



Project Team:
Dept. Conservation Ecology
and Entomology:
⇒ Dr. Shayne Jacobs

Dept. Microbiology:
⇒ Prof. Karin Jacobs
⇒ Dr. Etienne Slabbert

Value:
MSc ►R75 000
PhD ►R95,000 per year

**Closing Date for
Applications:
20 December 2013**

**Please send
your CV and a letter of
motivation to:**
Shayne Jacobs

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Scholarship Opportunity for MSc and PhD studies in 2014:

Riparian Ecology and Microbiology

Project title: Assessing the impact of selected methods of removal of alien invasive trees and biomass on fynbos riparian ecosystem functioning

Riparian ecotones are situated at the interface between terrestrial and aquatic environments and act as regulators of material fluxes. As such they are important providers of ecosystem services such as nutrient recycling and maintaining water quality and quantity. Invasion of riparian zones by invasive alien plants is pervasive in the Western Cape and threatens provision of ecosystem services. The Working for Water (WfW) Programme has the primary task of clearing of riparian ecotones (and upland areas), combined with a poverty relief, and over the last 18 years pioneered many successful strategies for removal, treatment and clearing.

When applied as prescribed, riparian zones can recover well from invasion in terms of vegetation structure. Less clear is the impact of various methods of clearing and treatment on riparian function, notably on soil nutrients and microbial diversity and activity, which underlies many ecosystem services associated with riparian ecotones. We will use ecological and microbial approaches to study riparian function, with the aim of strengthening our understanding of riparian restoration and we will work closely with WfW to achieve this. This research is sponsored through funding from the Water Research Commission.

We are in search of excellent students to pursue MSc or PhD studies (Ecology or Microbiology) starting the beginning of 2014. We would like to appoint highly motivated students that have the following:

- An appropriate degree for admission
- Appropriate experience
- The ability to work independently in the field and in a team
- Competence in experimental design and statistics
- Full computer literacy
- Excellent writing and communications skills
- A Code 08 Drivers licence is a strong recommendation

NB: Students with NRF freestanding bursaries for 2014 will receive preference