult, Limpopo Province.
- Archaeological And Palaeontological Impact Assessment For The Updated EMP for Trans Hex Mining Operations, Richtersveld, Northern Cape
- Archaeological Impact Assessment for Sasol's project Mafuta, Lephalale, Limpopo Province.
- Archaeological and Heritage Statement for the Proposed Lg5 Opencast Mining Area, North West Province
- Field supervisor at Mapungubwe (World Heritage Site) Archaeological Rehabilitation project
- Field Director for Iron Age mitigation for chrome Mining by Hernic Ferrochrome, North West Province.
- Field Director phase 2 documentation for The Heads Trust, Heritage Assessment, and monitoring for Lydenburg Ext 38 housing development, Lydenburg, Mpumalanga, principle investigator Prof. T. Huffman
- Field Director phase 2 documentation for Sterkspruit housing development, Lydenburg, Mpumalanga.

- Field Director Middle Iron Age Mitigation For Wesizwe Platinum mining, principle investigator.
- Field Director Phase 2 documentation of Khoni Iron Age Settlement Lydenburg.
- Field Director for the Archaeological Mitigation For Booysendal Platinum Mine, Steelpoort, Limpopo Province.
- Monitoring of heritage sites affected by the ARUP Transnet Multipurpose Pipeline from Jhb to Durban
- Field Director for the Phase 2 mapping of a late Iron Age site located on the farm Kameelbult, Zeerust, North West Province.



ENVIRONMENTAL PLANNING AND DESIGN Jonathan Marshall

Name JONATHAN MARSHALL

Nationality British

Year of Birth 1956

Specialisation Landscape Architecture / Landscape & Visual Impact Assessment / Environmental

Planning / Environmental Impact Assessment.

Qualifications

Education Diploma in Landscape Architecture, Gloucestershire College

of Art and Design, UK (1979)

Environmental Law Short Course, University of KZN (1997)

Professional Chartered Member of the Landscape Institute (UK)

Member of the International Association of Impact

Assessment, South Africa

Certified Environmental Assessment Practitioner of South Africa.

 Languages
 English
 Speaking
 Excellent

- Reading - Excellent - Writing - Excellent

Contact Details Post: PO Box 2122

Westville 3630

Republic of South Africa

Phone: +27 31 2668241, Cell: +27 83 7032995

Key Experience

Jon qualified as a Landscape Architect (Dip LA) at Cheltenham (UK) in 1979. He has been a chartered member of the Landscape Institute UK since 1986. He is also a Certified Environmental Assessment Practitioner of South Africa (2009).

During the early part of his career (1981 - 1990) He worked with Clouston (now RPS) in Hong Kong and Australia. During this period he was called on to undertake visual impact assessment (VIA) input to numerous environmental assessment processes for major infrastructure projects. This work was generally based on photography with line drawing superimposed to illustrate the extent of development visible.

He has worked in the United Kingdom (1990 - 1995) for major supermarket chains including Sainsbury's and prepared CAD based visual impact assessments for public enquiries for new store development. He also prepared the VIA input to the environmental statement for the Cardiff Bay Barrage for consideration by the UK Parliament in the passing of the Barrage Bill.

His more recent VIA work (1995 to present) includes a combination of CAD and GIS based work for a new international airport to the north of Durban, new heavy industrial operations, overhead electrical transmission lines, mining operations in West Africa and numerous commercial and residential developments.

VIA work undertaken during the last eighteen months includes assessments for proposed new mine developments in Ghana and Guinea as well as a proposed extension to the Gateway Shopping Centre in Umhlanga.

Jon Marshall CV

Visual Impact Assessment Experience

- AngloGold Ashanti, Dokyiwa (Ghana) Visual Impact Assessment for proposed new Tailings Storage Facility
 at a mine site working with SGS as part of their EIA team.
- Gateway Shopping Centre Extension (Durban) Visual Impact Assessment for a proposed shopping centre extension in Umhlanga, Durban.
- Kouroussa Gold Mine (Guinea) Visual impact assessment for a proposed new mine in Guinea working with SGS as part of their EIA team.
- Mampon Gold Mine (Ghana) Visual impact assessment for a proposed new mine in Ghana working with SGS as part of their EIA team.
- Telkom Towers Visual impact assessments for numerous Telkom masts in KwaZulu Natal
- Dube Trade Port, Durban International Airport Visual Impact Assessment
- Sibaya Precinct Plan Visual Impact Assessment as part of Environmental Impact Assessment for a major new development area to the north of Durban.
- Umdloti Housing Visual Impact Assessment as part of Environmental Impact Assessment for a residential development beside the Umdloti Lagoon to the north of Durban.
- Tata Steel Ferrochrome Smelter Visual impact assessment of proposed new Ferrochrome Smelter in Richards Bay as part of EIA undertaken by the CSIR.
- Durban Solid Waste Large Landfill Sites Visual Impact Assessment of proposed development sites to the North and South of the Durban Metropolitan Area. The project utilised 3d computer visualisation techniques.
- Hillside Aluminium Smelter, Richards Bay Visual Impact Assessment of proposed extension of the existing smelter. The project utilised 3d computer visualisation techniques.
- Estuaries of KwaZulu Natal Phase 1 Visual character assessment and GIS mapping as part of a review of the condition and development capacity of eight estuary landscapes for the Town and Regional Planning Commission. The project was extended to include all estuaries in KwaZulu Natal.
- Signage Assessments Numerous impact assessments for proposed signage developments for Blast Media.
- Signage Strategy Preparation of an environmental strategy report for a national advertising campaign on National Roads for Visual Image Placements.
- Zeekoegatt, Durban Computer aided visual impact assessment. EDP acted as advisor to the Province of KwaZulu Natal in an appeal brought about by a developer to extend a light industrial development within a 60 metre building line from the National N3 Highway.
- La Lucia Mall Extension Visual impact assessment using three dimensional computer modelling / photo realistic rendering and montage techniques for proposed extension to shopping mall for public consultation exercise.
- Redhill Industrial Development Visual impact assessment using three dimensional computer modelling / photo realistic rendering and montage techniques for proposed new industrial area for public consultation exercise.
- Avondale Reservoir Visual impact assessment using three dimensional computer modelling / photo realistic rendering and montage techniques for proposed hilltop reservoir as part of Environmental Impact Assessment for Umgeni Water.
- Hammersdale Reservoir Visual impact assessment using three dimensional computer modelling / photo realistic rendering and montage techniques for proposed hilltop reservoir as part of Environmental Impact Assessment for Umgeni Water.
- Southgate Industrial Park, Durban Computer Aided Visual Impact Assessment and Landscape Design for AECI.
- Sainsbury's Bryn Rhos Computer Aided Visual Impact Assessment/ Planning Application for the development of a new store within the Green Wedge North of Swansea.
- Ynyston Farm Access Computer Aided Impact Assessment of visual intrusion of access road to proposed development of Cardiff for the Land Authority for Wales.
- Cardiff Bay Barrage Concept Design, Detail Design, Documentation, and Visual Input to Environmental Statement for Cardiff Bay Development Corporation.
- A470, Cefn Coed to Pentrebach Preparation of frameworks for the assessment of the impact of the proposed alignment on the landscape for The Welsh Office.
- Sparkford to Illchester Bye Pass The preparation of the landscape framework and the draft landscape plan for the Department of Transport.
- Green Island Reclamation Study Visual Impact Assessment of building massing, Urban Design Guidelines and Masterplanning for a New Town extension to Hong Kong Island.
- Route 3 Visual Impact Assessment for alternative road alignments between Hong Kong Island and the Chinese Border.
- China Border Link Visual Impact Assessment and initial Landscape Design for a new border crossing at Lok Ma Chau.
- Route 81, Aberdeen Tunnel to Stanley Visual Impact Assessment for alternative highway alignments on the South side of Hong Kong Island.

CURRICULUM VITAE MORNE DE JAGER

Profession : Specialist Environmental Consultant Specialisation : Noise Monitoring, Modelling and Control

Years experience : 12

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

- 1998 2001: Department of Water Affairs and Forestry, Pollution Control Officer
- 2001 2002: EcoSat, Environmental Monitoring, Control and Management
- 2002 present: MENCO / M2 Environmental Connections cc

SELECTED RELEVANT PROJECT EXPERIENCE

 Noise impact assessments for a variety of wind energy facilities across South Africa including, albeit: Gouda Wind Energy Facility, Riverbank Wind Energy Facility, Suurplaat Wind Energy Facility, West Coast One Wind Energy Facility, Rheboksfontein Wind Energy Facility, Flagging Trees, AB's Wind Energy Facility, Dorper Wind Energy Facility, Happy Valley, Deep River Wind Energy Facility, Cookhouse Wind Energy Facility

ABRIDGED CV

Riaan A. J. Robbeson (Pr.Sci.Nat. Ecologist - Botanist



Personal Particulars

Date of Birth: 13th April 1969 **Nationality:** South African

Address: PO Box 77448, Eldoglen, 0171

Cellular Contact:082 3765 933Telephone Contact:012 658 5579email:riaan@bathusi.org

Consulting experience: 16 years

Name of Firm:

Position:

Bathusi Environmental Consulting cc
Member, Specialist Investigator

Years with BEC: 11 years

Profession: Environmental Scientist, Ecologist, Botanist

Education

DEGREE / DIPLOMA	FIELD	INSTITUTION
B.Sc.	Botany and Zoology (main subjects)	University of Pretoria (1987 – 1991)
B.Sc. (Hons)	Botany	University of Pretoria (1992)
M.Sc.	Plant Ecology	University of Pretoria (1994 – 1998)
Visual Basic Programming	Programming	Unischool (University of Pretoria), 1999

Employment Record

POSITION	COMPANY	JOB DESCRIPTION	DURATION
Research Assistant	IPPALONA	Botanical surveys, plant identifications, data capturing, data analysis, report compilation, phytosociological descriptions, Post graduate Masters Publications	1994 - 1998
Member	EkoInfo cc	Project acquisition, site investigations, data analysis, report compilation, GIS mapping, selected peer review for publications and specialist reports	1995 - 1999
	Environmental	Project acquisition, project management, site investigations, data analysis, report compilation, GIS mapping, selected peer review for publications and specialist reports, financial administration	1999 - present

Affiliations

CLASS	IPROFFSCIONAL SOCIETY	YEAR OF REGISTRATION
Pr.Sci.Nat.	South African Council of Natural Scientific Professions (SACNASP) (Ecological Scientist & Botanical Scientist, Reg no: 400005/03)	2003
Professional Member	Grassland Society of Southern Africa	2008
Member	Succulent Society of Southern Africa	
Member	Botanical Society of Southern Africa	

Experience & Project Contributions

Fair and Reasonable Opinions:

YEAR	CLIENT	RESPONSIBILITY	DESCRIPTION
17001	Deneys Reitz Attorneys	Environmental Due Diligence	Determining the fire damage to the structural layers of the vegetation in Sabi Sand Private Game Reserve
2007	Cameron Cross Inc		Investigating findings of GDACE in negative ROD for the proposed Greengate Residential Establishment

Abbreviated list of Current Tasks & Completed Projects:

YEAR	CLIENT	COMMODITY	PROJECT DESCRIPTION
	Mills & Otten	Farming	Biodiversity EIA for the proposed Highveld Mushroom Development on the farm Doornrandje, Gauteng Province
	Envirolink	Utilities	Biodiversity EIA for the proposed Lospersfontein & Groenpunt Prisons Water Treatment Plant Expansions, Free State & North-West Provinces
	Worley Parsons	Energy Utility	Biodiversity EIA for the proposed Rooipunt Solar Power Plant, Northern Cape Province
2012	GCS	Mining	Biodiversity EIA for the proposed Wits Gold Mine, Free State Province
	Worley Parsons	Energy Utility	Biodiversity EIA for the proposed Arriesfontein Photovoltaic Plant, Northern Cape Province
	GCS	Mining	Biodiversity EIA for the proposed Matla Coal Stooping and Open Cast Mine Project, Mpumalanga Province
	Marsh Vikela	Mining	Biodiversity EIA for the Pering Mine, North-West Province
	GCS	Mining	Biodiversity EIA for the proposed Slater Coal Witkop Mine, Free State Province
	GEM Diamonds	Mining	Biodiversity comments on the Site Selection for Letseng Diamond Mine, Lesotho
2011	Solafrica	Scientific	Development of a Biodiversity Offset Programme for the Bokpoort Development
	Lidwala Consulting Engineers	Mining	Hendrina Ash Dam Biodiversity EIA Assessment
	Worley Parsons	Power Utility	Rooipunt Solar Development Biodiversity Scoping Assessment
	Worley Parsons	Scientific	Survey of protected flora species on the

			Humansrus Solar Development
	Cave Clapwijk & Associates	Scientific	Peer review of the biodiversity impact assessment report of the N3 Highway upgrade
	SSI Environmental	Power Utility	Protected Species Survey at the Solar Plant development at Bokpoort, Northern Cape Province
	GCS	Mining	Biodiversity Scoping Assessment of the proposed mining development of the Matla Project, Mpumalanga Province
	GCS	Mining	Biodiversity Baseline Assessment of the proposed mining development at Eloff, Mpumalanga Province
	SSI Environmental	Power Utility	Biodiversity Scoping and EIA Assessments of the proposed Solar Plant Development on the farm Humansrus, Northern Cape Province
	Lidwala Engineers	Mining	Biodiversity Scoping Report for the proposed Hendrina Ash Dam development, Mpumalanga Province
	Momentus Energy	Power Utility	Biodiversity Basic Assessment of the proposed Solar Plant development on the farm Spruitfontein, North-West Province
	Lidwala Engineers	Mining	Biodiversity Screening Report for the proposed Hendrina Ash Dam, Mpumalanga Province
	SSI Environmental	Power Utility	Biodiversity Basic Assessment of the proposed Kudu – Dorstfontein Power Line, Mpumalanga Province
	SSI Environmental	Power Utility	Biodiversity Basic Assessment of the proposed Paulputs – Aggeneys Power Line, Northern Cape Province
	PB Power	Power Utility	Assessment of protected tree species on the proposed Medupi Power Station Water Pipeline and Conveyor Line, Limpopo Province
	GCS	Mining	Assessment of protected tree species on Der Brochen Mine, Mpumalanga Province
	SSI Environmental	Power Utility	Concentrated Solar Thermal Power Plant, Northern Cape Province
	Mills & Otten	Scientific	Peer review of Draft Ecological report for the proposed development of Farm Zwartkop, Gauteng Province
	Arcus Gibb	Power Utility	Floristic walkdown of the approved Watershed- Mmabatho 88kV line, North-West Province
	SSI Environmental	Power Utility	Strategic biodiversity Impact Assessment of the proposed Underground Gasification Plant, Mpumalanga Province
	SSI Environmental	Power Utility	Strategic Biodiversity EIA report for the proposed Matla-Jupiter-Sebenza project, Gauteng Province
	SSI Environmental	Power Utility	Strategic Biodiversity EIA report for the proposed Matla-Jupiter 400kV Lines, Gauteng & Mpumalanga Provinces
	SSI Environmental	Power Utility	Terrestrial Biodiversity EIA report for the proposed Hilltop-Rest Line and Substation, Mpumalanga Province
2010	Kwezi V3 Engineers	Waste	Terrestrial Biodiversity EIA report for the proposed Naledi Landfill Site, North-West Province
	GCS	Mining	Terrestrial Biodiversity EIA report for the proposed Forzando West Underground Mine and

		infrastructure, Mpumalanga Province
Savannah Environmental	Power Utility	Strategic Terrestrial biodiversity EIA report for the proposed Mokopane Integration Project, Limpopo Province
Savannah Environmental	Mining	Strategic Biodiversity EIA for the proposed Medupi Conveyor & Silo, Limpopo Province
SSI Environmental	Power Utility	Floristic Basic Assessment for the Ivory Park – Eskom College 88kV Line rebuild, Gauteng Province
SSI Environmental	Power Utility	Floristic Basic Assessment for the Lulamisa 88kV Line rebuild, Gauteng Province
SSI Environmental	Infrastructure	Floristic Basic Assessment for the proposed Rand Water Pipeline upgrades, Gauteng Province
Bombela CJV	Infrastructure	Ecological monitoring report for ecologically sensitive areas along the Gautrain Construction Route, Gauteng Province
GCS	Mining	Biodiversity Risk Assessment & Baseline biodiversity aspects for the proposed Kangra- Kusipongo Shaft locations, Mpumalanga Province
Marsh Vikela	Housing	Leeuwpoort Biodiversity Impact Assessment, Gauteng Province
Savannah Environmental	Power Utility	Biodiversity EIA assessment of the proposed Apollo-Verwoerdburg 400kV Lines, Gauteng Province
Kwezi V3 Engineers	Power Utility	Ecological EIA report for the proposed Ubertas Substation, Gauteng Province
Savannah Environmental	Power Utility	Red Data flora assessment for the proposed Apollo-Verwoerdburg 400kV Lines, Gauteng Province
Marsh Vikela	Housing	Biodiversity Assessment for the proposed Leeuwpoort Wetland crossing, Gauteng Province
Medupi Power Station	Power Utility	Chairperson for the Medupi Environmental Monitoring Committee (February – April 2010)
Medupi Power Station	Power Utility	Member of the Medupi Environmental Monitoring Committee (2007 – current)
Kwezi V3	Waste	Biodiversity Impact Assessment for the proposed Emfuleni Landfill project, Gauteng Province
Savannah Environmental	Power Utility	Biodiversity EIA report for the proposed Kwagga & Phoebes Substations, Gauteng Province
Savannah Environmental	Power Utility	Biodiversity EIA report for the proposed Kwagga & Phoebes Lines, Gauteng Province
PBA International	Power Utility	Biodiversity EIA report for the proposed Epsilon Substation, North-West Province
SSI Environmental	Power Utility	Strategic Biodiversity Assessment for the proposed Lupini-Lulamisa Lines, Gauteng Province
PBA International	Power Utility	Biodiversity Scoping Assessment for the proposed Mogwase Substation, North-West Province
Marsh Vikela	Scientific	Red Data flora assessment for the proposed Kameeldrift development, Gauteng Province

	Kwezi V3	Power Utility	Honingklip Ecological EIA, Gauteng Province
	Umoyo Wind Projects	Power Utility	Bioregional overview, Eastern Cape Province
	Kwezi V3	Power Utility	Eskom College – Randjesfontein Ecological EIA
	Marsh Vikela	Urban	Kameeldrift Red Data flora assessment
	Savannah Environmental	Power Utility	Mokopane Integration – Ecological EIA
	SSI Environmental	Industrial	Bulldog Projects – Floristic Screening Assessment
	Golder Associates	Infrastructure	Environmental Monitoring of the River Falls Office Park, Gauteng Province
	Mills & Otten	Infrastructure	Environmental Monitoring of the Heritage Hill Pipeline construction process, Gauteng Province
	Marsh Vikela	Infrastructure	Bio-remedial report for the Witkoppen Park, Gauteng Province
	PBA International	Power Utility	Masa Selomo 765kV Lines Ecological EIA
	Mills & Otten	Infrastructure	Bakgatla Ecological EIA
	GCS	Power Utility	Kangra PS Ecological EIA
	Kwezi V3 Engineers	Scientific	Red Data floras assessment for the proposed Doornkloof Reservoir, Gauteng Province
	Savanna Environmental	Power Utility	Kyalami Strengthening
	NuCoal Mining	Monitoring	Environmental monitoring of ecological environment
	SSI	Power Utility	Watershed Sephaku Biodiversity EIA, Mpumalanga Province
	NuCoal	Mining	Klipfontein Biodiversity EIA, Mpumalanga Province
2009	Arcus Gibb	Power Utility	Biodiversity Scoping Assessment for the proposed Mulilo Power Station, Limpopo Province
	GCS	Power Utility	Preliminary Site Selection for the proposed Kangra Power Station, Mpumalanga Province
	GCS	Mining	Biodiversity EIA for the proposed Maquasa West Mine, Mpumalanga Province
	Mills & Otten	Housing	Biodiversity EIA for the proposed Elandsfontein development, Gauteng Province
	Arcus Gibb	Power Utility	Biodiversity Basic Assessment for the proposed Watershed-Mmabatho line, North-West Province
	Arcus Gibb	Mining	Biodiversity Assessment for the proposed Medupi Borrow Pits, Limpopo Province
	Marsh Vikela	Housing	Biodiversity EIA for the proposed Spring Valley Development, Mpumalanga Province
	Iliso Environmental	Industrial	Remedial EMP for the Kaalplaasspruit, Gauteng Province
	PB Power	Power Utility	Environmental Monitoring Committee
	PBA International	Power Utility	Epsilon Substation Biodiversity Scoping Assessment
	Marsh Vikela	Mining	GOPE Diamon Mine, Central Kalahari Game Reserve, Botswana
	SSI Environmental	Power Utility	Vygeboom EMP
	Groundwater Consulting Services	Mining	Kusipongo Biodiversity Screening Assessment
	Iliso Consulting	Development	Kaaplaasspruit Remedial EMP
2008	Savannah Environmental	Power Utility	Mokopane Integration Biodiversity Scoping Investigation
	SSI Environmental	Power Utility	Majuba Combined Cycle Gas Turbine Biodiversity EIA

	Marsh Vikela (PTY) LTD	Mining	Ecological Impact Evaluation of the proposed GOPE Mine, Botswana
	PB Power	Power Utility	Environmental Monitoring Committee (Ecological Division) for the new Medupi Power Station, Lephalale
	PBA International	Power Utility	Ecological Impact Evaluation of the proposed Epsilon Substation, North-West Province
	Woestalleen Colliery	Mining	Development and implementation of ecological monitoring programme since 1996
	Bombela JV	Transport	Implementation of ecological monitoring programme for the new Gautrain Rail development, Gauteng Province
	Kwezi V3 Engineers	Mining	Ecological Impact Evaluation of the proposed Greenfields Expansion Project, Mpumalanga Province
	EkoInfo	Mining	Mmamabula vegetation surveys, Botswana
	Bohlweki Environmental	Power Utility	Ecological Impact Evaluation of the proposed Marathon Delta and Boulders Malelane 132kV lines, Mpumalanga Province
	PBA International	Power Utility	Ecological Impact Assessment of the Matimba – Marang Power lines
	PBA International	Power Utility	Ecological Impact Assessment of the Matimba – Dinaledi Power lines
	PBA International	Power Utility	Ecological Impact Assessment of the Mmamabula – Delta Power lines
	Marsh Vikela	Development	Ecological Impact Assessment of the farm Leeuwpoort
	Bohlweki	Power Utility	Ecological Impact Assessment of the proposed Steelpoort Pumped Storage Scheme
	SiVEST	Development	Ecological Assessment of the Bultfontein Development
2007	SiVEST	Development	Ecological Assessment of the Newmarket Development
	PBA International	Power Utility	Ecological Scoping and Impact Evaluations of the proposed Delta Epsilom Power Lines
	AgriDev International	Development	Ecological Impact Assessment of Golwe
	Bombela JV	Transport	Red Data species location and relocation for the Gautrain Development
	Eko-Info cc	Mining	Floristic Surveys of the proposed Nu-Largo coal mine
	Eko-Info cc	Mining	Floristic Surveys of the proposed Mmamabula coal mine
	Bohlweki	Mining	Floristic Impact Assessment of the proposed Underground Gasification Concept mining
	Bohlweki	Power utility	Biodiversity Impact Assessment of the Matimba B Power Station
	PBA International	Power utility	Biodiversity Scoping assessment of the proposed Matimba Integration
	Digby Wells	Mining	Biodiversity Assessment of the proposed Mareesburg mine
2006 & beyond	Bohlweki	Power utility	Floristic Assessments of the Kabokweni and Kiepersol power lines
Deyona	African EPA	Development	Bryntirion, Paardeplaats, Willows, Simon Vermooten Floristic Assessments
	Eko-Info	Development	Floristic sampling of Lula, Mozambique
	Mills & Otten	Development	Olievenhoutbosch, Brakfontein, Kosmosdal, Blue Hills, Garstfontein Biodiversity

		Assessments
Agricultural Research Council	Research	Management Guidelines and Impact Assessment of Quelea control activities in wetlands, Free State Province
SEF	Research	Floristic sampling of the Tshwane Municipal area
University of Pretoria	Research	Floristic sampling of the Kglalagadi Transfrontier Park, Botswana
Confidential	Development	Biodiversity assessment of selected sites in the Okavango Delta for limited lodge development and hunting concessions, Botswana
GCS	Mining	Ecological investigation of Wildebeestpan, Limpopo Province
GCS	Mining	Ecological investigation of Teutfontein, Limpopo Province
GCS	Mining	Ecological investigation of Aasvoelkrans, Kwa- Zulu Natal Province
GCS	Mining	Ecological investigation of Klipspruit, Kwa-Zulu Natal Province
Northam Platinum Limited	Mining	Development of an alien control programme for the mining area.
SEF	Development	Removal and relocation of medicinal plants from Calswald development site , Gauteng Province
Woestalleen Collier	Mining	Development and installation of a natural wind and visual break between mining and provincial roads
Confidential	Research	Vegetation structure analysis around permanent waterpans in the Chobe National Park, Botswana
Institute for Soil, Climate and Water	Research	Floristic sampling and development of a GIS remote sensing tool for the assessment of natural degradation of vegetation in the Gauteng Province
Institute for Soil, Climate and Water	Research	Floristic sampling and development of a GIS remote sensing tool for the assessment of natural degradation of vegetation in the Mpumalanga Province
University of Pretoria	Research	Botanical sampling of the vegetation of Transkei for compilation of maps and vegetation description, contribution to the current VEGMAP classification series

Key Qualifications

Riaan A.J. Robbeson is an experienced and passionate ecologist, having obtained his Masters degree in Plant Ecology at the University of Pretoria while working as a research assistant on the National Grassland Biome Project. This research included the mapping and description of the vegetation in northern KwaZulu-Natal Province, covering an area of approximately 9,300km². His involvement in specialist environmental studies followed naturally after graduation and he has since 1996 been professionally involved in numerous projects that related to his field of expertise, ranging in size from a few hectares to provincial scale.

Extensive experience has subsequently been obtained on the status and reaction of the natural environment to development and the assessment thereof. In addition to pure scientific investigations, he has also developed and successfully implemented biodiversity monitoring programmes on mining areas. International projects include the countries of Botswana and Mozambique. Project management include the acquisition and management of other specialist investigators and the ecological integration and interpretation of biodiversity data and reports.

On a personal level, Riaan is also an amateur wildlife photographer and is compiling a personal database of photographs of South African wild flowers. He also is a social ultra distance runner and has completed 5 Comrades marathons.

Languages

English: RWS - Excellent Afrikaans: RWS - Excellent

Computer Skills

- MS Word
- MS Excel
- MS Access
- Arcview 3.2 (a)
- Google Earth
- Adobe Photoshop CS & Lightroom 2.6
- Visual Basic Programming

Certification

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

Riaan A.J. Robbeson (Pr.Sci.Nat.)

29th March 2012