

CURRICULUM VITAE (Energy-related projects)

KAREN JODAS

SAVANNAH ENVIRONMENTAL (PTY) LTD

Profession : Environmental Management and Compliance Consultant ;
Environmental Assessment Practitioner

Specialisation : Strategic environmental assessment and advice; project management and co-ordination of environmental projects; environmental compliance advise and monitoring; Environmental Impact Assessment; environmental management; peer review; policy, strategy and guideline formulation; renewable energy projects; water resources management

Work experience : Nineteen (19) years in the environmental assessment and management field

VOCATIONAL EXPERIENCE

Provide technical input for projects in the environmental management field, specialising in strategic evaluation, Environmental Impact Assessment studies, Environmental Management Plans, integrated environmental management, environmental compliance monitoring; peer review of EIA reports and processes, strategy and guideline development, and public participation. Key focus on overall Project Management, integration of environmental studies and environmental processes into larger engineering-based projects, strategic assessment, and the identification of environmental management solutions and mitigation/risk minimising measures.

Undertaking studies requiring all environmental-related disciplines has allowed for considerable experience to be gained in the environmental assessment and management fields. A specialist area of focus is on management and assessment of multi-faceted projects, including electricity generation and transmission projects (with a strong focus on the renewable energy sector), linear developments (roads and power lines), bulk infrastructure and supply (e.g. WTWs, pipelines, landfills), the mining industry, urban, rural and township developments, environmental aspects of IDPs, EMFs, SoERs, as well as environmental planning, development and management.

Working knowledge of environmental legislation, strategies, guidelines and policies. Compilation of the reports for environmental studies are in accordance with the all relevant environmental legislation under the National Environmental Management Act.

SKILLS BASE AND CORE COMPETENCIES

- Nineteen years of experience in the environmental management, impact assessment and compliance fields
- Seventeen years of experience in Project Management - Project management of large environmental assessment and management projects
- Strategic and compliance advise for all aspects of environmental assessment and management
- External and peer review of environmental assessment and compliance reporting as well as EIA processes
- Working knowledge of environmental planning policies, regulatory frameworks and legislation
- Identification and assessment of potential environmental impacts and benefits
- Development of practical and achievable mitigation measures and management plans and evaluation of risk to project execution

- Experienced in environmental compliance advise, monitoring and reporting for construction projects
- Compilation and review of the reports in accordance with all relevant environmental legislation
- Public participation/involvement and stakeholder consultation
- Environmental strategy, policy and guidelines development
- Experienced in assessments for both linear developments and nodal developments
- Key experience in the assessment of impacts associated with renewable energy projects
- Wide range of experience for public and private sector projects
- Completed projects in all nine Provinces of South Africa, as well as Zambia and Lesotho

EDUCATION AND PROFESSIONAL STATUS

Degrees:

- 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

Short Courses:

Water Quality Management, *Potchefstroom University*, 1998
 Environmental Law Course, *Aldo Leopold Institute*, 2002
 WindFarmer Wind Farm Design course, *Garrad Hassan*, 2009

Professional Society Affiliations:

Registered with the South African Council for Natural Scientific Professions as a Professional Natural Scientist: *Environmental Scientist (400106/99)*

Other Relevant Skills:

Xtrack Extreme – Advanced Off-Road Driving Course (2003)

EMPLOYMENT

2006 - Current: Director of *Savannah Environmental (Pty) Ltd*. Independent specialist environmental consultant, Environmental Assessment Practitioner (EAP) and advisor. Primary focus on energy-sector projects.

1997 –2005: Associate of *Bohlweki Environmental (Pty) Ltd*. Environmental Management Unit: Manager; Principle Environmental Scientist focussing on Environmental Management and Project Management.

PROJECT EXPERIENCE

Experience includes projects associated with electricity generation and transmission, wastewater treatment facilities, mining and prospecting activities, property development, and national roads, as well as strategy and guidelines development. Selected projects in the energy and renewable energy sector include:

Strategic and Regional Assessments

- *Regional Assessment for wind energy developments within an identified area on the West Coast of the Western Cape Province (for Eskom Holdings Limited)*
- *Five Regional Assessment for wind energy developments within five identified area across South Africa (for Eskom Holdings Limited)*
- *Part of the Strategic Task Team for the identification of Eskom's future wind farm sites (Wind 1000) (for Eskom Holdings Limited)*
- *Regional Assessment for wind energy developments within an identified area in the De Aar Area of the Northern Cape Province (for juwi Wind)*
- *Strategic Regional Assessment for the Environmental Suitability of Wind Energy Facilities for the entire Western Cape Province (for DEA&DP)*

- *Regional Assessments for wind energy developments within identified areas in the Northern and Eastern Cape, including mapping (for Networx)*

Renewable power generation projects: Wind Energy Facilities

Environmental Impact Assessments and Environmental Management Plans

- *ABs Wind Energy Facility near Indwe, Eastern Cape (for Rainmaker Energy)*
- *Amakhala Emoyeni Wind Energy Facility near Cookhouse, Eastern Cape (for Windlab Developments)*
- *Castle Wind Energy Facility, in De Aar (for Juwi Renewable Energies)*
- *Cookhouse II Wind Energy Facility (for ACED & Tertia Waters)*
- *Dorper Wind Energy Facility near Molteno, Eastern Cape (for Rainmaker Energy)*
- *Elliot Wind Energy Facility (for Rainmaker Energy)*
- *Garob Wind Energy Facility, in Copperton (for Juwi Renewable Energies)*
- *Gouda Wind Energy Facility near Gouda, Western Cape (for VentuSA)*
- *Gunstfontein Wind Energy Facility (for Networx)*
- *Happy Valley Wind Energy Facility, Eastern Cape (for REISA)*
- *Hidden Valley Wind Energy Facility (for ACED)*
- *Hopefield Wind Energy Facility (for Umoya Energy)*
- *Karoo Renewable Wind and PV Solar Energy Facility near Victoria West, Northern & Western Cape (for SARGE)*
- *Pofadder 3x 140MW Wind Energy Facilities, Northern Cape (for Mainstream Renewable)*
- *Riverbank Wind Energy Facility near Wesley, Eastern Cape (for Just Energy)*
- *Sere Wind Energy Facility on the West Coast in the Western Cape (for Eskom Generation)*
- *Springfontein Wind Energy Facility (for Mainstream Renewable)*
- *Stormberg Wind Energy Facility (for Networx)*
- *West Coast One Wind Energy Facility (for Moyeng Energy (Pty) Ltd)*
- *West Coast Wind Energy Facility (for Exxaro)*
- *Wind Energy Facility at Cookhouse, Eastern Cape (for African Clean Energy Developments)*
- *Wind Energy Facility near Britannia Bay, Western Cape (for TerraPower Solutions)*
- *Zen Wind Energy Facility, near Gouda (for VentuSA Energy)*

Basic Assessments for wind monitoring masts

- *Caledon, Worcester, Tulbach Wind Energy Facilities (for SAGIT)*
- *Dorper, ABs, Dobos Wind Energy Facilities (for Rainmaker Energy)*

Compliance Advice

- *Amakhala Emoyeni Wind Energy Facility (for Amakhala Emoyeni)*
- *Amakhala Emoyeni Wind Energy Facility, Environment and Social Action Plan (for Cennergi)*
- *Cookhouse Wind Energy Facility site (for ACED Cookhouse Renewables)*
- *Cookhouse II Wind Energy Facility (for ACED)*
- *Dorper Phase 1 Wind Energy Facility (for Rainmaker Energy)*
- *Gouda Wind Farm (for Aveng / Acciona)*
- *Happy Valley Wind Energy Facility (for VentuSA Energy / EDPR)*
- *Loperberg Wind Farm (for Rainmaker Energy)*
- *Nobelsfontein Wind Energy Facility (for Coria / SARGE)*
- *Nojoli Wind Energy Facility (for ACED)*
- *Oyster Bay Wind Energy Facility (for RES)*

Due Diligence Reporting

- *ESG DD for Loeriesfontein, Khobab and Noupoort Wind Energy Facilities (for Actis)*

Renewable power generation projects: Solar Energy Facilities

Environmental Impact Assessments and Environmental Management Plans

- *5x CSP and 2x PV Solar Energy Facilities, Kenhardt, Northern Cape (for Kotulo Tsatsi)*
- *Blackwood PV Solar Energy Facility, near Kimberley/Boshoff (for VentuSA Energy)*
- *Bosjesmansberg PV Solar Energy Facility, Copperton (for Networx)*
- *Boundary PV Solar Energy Facility (for VentuSA Energy)*
- *De Aar CSP Energy Facility at De Aar, Northern Cape (for African Clean Energy Developments)*
- *De Aar PV Solar Energy Plant (for Solar Capital)*
- *Gihon and Kison PV Solar Energy Facilities (for Networx)*

- Grootdrink (Albany) PV Solar Energy Facility (for Africoast Engineers)
- Gunstfontein PV Solar Energy Facility (for Networx)
- Kabi Kimberley PV facility at DeBeers, Kimberley (Kabi Solar)
- Karoo Renewables PV Solar Energy Facility (for SARGE)
- KaXu CSP Facility near Pofadder, Northern Cape (for Abengoa Solar)
- Kheis Phase 1, 2 & 3 PV Solar Energy Facility (for GeStamp Solar)
- Khi CSP Facility near Upington, Northern Cape (for Abengoa Solar)
- Klipgat PV Solar Energy Facility (for Terra Solar)
- Loeriesfontein/Helios PV Solar Energy Plant (for Solar Capital)
- Naauwpoort PV Solar Energy Facility (for Terra Solar)
- Pofadder 75MW Solar Energy Facility, Northern Cape (for Mainstream Renewable)
- Prieska PV Solar Energy Facility, Prieska (for VentuSA Energy)
- PV Solar Energy Facility near De Aar, Northern Cape (for Solar Capital)
- Ritchie PV Solar Energy Facility (for Solar Capital)
- San Solar PV Solar Energy Facility, Kathu (for VentuSA Energy)
- Sirius (Tungston Lodge) x2 - PV Solar Energy Plants (for Aurora Power Solutions)
- Solar Plant in the Northern Cape Solar at Kathu (Wincanton) (for REISA)
- Solar Plant in the Northern Cape Solar at Sishen (Wincanton) (for VentuSA Energy)
- Stormberg Solar PV Solar Energy Facility (for Networx / Prana Energy)
- Tiger Kloof PV Solar Energy Facility (for Kabi Energy)
- Tiger Solar PV Solar Energy Facility, Northern Cape (for Kabi Energy)
- Upington 2 and 3 CSP Facilities near Upington, Northern Cape (for Abengoa Solar)
- Vaalkop and Witkop PV Solar Energy Facilities, North West (for Kabi Solar)
- Wagnbietjiespan PV Solar Energy Facility near Boshoff, Free State (for VentuSA)
- Wolmaransstad Municipality Solar PV Solar Energy Facility (for BlueWave)
- Xina CSP facility near Pofadder, Northern Cape (for Abengoa Solar)
- Zuurwater PV Solar Energy Facilities (x4) (for Solafrica / BlueWave)

Basic Assessments

- Amandla Welanga and Dida PV Solar Energy Facilities (for Terra Solar)
- Carolusberg PV Solar Energy Facility (for Ilio Energy (SARGE))
- Gosforth Park and Kynoch Rooftop PV Solar Energy (for Building Energy)
- Hibernia 5MW PV Solar Energy Facility (for EA Energy)
- Inkulukelo PV Solar Energy Facility (for Terra Solar)
- Kokerboom and Boabab PV Solar Energy Plants (for Brax Energy)
- Nigramoep PV Solar Energy Plant, Nababeep (for SARGE)
- Noupoot (Kleinfontein and Toitdale) CPV (for Terra Power)
- O'Kiep 1 PV Solar Energy Plant, Springbok (for Ilio Energy (SARGE))
- O'Kiep 2 PV Solar Energy Plant, Springbok (for BluePort Trade 118 (SARGE))
- O'Kiep 3 PV Solar Energy Plant (for Ilio Energy (SARGE))
- PV Solar Energy Plant - Kimberley (for Kabi Energy)
- Slurry PV Solar Energy Facility (for PPC)
- Small projects for PV Solar Energy Facilities (for BlueWave)
- Son Citrus Rooftop PV Solar Energy (for Building Energy)
- Tollie PV Solar Energy Facility (for Terra Solar)
- x2 Southern Farms PV Solar Energy Plants, Augrabies (for Southern Farms)

Compliance

- Bokpoort PV Solar Energy Facility (for Solafrica)
- Kathu II Bid compliance (for Building Energy)
- Kathu PV Solar Energy Facility (for Building Energy / REISA)
- Pofadder and Upington CSP (for Abengoa Solar)
- Prieska PV Solar Energy Facility (for VentuSA)
- Sishen PV Solar Energy Facility phase 1, 75MW (for Aveng / Acciona)
- Xina compliance (for Abengoa Solar)

Screening Studies

- 75MW facilities criteria-based analysis screenings (for BlueWave)
- Allemans, Wonderheuwel, Damfontein, Dida PV Solar Energy Facilities (for Terra Solar)
- Bobididi 5MW PV Solar Energy Facility (for Root 60Four Energy)
- Bosjesmansberg PV Solar Energy Facility, Copperton (for Networx)
- Lephalale PV Solar Energy Facility (for Exxaro)
- Northern Cape 5MW PV Solar Energy Facility, 2nd Stage One (for EDIP)

- Senekal 1 & 2, Pongola and Newcastle PV Solar Energy Facilities (for Building Energy)
- Small projects - PV Solar Energy Facility (x15) (for Building Energy)
- Small projects PV Solar Energy Facility (x3) (for GeoSolar)
- Small scale PV Solar Energy Facility - 2nd Stage One (for BlueWave)
- Small scale PV Solar Energy Facility - 2nd Stage One (for Building Energy)
- Various PV Solar Energy Facilities (for INCA Energy)

Siting Study

- CSP siting study (for Exxaro)

Due Diligence Reporting

- Equator Principles Due Diligence reporting - Kabi Kimberley PV plant (for Enertis Solar)
- Equator Principles Due Diligence reporting - Vaal River Solar 1 PV plant (for Enertis Solar)

Power Generation Projects

Environmental Impact Assessments and Environmental Management Plans

- Ankerlig OCGT to CCGT Conversion project, and the associated 400 kV transmission power line between Ankerlig and the Omega Substation, Western Cape (for Eskom Generation)
- Gourikwa OCGT to CCGT Conversion project, and the associated 400 kV transmission power line between Gourikwa and the Proteus Substation, Mossel Bay (for Eskom Generation)

Basic Assessments

- New raw water reservoir and pipeline for the Medupi Power Station, Limpopo Province (for Eskom Generation)
- Substation for Aggeney's PV facility (for BioTherm Energy)

Screening

- Indwe Power Station (for IPSA)
- IPP Baseload screening (coal) (for Exxaro)

Siting Study

- Siting study for a coal fired power station in the Bethal area (for ISS Global)

Power line projects

Environmental Impact Assessments and Environmental Management Plans

- Steelport Integration Project, Limpopo Province (for Eskom Transmission)
- Kyalami/Midrand Substation and 3 Transmission lines, Gauteng (for Eskom Transmission)

Basic Assessments

- Amakhala Emoyeni Power Line and Kopleegte substation (for Cennergi)
- Cuprum-Burchell; Burchell-Mooidraai power line BAR (Prieska) (for Eskom)
- Garob-Kronos Power Line (for Juwi Renewable Energies)
- Golden Valley Dx-Poseidon line and substation & Golden Valley-Kopleegte power line (for BioTherm Energy)
- Ilanga Lethemba-Hydra 132kV (for Solar Capital)
- Iziduli Emoyeni Substation, Power Line & LA18 (for Windlab)
- Kathu 132kV Power Line (for VentuSA Energy)
- Loeries 2 Power Line (for Mainstream Renewable)
- Loeriesfontein substation and power lines (for Mainstream Renewable)
- Nobelsfontein Wind Substation and Power line (for Coria / SARGE)
- Realignment of Dx lines at Hopefield Wind Energy Facility (for Umoya Energy)
- Rhebokfontein Power Line (for Moyeng Energy (Pty) Ltd)
- Sishen Solar PV Energy Facility 132kV Power line (for Aveng/Vexicom)
- Springfontein Power Line (for Mainstream Renewable)
- Wesley-Peddie / Riverbank Phase 2 Power Line 132 kV (for Just Energy)

CURRICULUM VITAE

Lisa Opperman

Profession : Environmental Consultant at Savannah Environmental
Specialisation : Environmental Management and Geographical Information Systems (GIS)
Years experience : 13 months

KEY RESPONSIBILITIES

- Execution of professional consulting services for a variety of projects
- Environmental Impact Assessment reporting
- GIS mapping
- Permitting reporting
- Public consultation
- Development of project proposals for procuring new work or projects

SKILLS BASE AND CORE COMPETENCIES

- GIS Mapping
- EIA Report Writing
- Conducting of public involvement processes.
- Administrative tasks
- Analysis and manipulation of geographical information and technical experience with the use of ArcGIS.

EDUCATION AND PROFESSIONAL STATUS

Degrees:

B.Sc. (Hons) Environmental Management (2014), North-West University, Potchefstroom.

B.A Psychology, Geography and Environmental Studies (2013), North-West University, Potchefstroom

Professional Society Affiliations:

IAIASa (Membership number: 3719)

EMPLOYMENT

16 February 2015 – Current:

Savannah Environmental (Pty) Ltd: Environmental Assessment Practitioner and GIS consultant

PROJECT EXPERIENCE

Environmental Impacts Assessments

- Basic Assessment Reports for Harmony Gold 3x PV Facilities, Welkom (BBEntropie).
- Environmental Impact Assessment Reports for Buffels PV 1 & Buffels PV 2, near Orkney (Kabi Solar).
- Environmental Impact Assessment Reports for Woodhouse Solar 1 & Woodhouse Solar 2 PV Facilities, near Vryburg (Genesis Eco-Energy Developments).
- Environmental Impact Assessment Report for the Orkney Solar Farm (Genesis Eco-Energy Developments).
- Environmental Impact Assessment Report for the Metals Industrial Cluster near Kuruman (Northern Cape Department of Economic Development and Tourism).
- Environmental Management Programme for the Nxuba Wind Farm (ACED).
- Finalisation of the Final EIA Reports for the Tewa Isitha Solar 1 and Tewa Isitha Solar 2 PV facilities near Upington (AfriCoast Energy).
- Lamberts Bay Wind Farm Screening Assessment Report (Windy World).

GIS Mapping (ArcGIS 10.2)

- The Woodhouse Solar 1 & Woodhouse Solar 2 PV Facilities, near Vryburg, North West Province.
- The Orkney Solar Farm, North West Province.
- The Gunstfontein Wind Energy Facility, Northern Cape Province.
- The proposed Komsberg substation Expansion, Northern Cape.
- The proposed Soetwater switching station, 132kV double circuit overhead power line and ancillaries near Sutherland, Northern Cape.
- The Ilanga 7 and 9 facilities as well as associated infrastructure within the Karoshoek Solar Valley Development, Northern Cape.
- The construction of the Soetwater facility substation complex and ancillaries near Sutherland, Northern Cape.
- The Camco PV, Gauteng Province.
- The Sol Invictus Solar PV Development near Aggeneys, Northern Cape.
- The 132kV power line associated with the Perdekraal Wind Farm, Western Cape Province.
- The 132kV power line and substation associated with the Golden Valley Wind Farm, Eastern Cape Province.
- The Acciona Nxuba temporary concrete tower plant, Eastern Cape.
- The Bon Espirange substation and 132kV overhead power line for the authorised Roggeveld Wind Farm.
- The Gunstfontein switching station and 132kV overhead power line for the proposed Gunstfontein Wind Farm near Sutherland, Northern Cape Province.

CURRICULUM VITAE

GABRIELE WOOD

Profession : Public Participation and Social Consultant
Specialisation : Public Participation Process Implementation
Years experience : 9 years

KEY RESPONSIBILITIES

Specific responsibilities as a Public Participation and Social Consultant include professional execution of public participation consulting for a variety of projects. This includes managing and coordinating public participation processes for Environmental Impact Assessments (EIA).

SKILLS BASE AND CORE COMPETENCIES

- Qualitative and Quantitative Social Research
- Social Assessment (Stakeholder and Social Analysis)
- Public participation process implementation, monitoring and evaluation
- Facilitation (Focus Groups, Community Meetings, Interest Group Meetings, Public Meetings, Public Open Days, Workshops, Forums, Committees, etc.)
- Stakeholder Management
- Community Needs Assessment
- Relocation Facilitation
- Project Administration
- Minute Taking
- Report Writing

EDUCATION AND PROFESSIONAL STATUS

Degrees:

- B. Hons. Anthropology (Cum Laude): University of Johannesburg (2004 – 2005)
- B.A. Psychology: University of Johannesburg (2002 – 2004)

Courses:

- International Association for Public Participation (IAP2) Certificate in Techniques for Effective Public Participation (2015)
- International Association for Public Participation (IAP2) Certificate in Foundations of Public Participation (Planning and Communication for Effective Public Participation) (2015)
- South African Advertising Research Foundation (SAARF) living Standards Measure (LSM) Training (2010).
- Certificate in Focus Group Moderation Skills, Market Research for Africa (2007)
- Prestige Diploma in Public Relations: Allenby Campus Boksburg now Damelin College (2001)

EMPLOYMENT

May 2012 – Current: Savannah Environmental (Pty) Ltd: Public Participation and Social Consultant

March 2007 – April 2012: NMA Effective Social Strategists (Pty) Ltd: Assistant Project Manager : Public Participation and Social Research

January 2005 – March 2007 (Part-time): University of Johannesburg: Department of Anthropology and Development Studies: Student Tutor and Research Assistant

PROJECT EXPERIENCE

Current projects include:

- Abengoa Upington CSP Phase 2 and 3 – EIA (for Abengoa Solar)
- Pofadder Renewable Energy Facilities – EIA (for Mainstream Renewable Power South Africa)
- Cuprum-Burchell and Burchell to Moodraai – BA (for Eskom)
- Wolmaransstad Municipality Solar Energy Facility – EIA (for Bluewave)
- Blackwood Power Line and Substation – BA (for VentuSA Energy)
- Transalloys Coal Fired Power Station – EIA (for Transalloys)
- Castle Wind Energy Facility – EIA (for juwi Renewable Energies)
- Karreebosch Wind Energy Facility – EIA (for G7 Renewable Energies)
- Tatuka PV Solar Energy Facility – EIA (for Eskom)
- Majuba PV Solar Energy Facility – EIA (for Eskom)
- Lethabo PV Solar Energy Facility – EIA (for Eskom)
- Iziduli Power Line and Substation – BA (for Windlab)
- Kathu CSP Watercourse Crossings and Power Line – BA (for GDF Suez)
- Karreebosch Wind Energy Facility – EIA (for G7 Energies)
- SolarReserve Kotulo Tsatsi Energy CSP Facilities – EIA (for SolarReserve & Kotulo Tsatsi Energy)
- Tewa Isitha Solar 1 & 2 PV Energy Facilities – EIA (for Africoast Engineering)
- Byromate Biomass Power Generation Facility – EIA (for Energuys)
- Bloemsmond Solar PV1 & PV2 Energy Facilities – EIA (for Atlantic Energy Partners)
- Buffels Solar 1 & 2 Energy Facilities – EIA (for Kabi Solar)
- Gunstfontein Wind Energy Facility – EIA (for Gunstfontein Wind Farm (Pty) Ltd)
- Woodhouse Solar 1 & 2 Energy Facilities – EIA (for Woodhouse Solar 1 (Pty) Ltd and Woodhouse Solar 2 (Pty) Ltd))
- Ilanga CSP 7, 8 and 9 Solar Facilities – EIA (for Emvelo Eco Projects (Pty) Ltd)
- Kuruman Industrial Cluster – EIA (for Northern Cape Department of Economic Development and Tourism)
- Saldanha Bay Network Strengthening project – EIA (for Eskom SOC Limited)
- 132kV Power Line for the authorised Excelsior Wind Farm (for Amstillinx (RF) (Pty) Ltd)
- Sol Invictus 1 – 4 PV Solar Energy Facilities – EIA (for Cyracraft (Pty) Ltd)

WASTE MANAGEMENT LICENSES

- Integrated NEMA and Waste Management License application for the Thabametsi Coal Fired Power Station, Limpopo
- Integrated NEMA and Waste Management License application for the Umbani Coal Fired Power Station, Mpumalanga
- Integrated NEMA and Waste Management License application for the Transalloys Coal Fired Power Station, Mpumalanga
- Waste Management License application for South Deep for Goldfields, Gauteng
- Waste Management License application for Medupi PS pollution control dams, Limpopo
- Waste Management License application for REDISA Visserhok Tyre Depot, Western Cape
- Waste Management License application for REDISA Witbank Tyre Depot, Mpumalanga
- Integrated NEMA and Waste Management License application for the Tshivhaso Coal-fired Power Plant, Limpopo

CURRICULUM VITAE CANDICE HUNTER

Profession : Social Consultant
Specialisation : Social Impact Assessments (SIA)
Years' experience : 2 years and 2 months

KEY RESPONSIBILITIES

Specific responsibilities as a Social Consultant involve conducting field research; socio-economic surveys; the management and analysis of data; undertaking stakeholder engagement and communication processes; socio-economic baseline data analyses and conducting general social research for a variety of projects. This includes managing and coordinating the Social Impact Assessment (SIA) processes and compiling SIA reports in line with the countries guidelines and legislation.

SKILLS BASE AND CORE COMPETENCIES

- Social Impact Assessments (SIA)
 - EIA Legislation
 - Data gathering and analysis
 - Qualitative and quantitative social research
 - Field research and socio-economic surveys
 - Baseline socio-economic data analyses
 - Stakeholder engagement
 - Public participation process
 - Communication and community facilitation
 - Report writing and review
 - Project administration
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EDUCATION AND PROFESSIONAL STATUS

Degrees:

- » M. A. Environmental Management: University of Johannesburg (2013)
- » B.A. Honours Tourism Development (Cum Laude): University of Johannesburg (2010)

Courses:

- » Advanced Certificate in Social Impact Assessment (SIA) (Cum Laude): University of Johannesburg (2013)
- » Certificate in Global Reporting Initiative (GRI), Sustainability Reporting Process: Environmental & Sustainable Solutions CC (2012)

Publications:

Hunter, C. & Mearns, K. (2015). Assessing the sustainability reporting of selected tourism companies listed on the Johannesburg Stock Exchange (JSE). *African Journal of Hospitality, Tourism and Leisure*, 4(1): 1-18. Publication URL:

http://www.ajhtl.com/uploads/7/1/6/3/7163688/article_51_vol.4_1_2015.pdf

EMPLOYMENT

- » January 2014 – Current: Savannah Environmental (Pty) Ltd: Social Consultant
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- » February 2011 – January 2013: University of Johannesburg: Department of Geography, Environmental and Energy Studies & School of Tourism and Hospitality (STH): Student and Research Assistant.

PROJECT EXPERIENCE

Social Impact Assessment Reports:

- » January 2014: Specialist SIA study for the proposed Gihon Solar Energy Facility & Associated Infrastructure Located near Bela-Bela, Limpopo Province (for Networx SA)
- » March 2014: Specialist social scoping study for the proposed Exheredo Photovoltaic (PV) Solar Energy Facility and associated infrastructure located near Kenhardt, Northern Cape Province (for Kotulo Tsatsi Energy (Pty) Ltd)
- » May 2014: Specialist social scoping study for the proposed Wolmaransstad Municipality Solar Energy Facility and associated infrastructure near Wolmaransstad, North West Province (for Bluewave Capital (Pty) Ltd)
- » July 2014: Specialist SIA study for the proposed Newcastle Solar Energy Facility near Newcastle, KwaZulu Natal (for Building Energy SpA)
- » July 2014: Specialist SIA study for the proposed Pongola Solar Energy Facility near Pongola, KwaZulu Natal (for Building Energy SpA)
- » July 2014: Specialist SIA study for the proposed Senekal 1 Solar Energy Facility near Mkuze, KwaZulu Natal (for Building Energy SpA)
- » July 2014: Specialist SIA study for the proposed Senekal 2 Solar Energy Facility near Mkuze, KwaZulu Natal (for Building Energy SpA)
- » October 2014: Specialist SIA study for the proposed Kotulo Tsatsi Energy Concentrated Solar Power (CSP) Tower Plant 3 facility and associated infrastructure located near Kenhardt, Northern Cape Province (for Kotulo Tsatsi Energy (Pty) Ltd)
- » November 2014: Specialist social scoping study for the proposed Lethabo Solar Energy Facility and associated infrastructure near Sasolburg, Free State Province (for Eskom Holdings (SOC) Limited)
- » November 2014: Specialist social scoping study for the proposed Majuba Solar Energy Facility and associated infrastructure near Amesforort, Mpumalanga Province (for Eskom Holdings (SOC) Limited)
- » November 2014: Specialist social scoping study for the proposed Tutuka Solar Energy Facility and associated infrastructure near Standerton, Mpumalanga Province (for Eskom Holdings (SOC) Limited)
- » December 2014: Specialist social scoping study for the proposed 120MW CPV Facility and associated infrastructure near Upington, Northern Cape Province (for Lambrius Energy (Pty) Ltd)
- » February 2015: Specialist SIA study for the proposed realignment of the N10 to facilitate access to the Ilanga CSP Facility site, east of Upington, Northern Cape Province (for SANRL)
- » March 2015: Specialist social scoping study for the proposed Beaufort West Solar Power Plant 1 near Beaufort West, Western Cape Province (for Beaufort West Solar Company 1 (Pty) Ltd)

Social Impact Assessment Reports:

- » March 2015: Specialist social scoping study for the proposed Beaufort West Solar Power Plant 2 near Beaufort West, Western Cape Province (for Beaufort West Solar Company 2 (Pty) Ltd)
- » March 2015: Specialist social scoping study for the proposed Beaufort West Solar Power Plant 3 near Beaufort West, Western Cape Province (for Beaufort West Solar Company 3 (Pty) Ltd)
- » June 2015: Specialist social scoping report for the proposed Buffels Solar 1 and Solar 2 Solar Energy Facilities, near Orkney, North West Province (for Kabi Solar (Pty) Ltd)
- » July 2015: Specialist SIA study for the proposed Lethabo Solar Energy Facility and associated infrastructure near Sasolburg, Free State Province (for Eskom Holdings (SOC) Limited)
- » July 2015: Specialist SIA study for the proposed Majuba Solar Energy Facility and associated infrastructure near Amesforort, Mpumalanga Province (for Eskom Holdings (SOC) Limited)
- » July 2015: Specialist SIA study for the proposed Tutuka Solar Energy Facility and associated infrastructure near Standerton, Mpumalanga Province (for Eskom Holdings (SOC) Limited)
- » August 2015: Specialist social scoping report for the proposed Paulputs CSP Tower Facility and associated infrastructure, near Pofadder, Northern Cape Province (for Abengoa Solar Power South Africa (Pty) Ltd)
- » September 2015: Specialist SIA study for the proposed AEP Bloemsmond Solar 1 and Solar 2 PV Facilities, near Upington, Northern Cape Province (for AEP Bloemsmond Solar 1 (Pty) Ltd)
- » October 2015: Specialist social scoping report for the proposed Woodhouse Solar 1 and Woodhouse Solar 2 PV Facilities, near Vryburg, North West Province (for Genesis Woodhouse Solar 1 (Pty) Ltd and Genesis Woodhouse Solar 2 (Pty) Ltd)
- » October 2015: Specialist social scoping report for the proposed Saldanha Bay Network Strengthening Project, Western Cape Province (for Eskom Holdings SOC Limited)
- » October 2015: Specialist social scoping report for the proposed Karoshoek Solar Valley Park- Additional CSP Facilities, near Upington, Northern Cape Province (for FG Emvelo (Pty) Ltd)
- » November 2015: Specialist social scoping report for the proposed Sol Invictus Solar Development and associated infrastructure near Aggeneys, Northern Cape Province (for Building Energy (Pty) Ltd)
- » November 2015: Specialist social scoping report for the proposed Orkney Solar Development and associated infrastructure near Orkney, North West Province (for Genesis Orkney Solar (Pty) Ltd)
- » November 2015: Specialist social scoping report for the proposed Gas to Power Plant on a site within the Richards Bay Industrial Development Zone, KwaZulu Natal Province (for Richards Bay Gas to Power 2 (Pty) Ltd)
- » December 2015: Specialist social scoping report for the proposed Noupoot Concentrated Solar Power (CSP) Project and associated infrastructure near Noupoot, Northern Cape Province (for Cresco Energy (Pty) Ltd)
- » December 2015: Specialist social scoping study for the proposed Beaufort West PV 1 and PV 2 and associated infrastructure near Beaufort West, Western Cape Province (for Turquoise Hive Solar (Pty) Ltd)
- » December 2015: Specialist social scoping study for the proposed Metals Industrial Cluster and associated infrastructure near Kuruman, Northern Cape Province (for the Northern Cape Department of Economic Development and Tourism)
- » December 2015: Specialist social scoping study for the proposed Karoshoek Solar Valley Development- Additional CSP Tower Plant, near Upington, Northern Cape Province (for FG Emvelo (Pty) Ltd)

- » December 2015: Specialist social scoping study for the proposed Karoshoek Solar Valley Development- Additional CSP Trough Plant, near Upington, Northern Cape Province (for FG Emvelo (Pty) Ltd)
- » December 2015: Specialist social scoping study for the proposed Ilanga CSP 7 and 8 facilities and associated infrastructure within the Karoshoek Solar Valley Development, near Upington, Northern Cape Province (for Emvelo Eco Projects (Pty) Ltd)
- » December 2015: Specialist social scoping study for the proposed Ilanga CSP 9 facility and associated infrastructure within the Karoshoek Solar Valley Development, near Upington, Northern Cape Province (for Emvelo Eco Projects (Pty) Ltd)
- » January 2016: Specialist social scoping study for the proposed Semonkong Wind Farm near Semonkong, Lesotho (for Sun Clean Energy Technologies (Pty) Ltd)

Other Projects:

- » June 2014: Screening and pre-feasibility report- Site assessment for the proposed Wind Energy Facility near Van Reenen, KwaZulu Natal and Free State Provinces (for 4Green Development SA)
- » October 2015: Environmental, Social and Governance (ESG) Due Diligence- Development of the Hilton Garden Inn by United African Group, Windhoek, Namibia (for Vantage Capital)
- » September 2015 - February 2016: Preparation, Development and Gazetting of the Environmental Implementation Plan (EIP) 2015-2020. (for Gauteng Department of Agriculture and Rural Development)

Curriculum Vitae

GA Botha

Personal Information:

Full names and surname: Gerhardus Alfred Botha
Date of birth: 11 April 1986
Identity number: 860411 5136 088
Postal address: PO BOX 298
BLOEMFONTEIN
9300
Residential address: Eunice House
3 Jock Meiring Street
Park West
BLOEMFONTEIN
9301
Cell phone number: 084 207 3454
Email address: gabotha11@gmail.com
Gender: Male
Nationality: South African citizen
Health: Excellent
Criminal offences: None
Marital status: Married
Bilingualism: Very good – English and Afrikaans
Hobbies:

- Photography
- Hiking and Camping
- Sport and Physical Exercise
- Reading

Educational Background:

1. Secondary Education:

Name of School: Marais Viljoen High School
Highest Standard Passed: National Senior Certificate – Grade 12 (Passed with merit)
Year: 2004

Subjects passed:

Afrikaans First Language	HG
English Second Language	HG
Mathematics	HG
Physical Sciences	HG
Biology	HG
Technical Mechanics	HG

2. Tertiary Education:

Obtained the following degrees from the University of the Free State (UFS) (see Appendix A for copies of degrees):

- **Baccalaureus Scientiae [B.Sc]** degree majoring in Zoology and Botany.
- **B.Sc Honours degree** majoring in Botany (Vegetation Ecology) with the following thesis theme:
“Phytosociological study of a section of the panhandle of the Okavango Delta, Botswana.”
Other subjects: Ecology, Limnology and Wildlife Management
- Currently completing a **M.Sc degree** in Botany (Vegetation Ecology) with the following thesis theme:
“Phytosociological study of a fossil river (Nxamaseri) connected to the panhandle of the Okavango Delta, Botswana.”

3. Short Courses:

- Attended the following UFS (University of the Free State) accredited courses (See Appendix B for copy of certificate):
 - **Wetland Management** (ecology, hydrology, biodiversity and dileation)
 - **Introduction to GIS & GPS** (Code: GISA 1500S).

Professional Society Affiliations:

- The South African Council for Natural Scientific Professions: Pr. Sci. Nat. Reg. No. 400502/14 (Botany and Ecology).

Employment

Position: Environmentalist and Vegetation Ecologist
Employer: Envioworks
Duration: January 2010 – December 2012

Position: Environmentalist and Vegetation Ecologist
Employer: GreenMined (Pty) LTD
Duration: On contract basis: January 2012 – current date.

Position: Environmentalist and Vegetation Ecologist
Employer: Eco-Care Consultancy (Pty) LTD
Duration: On contract basis: January 2012 – current date.

Position: Ecologist
Employer: Savannah Environmental (Pty) LTD
Duration: On contract basis: January 2014 – current date.

The Performance Areas for Envioworks were as follows:

1. Environmental Impact Management

RESPONSIBILITIES

- ❖ Conduct and coordinate Environmental Impact Assessments (EIA).
- ❖ Environmental Monitoring and Auditing.
- ❖ Compile Environmental Management Plans.
- ❖ Environmental Management during construction (ECO).
- ❖ Run Public Participation Processes.

2. Mining Impact Management

RESPONSIBILITIES

- ❖ Compile Environmental Management Impact Reports (EMPR).

3. Reclamation Ecology

RESPONSIBILITIES

- ❖ Compile Wetland Rehabilitation Reports.
- ❖ Compile Vegetation Rehabilitation/Reclamation Reports.
- ❖ Conduct alien vegetation species management and compile eradication plans.
- ❖ Conduct Search & Rescue of Flora and Fauna.
- ❖ Compile Fire Management Plans.
- ❖ Compile Conservation Management Plans.

4. Game and Veld Management

RESPONSIBILITIES

- ❖ Compile Business and Management Plans for the keeping of large predators.
- ❖ Determining of carrying capacity.
- ❖ Conduct and facilitate agricultural feasibility studies.

General Competencies & Experience:

1. Proven track record in project management

Worked as a Project Manager for a number of projects including the following:

- Agricultural Potential and Pre-Feasibility Study for Maluti FET College on a farm near Harrismith.
- ECO Manager for the laying of optic fiber cables within the road reserve of the N1 between Bloemfontein and Beaufort West.

2. Negotiation skills

As an environmental practitioner I had to continuously convince non-willing participants of environmental matters. In working with authorities verbal negotiation is also a necessary skill I have obtained.

3. Conflict Resolution

Almost on a daily basis, an environmental practitioner faces conflict. Sometimes as a part to the conflict or as a mediator. This has taught me to be able to handle different people with different interest and points of view.

4. Computer Skills

I am quite comfortable with most software packages and have a keen interest in learning future software packages.

5. Environmental work relating experiences.

- I have successfully compiled a number of EIA's, EMP's etc.
- I have conducted various Vegetation and Ecological Studies in various regions.
- I've managed a research team during an Agricultural Potential and Pre-Feasibility Study for Maluti FET College.
- I also took part in the research itself for the above mentioned project (my "leg" of the project comprised out of the vegetation study, carrying capacity study and veld management recommendations).
- I have a thorough experience of ECO work which include:
 - ECO work for the refurbishment of a 22kV line between Edenburg and Gariiep.
 - ECO work for the laying of optic fiber cables within the road reserve of the N1 from Bloemfontein to Laingsburg.
 - ECO work for the construction of a 22kV line in the Vredefort Dome.

6. Experience in working in sensitive and unique areas.

I have conducted vegetation studies and other environmental projects in various sensitive habitats including vegetation sensitive areas such as:

- Agulhas National Park
- Magalies Mountain Region
- Beaufort West / Laingsburg Region – ECO work, Search and Rescue as well as a Vegetation Rehabilitation Plan,
- Daveyton Region - EIA and Vegetation Study in an area closely associated with the sensitive Blesbokspruit Wetland System,
- West Coast Region (Melkbosstrand, Yzerfontein, Darling & Atlantis) - Writing of EIA Report for the laying of optic fiber. I also accompanied Dr. David J. McDonald during the Vegetation Survey.
- Drakensberg Region - Vegetation study as well as Search and Rescue for a proposed resort development near the uKhahlamba Drakensberg Park.
- Vredefort Dome (UNESCO World Heritage Site) – ECO work for the construction of a 22kV Power Line (Work include basic Vegetation Study, Search and Rescue of conservation worthy species etc.),

Curriculum Vitae 2015

- Ecological Survey for a proposed Eskom powerline located within a section of the Sekhukhuneland Centre of Plant Endemism,
- Kriel and Emalaheni Regions - Ecological Studies and Wetland Delineation within areas containing important and sensitive wetlands,
- Scottburgh Region – Vegetation study within the Critically Endangered; Interior South Coast Grassland Ecosystem.
- Okavango Delta – See Tertiary Education (B.Sc Honours & M.Sc).

7. Other work relating experiences.

Excursions:

The following excursions were undertaken together with the faculties mentioned from the University of the Free State.

- De Hoop Nature Reserve together with die Department of Zoology in 2007, and the Department of Plant Sciences in 2008.
- Department of Entomology excursion to Hogsback in 2007.
- Excursion to the Okavango Delta in June/July 2006 and June and December of 2008 as part of a research team from the Department of Zoology.
- Wildlife management excursion to Twee Riviere together with Professor Nico Smit.
- Accompanied Professor Johan du Preez on numerous occasions to Namibia, Botswana and Zimbabwe during research conducted there.

Tutorial:

I am passionate about ecology and enthusiastic about sharing my knowledge with others. I have good people skills and the ability to communicate effectively in an educational environment of which the following serves as proof:

- Practical laboratory assistant in service of the Department of Zoology from 2007 to 2009.
- Practical laboratory assistant in service of the Department of Plant Sciences in 2008 and 2009.
- Presented interactive information sessions to Bloemfontein school learners on National Arbour Day.

Other (holiday jobs):

- Printing company: Invisible Card Company
Mr D Smart
Cell: 082 377 5010
- Vehicle service station: Supercraft Service Centre
Mr A Meyer
Cell: 083 307 1521

References:

1. Christine Fouché
Manager: GreenMined (Pty) LTD
Cell: 084 663 2399
2. Professor J du Preez
Senior lecturer: Department of Plant Sciences
University of the Free State
Cell: 082 376 4404

APPENDIX A

COPIES OF DEGREES

UNIVERSITEIT
VAN DIE
VRYSTAAT



UNIVERSITY
OF THE
FREE STATE

HIERMEE WORD VERKLAAR DAT DIE GRAAD THIS IS TO CERTIFY THAT THE DEGREE

Baccalaureus Scientiae

TOEGEKEN IS AAN
HAS BEEN CONFERRED UPON

BOTHA, Gerhardus Alfred

NADAT AAN DIE STATUTE EN REGULASIES VAN IN ACCORDANCE WITH THE STATUTES AND
DIE UNIVERSITEIT VOLDOEN IS. AS BEWYS REGULATIONS OF THE UNIVERSITY. AS
DAARVAN PLAAS ONS ONS ONDERSKEIE WITNESS OUR RESPECTIVE SIGNA-
HANDTEKENINGE EN DIE SEËL VAN DIE TURES AND THE SEAL OF THE
UNIVERSITEIT HIERONDER. UNIVERSITY BELOW.

ENDOSSEMENT: DIERKUNDE
ENDORSEMENT: ZOOLOGY

WAARNEMENDE VISEKANSELIER/
ACTING VICE-CHANCELLOR



DEKAAN/DEAN

REGISTRATEUR/REGISTRAR

BLOEMFONTEIN
2009-04-23
2005005364

UNIVERSITEIT
VAN DIE
VRYSTAAT



UNIVERSITY
OF THE
FREE STATE

HIERMEE WORD VERKLAAR DAT DIE THIS IS TO CERTIFY THAT THE

Baccalaureus Scientiae Honores
in PLANTKUNDE
in BOTANY

TOEGEKEN IS AAN
HAS BEEN CONFERRED UPON

BOTHA, Gerhardus Alfred

NADAT AAN DIE STATUTE EN REGULASIES VAN
DIE UNIVERSITEIT VOLDOEN IS, AS BEWYS
DAARVAN PLAAS ONS ONS ONDERSKEIE
HANDTEKENINGE EN DIE SEël VAN DIE
UNIVERSITEIT HIERONDER.

IN ACCORDANCE WITH THE STATUTES AND
REGULATIONS OF THE UNIVERSITY, AS
WITNESS OUR RESPECTIVE SIGNA-
TURES AND THE SEAL OF THE
UNIVERSITY BELOW.


VERKANSERSERVICE-CHANCELLOR




WAARNEMENDE OORWAGTING DEEN


DIREKTEUR: AKADEMIESE STUDENTEDIENSTE
DIRECTOR: STUDENT ACADEMIC SERVICES

REGISTRASIE
2018/05/18
2109075364

APPENDIX B

OTHER CERTIFICATES

SACNASP

South African Council for Natural Scientific Professions

herewith certifies that

Gerhardus Alfred Botha

Registration number: 400502/14

is registered as a

Professional Natural Scientist

in terms of section 20(3) of the Natural Scientific Professions Act, 2003
(Act 27 of 2003)

in the following field(s) of practice (Schedule I of the Act)

Ecological Science

28 January 2015

Botanical Science

19 November 2014



28 January 2015

Pretoria

President

Executive Director

UNIVERSITY OF THE
FREE STATE
UNIVERSITEIT VAN DIE
VRYSTAAT
YUNIVESITHI YA
FREISTATA



UFS·UV
NATURAL AND
AGRICULTURAL SCIENCES
NATUUR- EN
LANDBOUWETENSKAPPE

This is to certify that

Gerhard Botha

has successfully completed a

Wetlands Management: Introduction and
Delineation Short Course

4 – 8 November 2013

Course Presenter:

Mr. Piet-Louis Grundling

Prof. M.T. Seaman

Director: Centre for
Environmental Management





CERTIFICATE OF ATTENDANCE | BYWONINGSERTIFIKAAT

This is to certify that | Hiermee word gesertifiseer dat

GA Botha

attended a Short Learning Programme (five days) | 'n Kort Leerprogram (vyf dae),
presented by the Centre for Environmental Management, | aangebied deur die Sentrum vir Omgewingsbestuur,
University of the Free State, | Universiteit van die Vrystaat,
during the period 14 to 18 July 2014. | vanaf 14 tot 18 Julie 2014 bygewoon het.

INTRODUCTION TO GIS & GPS | INLEIDING TOT GIS & GPS

Code | Kode

GISA1500S

CREDITS: 4* | KREDIETE: 4*
NQF LEVEL: 5 | NKR-VLAK: 5

CONTENT OF THE SHORT LEARNING PROGRAMME

History and theory of GIS and GPS
Spatial data structures
Spatial data symbolisation, analysis and interpretation
Map design

INHOUD VAN DIE KORT LEERPROGRAM

Geskiedenis en teorie van GIS en GPS
Ruimtelike datastrukture
Simbolisering, ontleding en interpretasie van ruimtelike data
Ontwerp van kaarte

LEARNING OUTCOMES

The attendee is able to:
Understand key terms, facts, principles and theories
Apply techniques to represent spatial data
Solve problems using relevant GIS and GPS technology
Access, process and manage spatial data sheets
and present spatial data in the form of maps

LEERUITKOMSTE

Die deelnemer is in staat om:
Sleutel terme, beginsels en teorieë te begryp
Tegnieke toe te pas om ruimtelike data voor te stel
Probleme op te los met behulp van toepaslike GIS en GPS tegnologie
Ruimtelike datavelle te bekom, verwerk en bestuur
en ruimtelike data in die vorm van kaarte voor te stel

Prof. NJL Heideman
Dean / Dekaan

Me. MF Avenant
Programme Director / Programdirekteur

23 July 2014
Bloemfontein



Certificate number/Sertifikaatnommer: GISA1500S013

*Not credit-bearing towards a UFS qualification/module/Nie-kredietdraend tot 'n UV-kwalifikasie/module nie

*Recognition is hereby given to
Hiermee word erkenning verleen aan*

GA Botha

*for excellent academic achievement
vir voortreflike akademiese prestasie*



Dekaan

23 April 2009

Datum



UNIVERSITEIT VAN DIE VRYSTAAT
UNIVERSITY OF THE FREE STATE
YUNIVESITHI YA FREISTATA



Simon Todd Consulting

P.O.Box 71
Nieuwoudtville
8180

Simon.Todd@uct.ac.za
Grazing.Guidelines@gmail.com

H: 027 218 1276
C: 082 3326 502

SUMMARY OF EXPERTISE: SIMON TODD

- Profession: Ecological Consultant
- Specialisation: Plant & Animal Ecology
- Years of Experience: 15 Years

Skills & Primary Competencies

- Research & description of ecological patterns & processes in Fynbos, Succulent Karoo, Nama Karoo, Thicket, Arid Grassland and Savannah Ecosystems.
- Ecological Impacts of land use on biodiversity
- Vegetation surveys & degradation assessment & mapping
- Long-term vegetation monitoring
- Faunal surveys & assessment.
- GIS & remote sensing

Tertiary Education:

- 1992-1994 – BSc (Botany & Zoology), University of Cape Town
- 1995 – BSc Hons, Cum Laude (Zoology) University of Natal
- 1996-1997- MSc, Cum Laude (Conservation Biology) University of Cape Town

Employment History

- 1997 – 1999 – Research Scientist (Contract) – South African National Biodiversity Institute
- 2000-2004 – Specialist Scientist (Contract) - South African National Biodiversity Institute
- 2004-2007 – Senior Scientist (Contract) – Plant Conservation Unit, Department of Botany, University of Cape Town
- 2007 Present – Senior Scientist (Associate) – Plant Conservation Unit, Department of Botany, University of Cape Town.

Experience Specific to the Current Proposal

- Conducted a large number of specialist assessments of wind energy facilities, distributed widely across South Africa and including sites in similar environments to the current study including several sites along the Mossel Bay – Gouritz coastline.
- Provided more than 10 full EIA assessments of wind energy facilities ranging from small developments of less than 20 turbines to very large projects in excess of 500 turbines and 50 000 ha.
- Worked on several wind energy facilities in areas with highly endangered species such as Riverine Rabbits and van Zyl's Golden Mole, which have required specific and specialized attention.
- Extensive experience in renosterveld vegetation types, as occur at the site. Currently supervising a UCT PhD student working on Renosterveld management in the Overberg region.

General Experience & Expertise

- Conducted a large number of fauna and flora specialist assessments distributed widely across South Africa.
- Extensive experience in the field and exceptional level of technical expertise, particularly with regards to GIS capabilities which is essential with regards to producing high-quality sensitivity maps for use in the design of final project layouts.
- Strong research background which has proved invaluable when working on several ecologically sensitive and potentially controversial sites containing some of the most threatened fauna in South Africa.
- Published numerous research reports as well as two book chapters and a large number of papers in leading scientific journals dealing primarily with human impacts on the vegetation and ecology of South Africa.
- Maintain several long-term vegetation monitoring projects distributed across Namaqualand and the karoo.
- Guest lecturer at two universities and have also served as an external examiner.
- Reviewed papers for more than 10 international ecological journals.
- Past chairman and current committee member of the Arid Zone Ecological Forum.
- SACNASP registered as a Professional Natural Scientist, (Ecology) No. 400425/11.

A selection of recent work is as follows:

Specialist Assessments:

Bitterfontein Solar Plant - Fauna & Flora Specialist Assessment. Specialist Report for Cape EAPrac. 2012.

Beaufort West Solar Facility, Erf 7388 - Fauna & Flora Specialist Assessment. Specialist Report for Cape EAPrac. 2012.

Plant Sweeps on Portion 2 of the Farm Demaneng 546, Kuruman District, Northern Cape Province for SA Manganese. 2011.

Proposed Olyven Kolk Solar Power Plant, Northern Cape: Botanical and Faunal Specialist Assessment. Specialist Report for Environmental Resources Management (ERM). 2011.

Klawer Wind Farm: Ecological and Biodiversity Assessment: Terrestrial Vertebrate Fauna & Botanical Specialist Study. Specialist Report for Environmental Resources Management. 2011.

Witberg Wind Farm: Ecological and Biodiversity Assessment: Terrestrial Vertebrate Fauna & Botanical Specialist Study. Specialist Report for Environmental Resources Management. 2011.

Lambert's Bay Wind Farm: Ecological and Biodiversity Assessment: Terrestrial Vertebrate Fauna & Botanical Specialist Study. Specialist Report for Environmental Resources Management. 2011.

Environmental Impact Assessment: Terrestrial Ecology Specialist Study for the Proposed Establishment of a Renewable Energy Facility near Sutherland, Western and Northern Cape Provinces. Specialist Report for Environmental Resources Management. 2011.

Ecological Scoping & Baseline Study. Vleesbaai Wind Park Development. Vleesbaai Independent Power Producers, ERM 2011.

Environmental Impact Assessment: Terrestrial Ecology Specialist Study for the Proposed Establishment of a Renewable Energy Facility near Beaufort West, Western Cape Province. Specialist Report for Environmental Resources Management. 2010.

Environmental Impact Assessment: Terrestrial Ecology Specialist Study for the Proposed Establishment of a Renewable Energy at Konstabel, Western Cape Province. Specialist Report for Environmental Resources Management. 2010.

Environmental Impact Assessment: Terrestrial Ecology Specialist Study for the Proposed Establishment of a Renewable Energy Facility at Perdekraal, Western Cape Province. Specialist Report for Environmental Resources Management. 2010.

Environmental Impact Assessment: Terrestrial Ecology Specialist Study for the Proposed Establishment of a Renewable Energy Facility near Victoria West, Western and Northern Cape Provinces. Specialist Report for Environmental Resources Management. 2010.

Research Reports & Peer Reviewed Publications:

Todd, S.W. 2010. Vegetation and Plant Communities Associated with the Tillite and Dolerite Renosterveld Types of the Avontuur Conservation Area, Nieuwoudtville, South Africa. DRYNET.

- Todd, S.W., Milton, S.J., Dean, W.R.J. Carrick, P.J. & Meyer, A. 2009. Ecological best Practice Guidelines for the Namakwa District. The Botanical Society of South Africa.
- Todd, S.W. 2009. Field-Based Assessment of Degradation in the Namakwa District. Final Report. Mapping Degradation in the Arid Subregions of the BIOTA South Transect. SANBI.
- Todd, S.W. 2009. A fence-line in time demonstrates grazing-induced vegetation shifts and dynamics in the semi-arid Succulent Karoo. *Ecological Applications*, 19: 1897–1908.
- Todd, S.W. 2007. Characterisation of Riparian Ecosystems. D14 of The WADE Project. Floodwater Recharge of Alluvial Aquifers in Dryland Environments. *GOCE-CT-2003-506680- WADE*. Sixth Framework Programme Priority 1.1.6.3 Global Change and Ecosystems.
- Todd, S.W. 2006. Gradients in vegetation cover, structure and species richness of Nama-Karoo shrublands in relation to distance from livestock watering points. *Journal of Applied Ecology* 43: 293-304.
- Benito, G., Rohde, R., Seely, M., Külls, C., Dahan, O., Enzel, Y., **Todd, S.** Botero, B., Morin, E., Grodek, T., Roberts, C. 2010. Management of Alluvial Aquifers in Two Southern African Ephemeral Rivers: Implications for IWRM. *Water Resources Management*, 24:641–667.
- Hahn, B.D., Richardson, F.D., Hoffman, M.T., Roberts, R., **Todd, S.W.** and Carrick, P.J. 2005. A simulation model of long-term climate, livestock and vegetation interactions on communal rangelands in the semi-arid Succulent Karoo, Namaqualand, South Africa. *Ecological Modelling* 183, 211–230.
- Malgas, R.R., Potts, A.J., Oetl , N.M., Koelle, B., **Todd, S.W.**, Verboom G.A. & Hoffman M.T.. 2010. Distribution, quantitative morphological variation and preliminary molecular analysis of different growth forms of wild rooibos (*Aspalathus linearis*) in the northern Cederberg and on the Bokkeveld Plateau. *South African Journal of Botany*, 76, 72-81.
- Mills, A., Fey, M., Donaldson, J.D., **Todd, S.W.** & Theron, L.J. 2009. Soil infiltrability as a driver of plant cover and species richness in the semi-arid Karoo, South Africa. *Plant and Soil* 320: 321–332.
- Rahlao, J.S., Hoffman M.T., **Todd, S.W.** & McGrath, K. 2008. Long-term vegetation change in the Succulent Karoo, South Africa following 67 years of rest from grazing. *Journal of Arid Environments*, 72, 808-819.
- Hoffman, M.T. & **Todd, S.W.** 2010. Using Fixed-Point Photography, Field Surveys, And Gis To Monitor Environmental Change: An Example From Riemvasmaak, South Africa. Chapter In *Repeat Photography: Methods And Applications In The Natural Sciences*. R.H. Webb, Editor. Island Press. In Press.

**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 Booyendal 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.

**RESUME
OF
BLAIR ANTHONY ZOGHBY**

Personal details	
Name	Blair Anthony Zoghby
Date of birth	8 July 1988
Citizenship	South Africa and The Netherlands
Address	
Home	113 9 th Street Linden Johannesburg 2195 South Africa
Contact details	
Mobile	+27 72 227 5191
Home	+27 11 782 4502
Fax	+27 11 388 8583
E-mail	blair.zoghby@gmail.com
Education and qualifications	
2006	De La Salle Holy Cross College (Matric)
2008 - 2010	<p>University of the Witwatersrand School of Geography, Archaeology and Environmental Studies Bachelor of Arts (Earth Sciences) with majors in:</p> <ul style="list-style-type: none"> • <i>Geography</i> <ul style="list-style-type: none"> ○ <i>Fundamentals of Conservation of Biogeography (81%)</i> ○ <i>GIS and Remote Sensing (80%)</i> ○ <i>Advanced Atmospheric Sciences (70%)</i> ○ <i>Climate and Environmental change (74%)</i> • <i>Archaeology III (66%)</i> <p>Awards</p> <ul style="list-style-type: none"> • <i>Archaeology: Best Student in Second Year</i> • <i>P D Tyson Climatology Award for Best Student in Third Year</i>
2011	<p>University of the Witwatersrand School of Geography, Archaeology and Environmental Studies Bachelor of Science with Honours in Geography and Environmental Studies with the following subjects:</p> <ul style="list-style-type: none"> • <i>Animal Behaviour and Ecology (85%)</i> • <i>Conservation of Biogeography (70%)</i> • <i>Advanced GIS and Remote Sensing (75%)</i> • <i>Climate Change (75%)</i> <p>Honours Research Project "Avifaunal responses to vegetation characteristics around pans of the Makuleke Ramsar Wetland Site, Kruger National Park."</p>
2012 - 2015	<p>University of Cape Town Department of Zoology Percy FitzPatrick Institute of African Ornithology Master of Science in Zoology by dissertation</p> <p>Masters Research Project "Fine-scale movement and habitat use of the Southern Ground-Hornbill <i>Bucorvus leadbeateri</i>"</p>

Other relevant courses and qualifications	
2004	Sappi Brett Bird Identification course
2008	Field Guides Association of Southern Africa (FGASA) Level 1 theory
2008	Wilderness First Aid level 1
2009	Field Guides Association of Southern Africa (FGASA) Level 1 practical assessment. Competent to guide in Sabi Sands and surrounding game reserves of the Greater Kruger National Park
2009	Advanced Rifle Handling theory and practical
2009	South African Marine Safety Association (SAMSA) inland waters watercraft skipper
2009	Registered as Nature Site Guide with DEAT
2011	Field Guides Association of Southern Africa (FGASA) Savanna Biome Specialist Bird Guide
Relevant experience	
2004 - 2015	SANParks Honorary Rangers Birding events in Kruger National Park at Lower Sabie, Shingwedzi, Olifants and Satara camps: <i>Responsibilities included:</i> <ul style="list-style-type: none"> • <i>Guest and activity logistics</i> • <i>Birding expert and guide: 2009 - 2015</i>
2008 & 2009	South African National Parks Scientific Services: Biodiversity surveys in the Kruger National Park (Skukuza) from 1 December 2008 to 31 January 2009. <i>Responsibilities included:</i> <ul style="list-style-type: none"> • <i>Birding surveys</i> • <i>Vegetation condition assessments</i> • <i>Capturing and gathering relevant data on rodents, snakes, small reptiles, insects, frogs etc.</i> • <i>Recording of data and storing of specimens</i>
2010 - 2015 (various times)	Savanna Private Game Reserve (Sabi Sands): Ranger / Guide. <i>Responsibilities included:</i> <ul style="list-style-type: none"> • <i>Leading game drives with guests</i> • <i>Leading game walks and acting as back-up rifle on trails</i> • <i>Sharing of knowledge with guests</i> • <i>Hosting dinners with guests</i> • <i>Vehicle, diesel, maintenance and general lodge activities</i>
2011	Kruger National Park (northern) Makuleke Concession on Limpopo / Luvuvhu floodplain <i>Honours research project fieldwork, data gathering and analysis including:</i> <ul style="list-style-type: none"> • <i>Birding transects</i> • <i>Fixed point birding sight and sound surveys</i> • <i>Vegetation diversity and structure assessments</i>

2011	Kgalagadi Transfrontier Park: <i>Participated in reconnaissance with SANParks staff and Honorary Rangers to map out an ecologically sensitive cycle route down the Nossob River for a future adventure cycle event.</i>
2011	University of Witwatersrand Tutor in the following subject: <ul style="list-style-type: none"> • <i>GIS for third year students</i>
2012 - 2014	Greater Kruger National Park Primarily in the Klaserie, Timbavati and surrounding game reserves <i>Masters research project fieldwork, data gathering and analysis:</i> <i>This study has the following overarching aims:</i> <ol style="list-style-type: none"> 1. <i>To gain a scientific understanding of the fine-scale movement and habitat use patterns of Southern Ground-Hornbills.</i> 2. <i>To use this knowledge to facilitate the reintroductions of ground-hornbills into areas previously occupied by the species.</i> <i>The data gathered includes group composition, nest parameters and reproductive performance as well as vegetation characteristics. Certain ground-hornbill groups carry satellite transmitters, transmitting positional data hourly. This data as well as data from untagged birds is overlaid on a detailed vegetation map of the area to assess daily and seasonal patterns of habitat use and will be used to guide reintroduction programmes in terms of identifying optimal habitat mosaics.</i>
2012 - 2013	Endangered Wildlife Trust Carnivore Conservation Project Field Officer: Kruger National Park Wild Dog Project (North) <i>Responsibilities included:</i> <ul style="list-style-type: none"> • <i>Assessing the threats to Wild Dogs within and along the western boundary of the park</i> • <i>Effect of human interaction and communities on the behavioural patterns of African wild dogs</i> • <i>Collecting primary and secondary data on Wild Dogs north of the Olifants River</i> • <i>Managing database</i> • <i>Report writing</i> • <i>Liaising with park staff and EWT conservation managers</i> • <i>Raising awareness about the project and the species</i>
2013 - 2014	Savannah Environmental Ecologist <i>Responsibilities included:</i> <ul style="list-style-type: none"> • <i>Acted as the in-house faunal specialist, with specific applications in avifauna and mammals</i> • <i>Conducted baseline and specialist biodiversity surveys in the field, as well as on-going monitoring programmes (including wind farm monitoring)</i> • <i>Report writing throughout the Environmental Impact Assessment process, as well as Environmental Management Plans</i>

2015 - present	Simon Todd Consulting Specialist Terrestrial Ecologist <i>Responsibilities include:</i> <ul style="list-style-type: none"> • <i>Conducting baseline and specialist biodiversity surveys in the field, as well as on-going monitoring programmes</i> • <i>Conducting specialist research studies (specifically on avifauna and mammals)</i> • <i>Report writing throughout the Environmental Impact Assessment process, as well as Environmental Management Plans</i>
Other work experience	
2005	Full Stop Restaurant: Waiter
2006 - 2010	Service Station Restaurant: Waiter
2007	Keswick Country House and Lodge, Lake District, UK: Worked from May to October during GAP year after school. <i>Responsibilities included:</i> <ul style="list-style-type: none"> • <i>Bar functions- serving, stocking</i> • <i>Banqueting and functions</i> • <i>Guest relations</i> • <i>Night duty manager</i> • <i>Housekeeping</i>
Clubs and societies	
	FGASA (membership number 1328) Loch Vaal Water Ski Club Johannesburg Country Club Wits University Golf Club Explorers Club (at Wits) Aquatics Club (at Wits)
Interests and hobbies	
	Birding Wildlife Photography Fly fishing Water sports Golf Soccer (Wits University team) Squash Travel (SA wildlife orientated, USA, Europe, Australia)
Competencies and strengths	
	<p>I am a very determined person and once I put my mind to achieving my goals I work very hard and will make whatever sacrifices are necessary to achieve my aspirations. I have an outgoing, friendly personality and get on well with people at an individual level as well as at a group or team level. I have overcome many obstacles in life through my determination and strong character and my will to succeed. I am physically fit, strong and healthy.</p> <p>I have a passion for birding and wildlife conservation and have always wanted to pursue a career in some aspect of wildlife or ornithology research and conservation. I thoroughly enjoy research and completed my Masters in Science dissertation, specialising in Zoology, in 2015.</p>

References

Graeme Ellis	South African National Parks Scientific Services (previously with Organisation for Tropical Studies) 079-881-5215
Michele Hofmeyr	South African National Parks Scientific Services 083-290-2078 / 013-735-4240
Kelly Marnewick	Endangered Wildlife Trust Carnivore Conservation Project Manager 082-451-6376
Dr Ian Whyte	South African National Parks (formerly) Scientific Services 082-908-2686 / 013-767-1196
Marianne Strohbach	Savannah Environmental Head Ecologist marianne@savannahsa.com
Prof. Peter Ryan	University of Cape Town Director: Percy FitzPatrick Institute of African Ornithology 021-650-2966
Dr Rob Little	University of Cape Town Manager: DST/NRF Centre of Excellence 021-650-4026
Paddy Hagelthorn	Savanna Private Game Reserve General Manager 082-497-0062 / 013-735-8700
Neil Whyte	Savanna Private Game Reserve Head Ranger 082-567-1689 / 013-735-8700
Mark Anderson	BirdLife South Africa Chief Executive Officer 082-788-0961
Duncan Pritchard	BirdLife Southern Africa (formerly) 083-225-5960
Irving Knight	South African National Parks Head Guide: Kruger National Park 082-735-7459

CURRICULUM VITAE

ELIZE BUTLER

PROFESSION: Palaeontologist

YEARS' EXPERIENCE: 23 years in Palaeontology

EDUCATION: B.Sc Botany and Zoology, 1988
University of the Orange Free State

B.Sc (Hons) Zoology, 1991
University of the Orange Free State

Management Course, 1991
University of the Orange Free State

M. Sc. *Cum laude* (Zoology), 2009
University of the Free State

Dissertation title: THE POSTCRANIAL SKELETON OF THE EARLY TRIASSIC NON-MAMMALIAN CYNODONT *GALESAURUS PLANICEPS*: IMPLICATIONS FOR BIOLOGY AND LIFESTYLE

Registered as a PhD fellow at the Zoology Department of the UFS

2013 to current

Dissertation title: A NEW GORGONOPSID FROM THE UPPERMOST *DICYNODON ASSEMBLAGE ZONE*, KAROO BASIN OF SOUTH AFRICA

MEMBERSHIP

Palaeontological Society of South Africa (PSSA)

2006-currently

EMPLOYMENT HISTORY

Part time Laboratory assistant

Department of Zoology &
Entomology University of the Free
State Zoology 1989-1992

Part time laboratory assistant

Department of Virology

University of the Free State Zoology

1992

Research Assistant

National Museum, Bloemfontein

1993 – 1997

Principal Research Assistant

National Museum, Bloemfontein

and Collection Manager

1998 – currently

TECHNICAL REPORTS

PIA desktop: Palaeontological Impact Assessment of the proposed development of private dwellings on portion 5 of farm 304 Matjesfontein Keurboomstrand, Knysna District, Western Cape Province. 2014.

PAI site visit and report: Palaeontological Impact Assessment for the proposed upgrade of existing water supply infrastructure at Noupoot, Northern Cape Province. 2014.

PIA desktop: Palaeontological impact assessment of the proposed consolidation, re-division and development of 250 serviced erven in Nieu-Bethesda, Camdeboo local municipality, Eastern Cape. 2015.

PAI site visit and report: Palaeontological impact assessment of the proposed mixed land developments at Rooikraal 454, Vrede, Free State. 2015.

PIA exemption report: Palaeontological exemption report of the proposed truck stop development at Palmiet 585, Vrede, Free State. 2015.

PAI site visit and report: Palaeontological impact assessment of the proposed Orange Grove 3500 residential development, Buffalo City Metropolitan Municipality East London, Eastern Cape. 2015.

PAI site visit and report: Palaeontological Impact Assessment of the proposed Gonubie residential development, Buffalo City Metropolitan Municipality East London, Eastern Cape Province. 2015.

PAI site visit and report: Palaeontological Impact Assessment of the proposed Ficksburg raw water pipeline. 2015

PAI site visit and report: Palaeontological Heritage Impact Assessment report on the establishment of the 65 mw Majuba Solar Photovoltaic facility and associated infrastructure on portion 1, 2 and 6 of the farm Witkoppies 81 HS, Mpumalanga Province. 2015.

PAI site visit and report: Palaeontological Impact Assessment of the proposed township establishment on the remainder of portion 6 and 7 of the farm Sunnyside 2620, Bloemfontein, Mangaung metropolitan municipality, Free State Bloemfontein. 2015.

PIA desktop: Palaeontological Impact Assessment of the proposed Spectra foods broiler houses and abattoir on the farm Maiden Manor 170 and Ashby Manor 171, Lukhanji Municipality, Queenstown, Eastern Cape Province. 2015.

CONFERENCE CONTRIBUTIONS

NATIONAL

PRESENTATION

Butler, E., Botha-Brink, J., and F. Abdala. A new gorgonopsian from the uppermost *Dicynodon Assemblage Zone*, Karoo Basin of South Africa. 18 the Biennial conference of the PSSA 2014. Wits, Johannesburg, South Africa.

INTERNATIONAL

Attended the Society of Vertebrate Palaeontology 73th Conference in Los Angeles, America. October 2012.

CONFERENCES: POSTER PRESENTATION

NATIONAL

Butler, E., and J. Botha-Brink. Cranial skeleton of *Galesaurus planiceps*, implications for biology and lifestyle. University of the Free State Seminar Day, Bloemfontein. South Africa. November 2007.

Butler, E., and J. Botha-Brink. Cranial skeleton of *Galesaurus planiceps*, implications for biology and lifestyle. 14th Conference of the PSSA, Matjiesfontein, South Africa. September 2008:

Butler, E., and J. Botha-Brink. The biology of the South African non-mammaliaform cynodont *Galesaurus planiceps*. 15th Conference of the PSSA, Howick, South Africa. August 2008.

INTERNATIONAL VISITS

Natural History Museum, London

July 2008

Paleontological Institute, Russian Academy of Science, Moscow

November 2014

CURRICULUM VITAE

JONATHAN H. MARSHALL

Landscape Architect and Environmental Assessment Practitioner for Environmental Planning & Design cc

SKILLS BASE AND CORE COMPETENCIES

- Chartered Landscape Architect (UK).
- Certified Environmental Assessment Practitioner of South Africa.
- Visual Impact Assessment utilising the the Government of the Western Cape Guideline for Involving Visual and Aesthetic Specialists in EIA Processes and the Landscape Institute and Institute of Environmental Management and Assessment (UK) Guidelines for Landscape and Visual Impact Assessment.

EMPLOYMENT HISTORY

- Landscape Assistant, WS Atkins (UK) 1979 – 1981.
- Landscape Architect, Brian Clouston and Partners (Hong Kong) 1981 – 1989.
- Director, Brian Clouston and Partners (Australia) 1989 - 1990.
- Principal Landscape Architect, Gillespies (UK) 1990 – 1992.
- Principal, Opus Environment (UK) 1992 – 1995.
- Director, Environmental Design Partnership (SA) 1995 – 1998.
- Principal, Environmental Planning and Design (SA) 1998 – present.

TERTIARY EDUCATION

- Diploma in Landscape Architecture, Gloucestershire College of Art and Design, UK (1979).
- Environmental Law Short Course, University of KZN (1997)

SELECTED RELEVANT PROJECT EXPERIENCE

Visual impact assessments for developments in the Hong Kong, the UK, Ghana Guinea, Gauteng, Free State, KwaZulu-Natal, Mpumalanga. Examples of larger projects include:

- Solar plant projects including photovoltaic and concentrating solar power plants – Numerous projects for Eskom and private clients in the Northern Cape, Limpopo, Mpumalanga and the Free State.
- Proposed new mines and tailings facilities associated with existing mines in Ghana and Guinea.
- Four major shopping centre developments including projects in the UK and South Africa.
- A new international airport development to the north of Durban.
- Heavy industrial developments including a ferrochrome smelter in Richards Bay.
- Numerous new road and road upgrade proposals including projects in Hong Kong, the UK and South Africa.
- Long term landfill planning in the Durban area.
- Numerous power line proposals including projects for Eskom in the Free State and KwaZulu Natal.
- Aesthetic guideline documents including building massing in Hong Kong, development around estuaries in KwaZulu Natal.
- The provision of visual impact assessments as evidence for legal processes including parliamentary debate (UK), public enquiry (UK) and planning appeal (South Africa)
- Review of specialist reports prepared by other experts.



Dr. Neville Bews & Associates – Johannesburg, South Africa

EDUCATION

- *B.A. (Soc), University of South Africa, 1980*
- *B.A. (Soc) (Hons), University of South Africa, 1984*
- *The Henley Post Graduate Certificate in Management, Henley Management College, United Kingdom*
- *M.A. (Cum Laude), Rand Afrikaans University, 1999*
- *D. Litt. et Phil., Rand Afrikaans University, 2000*

Dr Neville Bews is a senior social scientist and human resource professional with 36 years' experience. He consults in the fields of Social Impact Assessments and research, and human resource management. He has worked on a number of large infrastructure, mining and water resource projects. He at times lectures at both the Universities of Pretoria and Johannesburg and is a Senior Fellow in the Centre for Sociological Research, Department of Sociology, University of Johannesburg.

EMPLOYMENT HISTORY

Dr Neville Bews & Associates, Johannesburg, South Africa

Social Impact Assessment consultant and part-time lecturer, 2001 – date.

Leads social impact assessments, provides strategic social management advice to clients, acts as reviewer and mentor to young social scientists.

S A Eagle Company Ltd, Johannesburg, South Africa

Employee Relations Manager, 1992 - 2001

Human Resource management and administration; industrial relations; human resource related research projects; designing and leading implementation of research strategies; disciplinary and grievance hearings; negotiating with unions; corporate social responsibility.

Status Management Services

Human Resources Consultant, 1986 – 1992

Management training; employee assistance programmes; industrial relations; recruitment; disciplinary and grievance hearings; negotiating with unions; job evaluation.

City of Johannesburg

Professional Officer - Human Resources, 1977 - 1986

Industrial relations; disciplinary and grievance hearings; negotiating with unions; recruitment, selection and placement; management training; job evaluation.

EXPERIENCE – EXAMPLES

Water resources and regional planning Social Impact Assessments

Department of Water Affairs and Forestry

South Africa

Social impact assessment for the Mokolo and Crocodile River (West) Water Augmentation Project for increased and assurance of water supply. Research socio-economic circumstances, data analysis, assessment, authored report.

The Aveng (Africa) Group Limited (Grinaker LTA)

South Africa

Assisting the construction company with the social management of the Mokolo and Crocodile River (West) Water Augmentation Project. Consult and mediate between contractors and affected parties advise on strategies to reduce tensions between contractors and the public.

Department of Water Affairs and Forestry

South Africa

Ncwabeni Off-Channel Storage Dam for security of water supply in Umzumbe, KwaZulu-Natal. Research socio-economic circumstances, data analysis, assessment, authored report.

Sedibeng District Municipality

South Africa

Social impact assessment for the Environmental Management Plan for the Sedibeng District, on behalf of Felehetsa Environmental (Pty) Ltd. Research socio-economic circumstances, data analysis, assessment, authored report.

Felehetsa Environmental (Pty) Ltd

South Africa

Social Impact Assessment for Waterfall Wedge housing and business development situated in Midrand Gauteng. Research socio-economic circumstances, data analysis, assessment, authored report.

NEMAI Consulting Environmental & Social Consultants

South Africa

Ncwabeni: Off-Channel Storage Dam, KwaZulu-Natal. Research socio-economic circumstances, data analysis, assessment, authored report.

Department of Water and Sanitation

South Africa

Mzimvubu Water Project Eastern Cape. Research socio-economic circumstances, data analysis, assessment, authored report.

Social Assessments for mining clients

Vale

Mozambique

Socio-economic impact assessment of proposed Moatize power plant, Tete. Research socio-economic circumstances, data analysis, assessment, authored report.

Exxaro Resources Limited **South Africa**
Social impact assessment for the social and labour plan for Leeuwpan Coal Mine, Delmas. Research socio-economic circumstances, data analysis, assessment, authored report.

Exxaro Resources Limited **South Africa**
Social impact assessment for the social and labour plan for Glen Douglas Dolomite Mine, Henley-on-Klip. Research socio-economic circumstances, data analysis, assessment, authored report.

Exxaro Resources Limited **South Africa**
Social impact assessment for the social and labour plan for Grootegeluk Open Cast Coal Mine, Lephalale. Research socio-economic circumstances, data analysis, assessment, authored report.

Exxaro Resources Limited **South Africa**
Social and labour plan for the Paardekraal Project, Belfast. Research socio-economic circumstances, data analysis, assessment, authored report.

Exxaro Resources Limited **South Africa**
Social impact assessment for the Paardekraal Belfast Project Belfast. Research socio-economic circumstances, data analysis, assessment, authored report.

Kumba Resources Ltd **South Africa**
Social Impact Assessments for the Sishen Iron Ore Mine in Kathu Northern Cape. Research socio-economic circumstances, data analysis, assessment, authored report.

Kumba Resources Ltd **South Africa**
Social Impact Assessments for the Sishen South Project in Postmasburg, Northern Cape. Research socio-economic circumstances, data analysis, assessment, authored report.

Kumba Resources Ltd **South Africa**
Social Impact Assessments for the Dingleton resettlement project at Sishen Iron Ore Mine Kathu, Northern Cape. Research socio-economic circumstances, data analysis, assessment, authored report.

Gold Fields **South Africa**
Social Impact Assessment for the Gold Fields West Wits Project. Research socio-economic circumstances, data analysis, assessment, authored report.

Anglo Coal **South Africa**
Review of social impact assessment for the proposed Waterberg Gas 37-spot coalbed methane (CBM) bulk yield test project.

Sekoko Mining

South Africa

Sekoko Wayland Iron Ore, Molemole Local Municipalities in Limpopo Province. Research socio-economic circumstances, data analysis, assessment, authored report.

Memor Mining (Pty) Ltd

South Africa

Langpan Chrome Mine, Thabazimbi, Limpopo. Research socio-economic circumstances, data analysis, assessment, authored report.

Prescali Environmental Consultants (Pty) Ltd

South Africa

Vlakpoort Open Cast Mine – Thabazimbi, Limpopo. Research socio-economic circumstances, data analysis, assessment, authored report.

Afrimat Ltd

South Africa

1. Marble Hall Lime Burning Project: Social Impact Assessment – Limpopo.
2. Glen Douglas Lime Burning Project: Social Impact Assessment - Henley-on Klip, Midvaal

Social assessments for regional and linear projects

Gautrans

South Africa

Social impact for the Gautrain Rapid Rail Link, Pretoria to Johannesburg and Kempton Park. Managed a team of 10 field workers, research socio-economic circumstances, data analysis, assessment, and co-authored report.

South African National Road Agency Limited

South Africa

Social Impact of tolling the Gauteng Freeway Improvement Project. Research socio-economic circumstances, data analysis, assessment, authored report.

South African National Road Agency Limited

South Africa

Social Impact of the N2 Wild Coast Toll Highway. Managed a team of three specialists. Research socio-economic circumstances, data analysis, assessment, co-authored report.

South African National Road Agency Limited

South Africa

SIA for the N3 Keversfontein to Warden (De Beers Pass Section). Research socio-economic circumstances, data analysis, assessment, authored report.

Transnet

South Africa

Social impact assessment for the Transnet New Multi-Product Pipeline Project (555 km) (Commercial Farmers). Research socio-economic circumstances, data analysis, assessment, authored report.

Eskom Holdings Limited

South Africa

Social Impact Assessment for the Ubertas 88/11kV Substation in Sandton, Johannesburg. Research socio-economic circumstances, data analysis, assessment, authored report.

Eskom Holdings Limited

South Africa

Nuclear 1 Power Plant. Assisted with the social impact assessment consulting to Arcus GIBB Engineering & Science. Peer review and adjusted the report and assisted at the public participation feedback meetings.

Eskom Holdings Limited, Transmission Division **South Africa**

Social impact assessment for Eskom Holdings Limited, Transmission Division's Neptune-Poseidon 400kV Power Line in the Eastern Cape. Research socio-economic circumstances, data analysis, assessment, authored report.

Eskom Holdings Limited, Transmission Division **South Africa**

Social Impact assessment for Eskom Holdings Limited, Transmission Division, Forskor-Mernsky 275kV±130km Powerline and Associated Substation Works in Limpopo Province. Research socio-economic circumstances, data analysis, assessment, authored report.

MGTD Environmental **South Africa**

Social impact assessment for a 150MW Photovoltaic Power Plant and Associated Infrastructure in Mpumalanga. Research socio-economic circumstances, data analysis, assessment, authored report.

MGTD Environmental **South Africa**

10MWp Photovoltaic Power Plant & Associated Infrastructure, North West Province. Research socio-economic circumstances, data analysis, assessment, authored report.

eThekwini Municipality **South Africa**

Social impact assessment for the proposed infilling of the Model Yacht Pond at Blue Lagoon, Stiebel Place, Durban. Research socio-economic circumstances, data analysis, assessment, authored report.

MGTD Environmental **South Africa**

ABC Prieska Solar Project; Proposed 75 MWp Photovoltaic Power Plant and its associated infrastructure on a portion of the remaining extent of ERF 1 Prieska, Northern Cape. Research socio-economic circumstances, data analysis, assessment, authored report.

MGTD Environmental **South Africa**

ABC Prieska Solar Project; Proposed 75 MWp Photovoltaic Power Plant and its associated infrastructure on a portion of the remaining extent of ERF 1 Prieska, Northern Cape;

Assessments for social projects and social research

Australia – Africa 2006 Sport Development Program **South Africa**

To establish and assess the impact of the Active Community Clubs Initiative on the communities of NU2 (in the township of Mdantsane)* and Tshabo (a rural village). Lead researcher social, data collection and analysis, assessment.

United Nations Office on Drugs and Crime **South Africa**

Evaluation of a Centre for Violence Against Women in Upington. Research socio-economic circumstances, data analysis, assessment, co-authored report.

University of Johannesburg

South Africa

Research into research outputs of academics working in the various departments of the university.
Research socio-economic circumstances, data analysis, assessment, authored report.

Human Resource and management training

Various national companies

South Africa

Developed and run various management courses such as, recruitment selection & placement; industrial relations / disciplinary hearings; team building workshops; multiculturalism workshop.

1986-2007

University of South Africa, Department of Industrial Psychology

South Africa

Developed the performance development study guide for industrial psychology 3.

2000

Authored Chapters in HR books

South Africa

In Slabbert J.A. de Villiers, A.S. & Parker A (eds.). Managing employment relations in South Africa.

Teamwork within the world-class organisation.

2005

In Muchinsky, P. M. Kriek, H. J. & Schreuder, A. M. G. Personnel Psychology 3rd Edition

Chapter 9 – Human resource planning.

Chapter 10 – The changing nature of work.

2005.

In Rossouw, G. J. and van Vuuren, L. Business Ethics - Made in Africa 4th Edition.

Chapter 11 – Building Trust with Ethics.

South African Management Development Institute (SAMDI) Democratic Republic of the Congo

Developed a course on Strategic Human Resource Planning for SAMDI and the Democratic Republic of the Congo as well as trainer's manuals for this course.

2006.

Competition Tribunal

South Africa

Developed a Performance Management System and Policy for the Competition Tribunal South Africa.

2006

PUBLICATIONS

Bews, N. & Martins, N. 2002. An evaluation of the facilitators of trustworthiness. SA Journal of Industrial Psychology. 28(4), 14-19.

Bews, N. Martins, N. & von der Ohe, H. 2002. Editorial. SA Journal of Industrial Psychology. 28(4), 1.

Bews, N. & Rossouw, D. 2002. Contemporary organisational change and the importance of trust. SA Journal of Industrial Psychology. 28(4), 2-6.

Bews, N. & Uys, T. 2002. The impact of organisational restructuring on perceptions of trustworthiness. SA Journal of Industrial Psychology. 28(4), 21-28.

Bews, N & Rossouw, D. 2002. A role for business ethics in facilitating trustworthiness. Journal of Business Ethics. 39: 377-390.

Bews, N. 2009. A matter of trust – Gaining the confidence of the public and client. IAIA Newsletter Forthcoming (Spring 2009).

Bews, N. 2009. Does he who pays the bill call the shots? Sitting astride client and public interest – the dilemma of maintaining credibility in impact assessments. IAIA Newsletter Winter – 2009.

Bews, N. 2002. Reducing your company's risk of sexual harassment claims. HR Future. (2) 2 10-11.

Bews, N. & Martins, N. von der Ohe, H. 2002. Organisational change and trust: Experiences here and abroad. Management Today, (18) 8 34-35.

Martins, N. Bews, N. & von der Ohe, H. 2002. Organisational change and trust. Lessons from Europe and South African organisations. HR Future, (2)9 46-47.

Rossouw, D. & Bews, N. 2002. The importance of trust within a changing business environment. Management Today. 18(2) 26-27.

Bews, N. 2001. You can put a value to trust in the new economy. HR Future, (1)1 48-49.

Bews, N. 2001. Maintaining trust during organisational change. Management Today, (17) 2 36-39.

Bews, N. 2001. Business ethics, trust and leadership: how does Africa fare? Management Today, (17) 7 14-15.

Rossouw, D & Bews, N. 2001. Trust is on the decline in the workplace, yet it's vital for modern organisational success. People Dynamics. (18) 6 28-30.

Bews, N. & Uys, T. 2001. The effects of restructuring on organisational trust. *HR Future*, (1)8 50-52.

Rossouw, G. J. & Bews, N. F. 2010. Building Trust with Ethics. In Rossouw, G. J. and van Vuuren, L. *Business Ethics - Made in Africa 4th Edition*. Cape Town: Oxford University Press.

Bews N. 2005. Teamwork within the world-class organisation. In Slabbert J.A. de Villiers, A.S. & Parker A (eds.). *Managing employment relations in South Africa*. Durban : Butterworths.

Bews, N. F. 2005. Human resource planning. In Muchinsky, P. M. Kriek, H. J. & Schreuder, A. M. G. 2005. *Personnel Psychology 3rd Edition*. Cape Town; Oxford University Press.

Bews, N. F. 2005. The changing nature of work. In Muchinsky, P. M. Kriek, H. J. & Schreuder, A. M. G. 2005. *Personnel Psychology 3rd Edition*. Cape Town; Oxford University Press.

Bews, N. F. 2005. Chapter 9 & 13. In Muchinsky, P. M. Kriek, H. J. & Schreuder, A. M. G. 2005. *Instructor's Manual. Personnel Psychology 3rd Edition*. Cape Town; Oxford University Press.

Bews, N. F., Schreuder, A. M. G. & Vosloo, S. E. 2000. *Performance Development. Study guide for Industrial Psychology 3*. Pretoria: University of South Africa.

Uys, T. and Bews, N. 2003. "Not in my Backyard": Challenges in the Social Impact Assessment of the Gautrain. Department of Sociology Seminar, RAU. 23 May 2003.

Bews, N. 2002. The value of trust in the new economy. Industrial Relations Association of South Africa (Irasa). Morning seminar 21 August 2002.

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MEMBERSHIP OF PROFESSIONAL BODIES

Member of South African Affiliate of the International Association for Impact Assessment (IAIASa).

Membership Number: 2399

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