

## **CURRICULUM VITAE – DR GREER LEIGH HAWLEY**

Date of birth: 30 May 1978

### **QUALIFICATIONS**

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BSc (University of Cape Town)  
BSc (Botany Hons) (University of Cape Town),  
PhD (Rhodes)

### **ASSOCIATIONS**

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- South African Association of Microbiology
- International Association for Impact Assessment
- South African Association of Botany

### **PROFESSIONAL EXPERIENCE**

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1998 : Botanical consultant: University of Cape Town  
Laboratory assistant: University of Cape Town

1999 : Undergraduate Tutor: University of Cape Town

2000- 2001 : Temporary administrative position: Robert Half International, London  
Assistant Office Manager: Warwick House, London  
Office administration: West London Magistrates Court, London

2002 : Laboratory Assistant: Amphigro

2002- 2007 : Undergraduate Tutor: Botany and Microbiology, Rhodes University

2006- 2007 : Laboratory researcher: Abalone Probiotic isolation and testing, Rhodes University

2007 : Laboratory assistant and product quality control: Mycoroot (pty) Ltd, Grahamstown

2007- present : Senior Environmental Consultant - Coastal & Environmental Services

- Environmental Impact Assessments
- Ecological and Carbon Stock Specialist studies
- Provide input, report writing and management of Spatial Development Frameworks
- Provided input and carry out report writing of Environmental Feasibility studies

### **RESEARCH INTERESTS**

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In the last 10 years, Dr Greer Hawley has been involved in a number of diverse activities. The core academic focus has however, been directed in the field of taxonomy both in the plant and fungal kingdom. The theory of taxonomy and phylogenetic analysis has been applied to further knowledge of species identification and understanding of biodiversity in South Africa. Greer's research ranges from studying fresh and marine algae, estuarine diatoms, *Restio* species classification in the fynbos vegetation and fungal species identification and ecology in *Pinus* plantation in Mpumalanga. Greer's Microbiological study of Ectomycorrhizal fungi have also contributed towards an understanding of soil ecology and "below ground" networks, including plant pathogens, saprotrophic micro-organisms and mutual symbioses (arbuscular mycorrhiza and nitrogen-fixing bacteria) that provide a living medium for all plant life.

### **POST GRADUATE STUDENT SUPERVISION**

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2005 – 2007: 3 Honours students in the Mycology Unit, Rhodes University  
2006: MSc student in the Mycology Unit, Rhodes University.

## **SELECTED RECENT PUBLICATIONS**

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**Hawley GL and Dames JF. 2004.** Mycorrhizal status of indigenous tree species in a forest biome of the Eastern Cape, South Africa. *South African Journal of Science* 100, 633-637.

**Hawley GL and Dames JF. (2008).** Ectomycorrhizas in association with *Pinus* in South Africa. *South African Journal of Science*.

## **RECENT CONFERENCE PAPER/PUBLICATIONS**

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2010: Hawley, GL, McMaster AR and Carter AR. The Environmental and Social Impact Assessment and associated issues and challenges. African, Caribbean and Pacific Group of States (ACP), Science and Technology Programme, Sustainable Crop Biofuels in Africa.

2009: Hawley, GL, McMaster AR and Carter AR. Carbon, carbon stock and life-cycle assessment in assessing cumulative climate change impacts in the environmental impact process. International Association of Impact Assessors.

2008: Hawley GL and Dames JF. Ectomycorrhizal species diversity above- and below ground comparison in *Pinus patula* (Schlecht et Cham) plantations, South Africa. South African Society for Microbiology (Poster presentation).

2006: Hawley, GL and Dames, JF. Morphological and molecular identification of ectomycorrhizal fungi in *Pinus* plantations. South African Society of Microbiology.

## **RECENT EIA's AND RELEVANT STUDIES**

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### **Specialist studies**

- ***Addax Biofuels (2009/2010), Biodiversity and Ecological Impact Assessment AND Carbon Stock Impact Assessment, Sierra Leone.***

The above specialist studies were submitted as separate deliverables and are described separately.

**Biodiversity and Ecological Impact Assessment:** This study involved the survey of a 60 000 ha site in Sierra Leone. The vegetation types were described and assessed in terms of biodiversity and overall ecological sensitivity. In addition, the area was surveyed by local experts for the presence of rare and endangered faunal species, for inclusion into the report. All vegetation types were mapped using GIS. The assessment was compiled for international review in accordance with World Bank standards.

**Carbon Stock Impact Assessment:** In accordance with the EU directive, Biofuel production needs to demonstrate a 30% reduction in carbon emissions compared to fossil fuels. For this reason, a Carbon Stock study was carried out to determine site specific carbon stocks. This study included field calculations, vegetation and soil sampling and carbon stock calculations. Using the detailed GIS maps, total carbon stocks could be calculated. Sample collection included local academic soil scientists. This study and associated methodology was compiled according to the International Panel on Climate Change (IPCC) standards.

- ***Wild Coast Forest Survey: (2009-2010) Department of Water and Forestry / Eastern Cape Parks Board initiative***

The forest survey included substantial field work and data collection of the following: plant species identification, GPS mapping of forest boundaries, forest-typing and identifying and quantifying disturbance impacts.

- ***Mncwasa Water Scheme (2009): Ecological Sensitivity Assessment***

This assessment involved a detailed vegetation survey of forest vegetation and wetlands along anticipated and alternative pipeline routes. The survey included an assessment of the

environmental sensitivity along the route and recommendations for mitigation and environmentally acceptable alternatives.

- ***Peregrine Dunes Golf Estate (2009): Vegetation Rehabilitation Plan and Ecological Impact Assessment***

The Ecological Impact Assessment and Rehabilitation Plan were represented as two reports for the same project. The work carried out on the Ecological Impact Assessment included report revision writing.

The Rehabilitation Plan was submitted as part of the Environmental Management Plan and incorporated elements of re-vegetation, alien plant removal and rehabilitation, landscape restoration, based on widely accepted concepts of soil ecology and plant succession ecology.

- ***Atterbury Development (2007): Vegetation Assessment***

The scope of work carried out for this project included a brief vegetation survey in terms of species diversity and sensitivity.

- ***Vegetation assessment and alien plant removal plan for East London, Airports Company South Africa.***

The study involved the survey and mapping of indigenous and alien (exotic) plant species and a rehabilitation program to remove exotic species in an environmentally acceptable manner.

### **Feasibility studies**

- ***Nkanya Lodge Feasibility Study: Eastern Cape Development Corporation (ECDC) initiative***

Aspects of this study included the consideration of the economic and financial viability of the proposed project as well as the environmental risks and alternative technologies.

### **Basic Environmental Impact Assessments**

- Waterfall Country Estate: Port Elizabeth
- Nkanya Lodge Resort: Nkanya Mouth
- Schafli Road Retirement village: Great Kei LM
- Nduli Nature Reserve Development: Mthatha

### **Environmental Control Officer**

- Mpekweni Beach Resort expansion and construction of Waste water treatment works

### **Full Scoping and Environmental Impact Assessments (South African National Environmental Management: EIA regulations)**

- ***Buffalo City Municipality R72 national road re-alignment (2007-2008): Sleeper site***

Responsibilities included: Project Management, budget management, written report, public participation and engagement with key stakeholders throughout the EIA process. Environmental approval obtained.

- ***Wild Coast Abalone expansion and processing plant (2008)***

Responsibilities included: Project management, budget management, written reports, public participation and stakeholder engagement with key stakeholders. Environmental approval obtained.

- ***Mpekweni Beach Resort Waste Water Treatment Works (2007)***

Responsibilities included: Project management, budget management, written reports, public participation and stakeholder engagement with key stakeholders. Environmental approval obtained.

Other relevant projects currently being managed

- Summerpride Residential Village (Environmental approval obtained 2009)
- All Saints Hospital Waste Water Treatment Works (current)
- Wild Coast, Qolora Fish Farm Enterprise (current)
- Thomas River Energy facility (InnoWind) (current)
- Chaba Energy facility (InnoWind) (current)

**State of Environment (SoER) and Environmental Management Plans (EMP) for:**

- OR Tambo District Municipality, Eastern Cape Province, South Africa (2009-2010). Accepted by council.
- Ukhahlamba District Municipality, Eastern Cape Province, South Africa. Still in progress.

Activities:

- Field survey of district municipality through aerial surveying and field work reporting of whole district municipality (incorporating 4-7 local municipalities).
- Continued interaction with municipal representatives and key stakeholders
- Workshops held with key role-players and decision-makers
- Review of planning document and integrated development programs.
- Identification of key environmental issues
- Selection of priority environmental issues
- Development of Environmental Management Action Plans directly aimed at mitigated priority issues.

Responsibilities:

- Overall project manager,
- Budget management,
- Report writing,
- Team delegation and management and
- Client liaison.