



SARChI Research Chair in Social-Ecological Systems and Resilience

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

Call for applications: Honours fellowship in private land conservation 2018

Deadline for applications: 23 February 2018

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 intertwined elements of 'social-ecological' systems. A fundamental determinant of sustainability in a social-ecological system is resilience, the capacity to cope with novel changes and unexpected disturbances (e.g., climate change, political and economic volatility, biodiversity loss). The South African Research Chair (SARChI) in Social-Ecological Systems and Resilience, held by Prof Reinette (Oonsie) Biggs, aims to contribute to the emerging field of social-ecological resilience, 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 sustainability science.

Project background

Private protected areas (protected areas owned by individuals, NGOs or businesses) are prevalent in many parts of the world, including southern Africa. Their potential to contribute to biodiversity conservation is gaining increasing attention from the global conservation community (including the International Union for the Conservation of Nature-World Commission on Protected Areas). We have very little understanding, however, regarding how effectively they conserve biodiversity long-term. While publicly owned protected areas are established primarily for conservation and managed by centralized organizations (e.g., SANParks or provincial conservation agencies), private protected areas are established for a range of different reasons, such as the landowner's need to generate an income through ecotourism or hunting, their desire to contribute to conservation, or simply their desire to live somewhere peaceful in nature. These motivations, together with the landowner's financial situation, can influence how the protected area is managed. For example, the need to generate an income may cause the owner to overstock their property with large mammals, causing degradation. Some properties listed as private protected areas may, in fact, no longer be managed for conservation at all. By contrast, it is possible that many of these areas are extremely effective at conserving biodiversity. We currently have little understanding of whether private protected areas will be resilient in conserving biodiversity in perpetuity, and thus whether they can be included in national conservation planning.

Call for applications

An honours project is available to measure the extent to which private protected areas in South Africa are resilient in preventing land use change (i.e., shifts away from natural landscapes to degraded landscapes, farming, urbanization, mining, etc.). This project will use data from an existing spatial database of private protected areas in South Africa, together with existing land cover maps and remote sensing.

The successful candidate will be co-supervised by Dr Alta De Vos at Rhodes University, and Dr Hayley Clements and Prof Oonsie Biggs at the Centre for Complex Systems in Transition, Stellenbosch University.

Funding

Honours full-time over 1 year: R 40,000

Requirements

Students applying for this project should currently be registered for a relevant Honours degree at a university in South Africa. All candidates should show evidence of strong scholarly performance. Experience in and/or ability and eagerness to learn to use ARCGIS is desirable. Applications are particularly invited from South African nationals, especially women and candidates from previously disadvantaged groups.

To apply

Interested candidates should send:

- a motivation letter (detailing your previous experience and your general area of interest),
- a CV that includes your academic record, any previous work experience and the names of at least two academic referees,
- transcripts of academic qualifications,
- at least one example of recent written work (e.g. a university assignment).

Please submit your applications electronically to clementsHayley@gmail.com

We encourage you to submit your application as soon as possible, but latest by **23 February 2018**.