# CURRICULUM VITAE - CHRIS VAN ROOYEN

Name of organisation: Chris van Rooyen Consulting
Profession: Ornithological Consultant
Position in Firm: Director/Co-owner
Date of Birth: 30 April 1964

**Date of Birth:** 30 April 1 **Relevant Experience:** 17 years

#### **SPECIALIST FIELD**

Ornithological consultant offering specialist advice related to the impact of industrial developments on avifauna, especially in the electricity energy sector.

#### **BIOGRAPHICAL SKETCH**

My formal training is in the legal sciences. I studied at the Rand Afrikaans University where I obtained my LLB in 1990, and I was admitted as an advocate in 1994. However, my interest and passion has always been for the natural sciences, particularly the study of birds. I therefore had no regrets when I abandoned my legal career to pursue a career in the natural sciences and conservation in 1996.

I started my formal employment in the natural sciences and conservation field at the Endangered Wildlife Trust (EWT) in April 1996. Prior to that I was a volunteer and member of the management committees of the Raptor Conservation Group and Vulture Study Group (now amalgamated under the Birds of Prey Working Group of the Endangered Wildlife Trust). I was offered the position of working group manager in April 1996 by Dr. John Ledger, then Director of the EWT, and my brief was to develop a strategic partnership with Eskom, aimed at reducing the conflicts between electricity infrastructure and wildlife, particularly birds.

All in all I have sixteen years experience in the management of wildlife interactions with electricity infrastructure. I was employed by the Endangered Wildlife Trust as head of the Eskom-EWT Strategic Partnership from 1996 to 2007, which has received international acclaim as a model of co-operative management between industry and natural resource conservation. I am an acknowledged global expert in this field and have consulted in South Africa, Namibia, Botswana, Lesotho, New Zealand, Texas, New Mexico and Florida. I also have extensive project management experience and I have received several management awards from Eskom for my work in the Eskom-EWT Strategic Partnership. I am the author and/or co-author of 17 conference papers, co-author of two book chapters, several research reports and the current best practice guidelines for avifaunal monitoring at wind farm sites. I have completed numerous power line assessments; and is very active as specialist avifaunal consultant on wind and solar generation assessments. I also work outside the electricity industry where I have done a wide range of bird impact assessment studies associated with various residential and industrial developments. I have been working as a private consultant since January 2008.

Since my resignation from the EWT in November 2007, I continue to act as an advisor to Eskom and other industries on the management of wildlife, (particularly bird) conflicts with industrial infrastructure and developments. I have since broadened my scope beyond the electricity industry to general bird impact related work e.g., the impact of non-electricity related industrial and residential developments on birds. In 2008, I was appointed as specialist consultant for a three-year period to assist the Namibian power utility, NamPower, and the Namibia Nature Foundation to forge a strategic partnership along the lines of the Eskom-EWT Strategic Partnership. Since 2010, a large proportion of my work has been in relation to the impacts on birds of the emerging renewable energy sector, particularly wind farms. I serve on the Birds and Wind Energy Specialist Group which was formed in 2011 to serve as a liaison body between the ornithological community and the wind industry.

Apart from ornithological consulting, I'm also a professional bird photographer and bird artist - my bird photographs have appeared in many publications and calendars worldwide, and I am co-illustrator of the Roberts Birds of Southern Africa 7<sup>th</sup> Edition. I have received several merit awards in photographic competitions, including the BBC Wildlife Photographer of the Year Awards. My passion for bird photography has greatly increased my knowledge of bird behaviour as I spend many hours in the field observing birds while photographing them

## **TERTIARY EDUCATION**

1988B.A. (Law)Rand Afrikaans University1991LLBRand Afrikaans University

# KEY EXPERIENCE IN ELECTRICITY INDUSTRY

## Wind energy sites:

- St Helena Bay, Seeland, Electrawind
- Caledon, Caledon Wind
- Caledon, Langhoogte, SAGIT
- Langebaan, Langefontein, Oelsner Group
- Darling, Kerrifontein Oelsner Group
- Jeffreys Bay, Mainstream
- Ubuntu, Windcurrent
- Bana ba pifhu, Windcurrent
- Coega, Electrawind
- Swellendam, Excelsior, Biotherm
- Vredendal, Inca Energy
- Vredendal, Electrawind
- Morreesburg, Swartberg, Electrawind

- Oyster Bay, Renewable Energies South Africa
- Laingsburg, Spitskopvlakte, Biotherm
- Port Nolloth, Kannikwavlakte, Biotherm
- Vleesbaai, Vleesbaai Independent Power Producer
- Loeriesfontein, Mainstream
- Noupoort, Mainstream
- · Indwe, Biotherm
- Pofadder, Mainstream

### Solar energy sites:

- Bokpoort, Concentrated Solar Thermal Power (CSP)
- Solar Park, Upington
- Mainstream De Aar PV
- Droogfontein (Kimberley) PV

#### Power lines:

- Chobe 33kV Distribution line
- Athene Umfolozi 400kV
- Beta-Delphi 400kV
- Cape Strengthening Scheme 765kV
- Flurian-Louis-Trichardt 132kV
- Ghanzi 132kV (Botswana)
- Ikaros 400kV
- Matimba-Witkop 400kV
- Naboomspruit 132kV
- Tabor-Flurian 132kV
- Windhoek Walvisbaai 220 kV (Namibia)
- Witkop-Overyssel 132kV
- Breyten 88kV
- Adis-Phoebus 400kV
- Dhuva-Janus 400kV
- Perseus-Mercury 400kV
- Gravelotte 132kV
- Ikaros 400 kV
- Khanye 132kV (Botswana)
- Moropule Thamaga 220 kV (Botswana)
- Parys 132kV
- Simplon –Everest 132kV
- Tutuka-Alpha 400kV
- Simplon-Der Brochen 132kV
- Big Tree 132kV
- Mercury-Ferrum-Garona 400kV
- Zeus-Perseus 765kV
- Matimba B Integration Project
- Caprivi 350kV DC (Namibia)
- Gerus-Mururani Gate 350kV DC (Namibia)
- Mmamabula 220kV (Botswana)
- Steenberg-Der Brochen 132kV
- Venetia-Paradise T 132kV
- Burgersfort 132kV
- Majuba-Umfolozi 765kV
- Delta 765kV Substation
- Braamhoek 22kV
- Steelpoort Merensky 400kV
- Mmamabula Delta 400kV
- Delta Epsilon 765kV
- Gerus-Zambezi 350kV DC Interconnector: Review of proposed avian mitigation measures for the Okavango and Kwando River crossings
- Giyani 22kV Distribution line
- Liqhobong-Kao 132/11kV distribution power line, Lesotho
- 132kV Leslie Wildebeest distribution line
- A proposed new 50 kV Spoornet feeder line between Sishen and Saldanha
- Cairns 132kv substation extension and associated power lines
- Pimlico 132kv substation extension and associated power lines
- Gyani 22kV
- Matafin 132kV
- Nkomazi\_Fig Tree 132kV
- Pebble Rock 132kV
- Reddersburg 132kV
- Thaba Combine 132kV
- Nkomati 132kV
- Louis Trichardt Musina 132kV
- Endicot 44kV

- Apollo Lepini 400kV
- Tarlton-Spring Farms 132kV
- Kuschke 132kV substation
- Bendstore 66kV Substation and associated lines
- Kuiseb 400kV (Namibia)
- Gyani-Malamulele 132kV
- Watershed 132kV
- Bakone 132kV substation
- Eerstegoud 132kV LILO lines
- Kumba Iron Ore: SWEP Relocation of Infrastructure
- Kudu Gas Power Station: Associated power lines
- Steenberg Booysendal 132kV
- Toulon Pumps 33kV
- Thabatshipi 132kV
- Witkop-Silica 132kV
- Bakubung 132kV
- Nelsriver 132kV
- Rethabiseng 132kV
- Tilburg 132kV
- GaKgapane 66kV
- Knobel Gilead 132kV
- Bochum Knobel 132kV
- Madibeng 132kV
- Witbank Railway Line and associated infrastructure
- Spencer NDP phase 2 (5 lines)
- Akanani 132kV
- Hermes-Dominion Reefs 132kV
- Cape Pensinsula Strengthening Project 400kV
- Magalakwena 132kV
- Benficosa 132kV
- Dithabaneng 132kV
- Taunus Diepkloof 132kV
- Taunus Doornkop 132kV
- Tweedracht 132kV
- Jane Furse 132kV
- Majeje Sub 132kV
- Tabor Louis Trichardt 132kV
- Riversong 88kV
- Mamatsekele 132kV
- Kabokweni 132kV
- MDPP 400kV Botswana
- Marble Hall NDP 132kVBokmakiere 132kV Substation and LILO lines
- Styldrift 132kV
- Taunus Diepkloof 132kV
- Bighorn NDP 132kV
- Waterkloof 88kV
- Camden Theta 765kV
- Dhuva Minerva 400kV Diversion
- Lesedi –Grootpan 132kV
- Waterberg NDP
- Bulgerivier Dorset 132kV
- Bulgerivier Toulon 132kV
- Nokeng-Fluorspar 132kV
- Mantsole 132kV
- Tshilamba 132kV
- Thabamoopo Tshebela Nhlovuko 132kV
- Arthurseat 132kV
- Borutho 132kV MTS
- Grootboom 132kV
- DWAF Steelpoort 132kV
- Chloe Gilead 66kV
- Pietersburg Chloe 66kVTshatane Lesideng 132kV
- Lesego Jane Furse 132kV
- Lesego Jane Furse 132k
   DWAF 1 DWAF 2 132kV
- Pitso 132kV Substation
- Lebowa Dithabaneng Boynton LILO 132kV
- Thulamela 132kV
- Marang 132kV
- Thulamela 132kV
- Merensky 132kV
- Amandla Makometsane Moutse 132kV
- Lebathlane 132kV
- Sun City Substation and associated powerlines

- Solar Park 400kV Integration Project
- Mamatsekele 132kV
- KwaMhlanga 132kV
- Malelane Buffelspruit 132kV
- Gutshwa 132kV
- Taung-Gold 88kV

### **Power Stations:**

- Open Cycle Gas Turbine Plants & The Associated Transmission Lines & Substation At Atlantis, Western Cape
- Kangra Power Station: Siting Report

### Other projects:

- Lizard Point Golf Estate
- Lever Creek Estates
- Leloko Lifestvle Estates
- Vaaloewers Residential Development
- Clearwater Estates Grass Owl Impact Study
- Somerset Ext. Grass Owl Study
- Proposed Three Diamonds Trading Mining Project (Portion 9 and 15 of the Farm Blesbokfontein)
- N17 Section: Springs To Leandra "Borrow Pit 12 And Access Road On (Section 9, 6 And 28 Of The Farm Winterhoek 314 Ir)
- South African Police Services Gauteng Radio Communication System: Portion 136 Of The Farm 528 Jq, Lindley.
- Report for the proposed upgrade and extension of the Zeekoegat Wastewater Treatment Works, Gauteng.
- Bird Impact Assessment for Portion 265 (a portion of Portion 163) of the farm Rietfontein 189-JR, Gauteng.
- Bird Impact Assessment Study for Portions 54 and 55 of the Farm Zwartkop 525 JQ, Gauteng.
- Bird Impact Assessment Study Portions 8 and 36 of the Farm Nooitgedacht 534 JQ, Gauteng.
- Shumba's Rest Bird Impact Assessment Study
- Randfontein Golf Estate Bird Impact Assessment Study
- Zilkaatsnek Wildlife Estate

Airi can Lacepe

- Regenstein Communications Tower (Namibia)
- Input into Richards Bay Comparative Risk Assessment Study
- Maguasa West Open Cast Coal Mine
- Glen Erasmia Residential Development, Kempton Park, Gauteng
- Bird Impact Assessment Study, Weltevreden Mine, Mpumalanga
- Bird Impact Assessment Study, Olifantsvlei Cemetery, Johannesburg
- Camden Ash Disposal Facility, Mpumalanga
- Proposed Desalination Project at Mile 6 near Swakopmund, Namibia

# CERTIFICATION

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

Date: 06 March 2013