



Postgraduate opportunities in ecological research

The South African Environmental Observation network (SAEON) has obtained funding from the National Research Foundation (NRF) to undertake research in conjunction with Ezemvelo KZN Wildlife, the University of the Witwatersrand, and the University of KwaZulu-Natal, on long-term patterns of ecosystem change in the Maloti-Drakensberg region of KwaZulu-Natal. The programme will commence in early 2009.

Research opportunities are on offer at PhD or MSc level for the following topics:

1. Landscape-level fire behaviour, examining the main controls over landscape-level spatial and temporal patterns of fire in the Drakensberg. The study is based on long-term records and empirical investigation of landscape behaviour of fire (GIS ability required).

2. 'Bush encroachment' of Drakensberg and surrounding grassland in relation to environmental factors, investigating the main abiotic and biotic agents influencing woody invasion of grassland, based on photographic analysis.

3. Near preclusion of fire: woody ingress into montane grassland, investigating the long-term impact of fire preclusion on transformation of grassland to woody vegetation, based on long-term experiments at Cathedral Peak, nThabamhlope, Giants Castle Game Reserve, and Royal Natal National Park.

4. Grassland vegetation dynamics in response to multiple drivers, investigating the relative influence of the main drivers (climate, soils, radiation, fire, grazing, land use) on the stability and resilience of grassland, through study of long-term burning and grazing trials and fence line comparisons.

5. Mammals in response to multiple drivers, investigating possible determinants of population trends of the common large mammal species, based on previous studies and long-term monitoring.

Requirements

- Applicants must hold a relevant degree
- Bursaries are awarded at NRF rates and under NRF conditions
- Potential applicants requiring further information should contact Professor Tim O'Connor (details below)
- Applicants must submit a *curriculum vitae*, including a full academic record and the names and contact details of two referees, together with a brief statement of research interests to the following address by **15 February 2009**:
Professor Tim O'Connor, SAEON, PO Box 379, Hilton 3245, Email: timoconnor@xsinet.co.za