



SARChI Research Chair in Social-Ecological Systems and Resilience

Hosted by the Centre for Complex Systems in Transition at Stellenbosch University

Call for applications: Masters fellowship in private land conservation for 2017

Deadline for applications: 1 October 2017

Introduction

A key challenge of the 21st century is identifying sustainable development pathways for humanity that do not erode the ecological foundation on which human well-being depends. It is increasingly recognized that humans and ecosystems are linked in complex and dynamic ways, as interacting elements of intertwined 'social-ecological' systems. A fundamental determinant of sustainability in a social-ecological system is resilience, the capacity to maintain a set of ecosystem services deemed critical to human well-being in the face of disturbance and ongoing change. Building sustainable societies therefore requires an understanding of the attributes of social-ecological systems that determine their resilience.

The new South African Research Chair in Social-Ecological Systems and Resilience, held by Dr Reinette (Oonsie) Biggs, aims to contribute to this new research field, specifically from a southern African perspective. The Chair is hosted by the NRF Flagship initiative on 'Complex Systems in Transition' (CST) at Stellenbosch University. The CST builds on a strong history of transdisciplinary research, and hosts leading scientists and students from diverse disciplinary backgrounds, providing a vibrant hub for solution-oriented, transdisciplinary, sustainability science. The Chair and CST are also partners in an exciting new collaborative research program, *Guidance for Resilience in the Anthropocene: Investments for Development (GRAID)*, together with the CSIR and the Stockholm Resilience Centre in Sweden. The primary objective of these initiatives is to provide transformational knowledge on the dynamics of multi-scale social-ecological change, and strategic insights into the new modes of research and governance that can bring about a just transition to a more equitable and sustainable society, in southern Africa and globally.

Project background

Privately owned land that is managed for biodiversity conservation contributes to human well-being by protecting ecosystems and the services they provide (e.g., climate regulation, freshwater provision, recreation). Recreational ecosystem services on privately protected areas (PPAs; e.g., hunting/ecotourism) contribute to local and national economies around the world. Despite the recent global increase in PPAs, and their prevalence in South Africa, the sustainability of this livelihood and conservation strategy remains poorly understood. The reliance of many PPAs on tourist markets may make them vulnerable to volatile economic and political systems. Tourist expectations to see charismatic wildlife (e.g., elephant and lion) can encourage landowners to stock these animals at high densities, increasing ecosystem vulnerability to environmental change. There is therefore an urgent need for (a) an understanding of the threats to which the PLCA industry is exposed; (b) indicators for assessing the likely resilience of PPAs to these threats; and (c) insight into the types of management systems and policies that could build the capacity of this industry to cope with change.

Call for applications

We seek a motivated individual to contribute to understanding the resilience of PPAs in South Africa. The ideal candidate will possess a keen interest in sustainability issues and conservation science, an interest and ability to integrate across the social and natural sciences, and be an independent thinker who is open to collaboration and keen to participate in the events and activities of the CST. Interested individuals should have a strong track-record, and be interested in developing a career around topics such as complex thinking, conservation science, social-ecological systems and resilience.

Successful candidates will be co-supervised by Dr Hayley Clements and Prof Oonsie Biggs. Degrees will generally be registered within the School for Public Leadership in the Faculty of Economic and Management Sciences at Stellenbosch University, but other options (such as a Science department) are also possible.

Value

Masters full-time over 2 years: R 70,000 pa

Requirements

All students applying for a Masters degree should have completed a relevant four-year undergraduate degree or equivalent to be eligible. All candidates should show evidence of strong scholarly performance and commitment to publishing.

Applications are particularly invited from South African nationals, especially women and candidates from previously disadvantaged groups. Preference will be given to students who can work independently, are well organized and who will be willing to participate in the regular activities of the CST.

To apply

Interested candidates should send:

- a motivation letter (detailing your previous experience, your general area of interest, as well as an outline of potential research topics of interest),
- a detailed CV that includes your academic record, previous work experience, any scientific publications on which you have been an author, and the names of at least two academic referees,
- transcripts of academic qualifications,
- at least one example of recent written work (e.g. a paper, report, thesis chapter).

Please submit your applications electronically to clementsHayley@gmail.com

We encourage you to submit your application as soon as possible, but latest by **1 October 2017**.